

# **Public Hearing Agenda**

Public Notice is hereby given of a Regular Council Meeting for Public Hearings being held on:

Monday, July 16, 2018 – 7 p.m.

Council Chambers, 1<sup>st</sup> Floor
Richmond City Hall
6911 No. 3 Road
Richmond, BC V6Y 2C1

## **OPENING STATEMENT**

### **Page**

1. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9825 (RZ 15-692485)

(File Ref. No. 12-8060-20-009825; RZ 15-692485) (REDMS No. 5776888 v. 5; 5776930)

### **PH-8**

### See Page **PH-8** for full report

**Location:** 7960 Alderbridge Way and 5333 and 5411 No. 3 Road

**Applicant:** 0989705 BC Ltd.

Purpose:

- 1. To create the "City Centre High Density Mixed Use (ZMU34) Lansdowne Village" zone; and
- 2. To rezone 7960 Alderbridge Way and 5333 and 5411 No. 3 Road from "Auto-Oriented Commercial (CA)" to a new site specific zone, "City Centre High Density Mixed Use (ZMU34) Lansdowne Village", in order to permit the development of a high-density commercial, office and residential use development including:
  - approximately 674 residential units;
  - approximately 112 market rental units; and
  - 38 affordable housing units.

First Reading: June 25, 2018

### **Order of Business:**

1. Presentation from the applicant.

- 2. Acknowledgement of written submissions received by the City Clerk since first reading.
- 3. Submissions from the floor.

### **Council Consideration:**

1. Action on second and third readings of Richmond Zoning Bylaw 8500, Amendment Bylaw 9825.

# 2. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9859 (RZ 17-773703)

(File Ref. No. 12-8060-20-009859; RZ 17-773703) (REDMS No. 5828120 v. 5; 5828207; 5833381; 5858042; 5789830)

### PH-94

### See Page **PH-94** for full report

**Location:** 6340 No. 3 Road

Applicant: GBL Architects Ltd. on behalf of Keltic (Brighouse)

Development Ltd.

Purpose:

- 1. To create the "High Density Mixed Use and ECD Hub (ZMU37) Brighouse Village (City Centre)" zone;
- 2. To rezone the subject property from "Land Use Contract 062" to "High Density Mixed Use and ECD Hub (ZMU37) Brighouse Village (City Centre)" to permit development of a 53,700 m² (578,022 ft²) mixed-use building with an Early Childhood Development Hub and approximately 536 residential units and 27 affordable residential units; and
- 3. To discharge "Land Use Contract 062".

First Reading: June 11, 2018

### **Order of Business:**

- 1. Presentation from the applicant.
- 2. Acknowledgement of written submissions received by the City Clerk since first reading.
- 3. Submissions from the floor.

### **Council Consideration:**

1. Action on second and third readings of Richmond Zoning Bylaw 8500, Amendment Bylaw 9859.

# 3. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9867 (RZ 17-765420)

(File Ref. No. 12-8060-20-009867; RZ 17-765420) (REDMS No. 5813659 v. 2; 5813662)

### PH-289

### See Page **PH-289** for full report

**Location:** 7811 Alderbridge Way and surplus City lane lands west of

the property

**Applicant:** Onni 7811 Alderbridge Holding Corp. Inc.

Purpose: To rezone the subject location from the "Industrial Retail

(IR1)" zone to the "Residential/Limited Commercial (RCL2)" zone to permit development of one 5-storey and one 6-storey building with approximately 365 apartment

units and 280 m<sup>2</sup> (3,014 ft<sup>2</sup>) of commercial space.

First Reading: June 25, 2018

### **Order of Business:**

1. Presentation from the applicant.

2. Acknowledgement of written submissions received by the City Clerk since first reading.

### PH-348

- (a) Richmond resident
- 3. Submissions from the floor.

### **Council Consideration:**

1. Action on second and third readings of Richmond Zoning Bylaw 8500, Amendment Bylaw 9867.

4. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9873 (RZ 15-707952)

(File Ref. No. 12-8060-20-009873; RZ 15-707952) (REDMS No. 5789630; 5841631)

### PH-351

### See Page **PH-351** for full report

**Location:** 7460 and 7480 Railway Avenue

**Applicant:** Yamamoto Architecture Inc.

**Purpose:** To rezone the properties at 7460 and 7480 Railway Avenue

from the "Single Detached (RS1/E)" zone to the "Low Density Townhouses (RTL4)" zone in order to permit the development of eight townhouse units with vehicle access from 7388 Railway Avenue via a Statutory Right-of-Way

registered on the title of 7388 Railway Avenue.

First Reading: June 11, 2018

### **Order of Business:**

- 1. Presentation from the applicant.
- 2. Acknowledgement of written submissions received by the City Clerk since first reading.
- 3. Submissions from the floor.

### **Council Consideration:**

1. Action on second and third readings of Richmond Zoning Bylaw 8500, Amendment Bylaw 9873.

# 5. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9878 (RZ 17-779229)

(File Ref. No. 12-8060-20-009878; RZ 17-779229) (REDMS No. 5767066 v. 5; 5838285)

### PH-380

### See Page PH-380 for full report

**Location:** 8071 / 8091 Park Road

**Applicant:** W.T. Leung Architects, Inc. on behalf of Park Village

Investments Ltd. & Grand Long Holdings Canada Ltd.

Purpose: To create the "High Density Mixed Use (ZMU39) –

Brighouse Village (City Centre)" zone, and to rezone 8071/8091 Park Road from "Downtown Commercial (CDT1)" zone to "High Density Mixed Use (ZMU39) – Brighouse Village (City Centre)" zone to permit the development of a high-density, mixed commercial, office and residential development that includes three towers on a

mixed use podium in the Brighouse Village.

First Reading: June 11, 2018

### **Order of Business:**

- 1. Presentation from the applicant.
- 2. Acknowledgement of written submissions received by the City Clerk since first reading.
- 3. Submissions from the floor.

### **Council Consideration:**

1. Action on second and third readings of Richmond Zoning Bylaw 8500, Amendment Bylaw 9878.

### 6. TEMPORARY COMMERCIAL USE PERMIT (TU 18-803320)

(File Ref. No. TU 18-803320; 08-4105-07-01) (REDMS No. 5854857)

### PH-455

### See Page **PH-455** for full report

**Location:** 4211 No. 3 Road

**Applicant:** YKLM Artspace Co. Ltd.

Purpose: To issue a Temporary Commercial Use Permit to YKLM

Artspace Co. Ltd. for property at 4211 No. 3 Road to allow 'Auction, Minor' as a permitted use for a period of three

years.

### **Order of Business:**

- 1. Presentation from the applicant.
- 2. Acknowledgement of written submissions received by the City Clerk since first reading.
- 3. Submissions from the floor.

### **Council Consideration:**

1. That a Temporary Commercial Use Permit be issued to YKLM Artspace Co. Ltd. for property at 4211 No. 3 Road to allow 'Auction, Minor' as a permitted use for a period of three years.

7. RICHMOND OFFICIAL COMMUNITY PLAN BYLAW 7100, AMENDMENT BYLAW 9770, RICHMOND OFFICIAL COMMUNITY PLAN BYLAW 9000, AMENDMENT BYLAW 9771, AND RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9845

(File Ref. No. 10-6125-07-02; 12-8060-20-009769; 12-8060-20-009845; 12-8060-20-009771; 12-8060-20-009770) (REDMS No. 5827315 v. 4; 5790076; 5827434; 5827441; 5827428)

### PH-471

### See Page **PH-471** for full report

**Location:** City-wide

**Applicant:** City of Richmond

Purpose of Richmond Official Community Plan Bylaw 7100, Amendment Bylaw 9770:

To amend Schedule 2.10 (City Centre Area Plan) and Sections 2.2.3 and 2.5 of Richmond Official Community Plan Bylaw 7100 to reference the BC Energy Step Code and its relation to high performance building standards.

Purpose of Richmond Official Community Plan Bylaw 9000, Amendment Bylaw 9771:

To replace Schedule 1, Section 12.4 to update policies on reducing energy use and emissions from buildings and reference the BC Energy Step Code.

Purpose of Richmond Zoning Bylaw 8500, Amendment Bylaw 9845:

To amend Sections 3.4, 4.2.1, 4.3.3 and 4.4.1 to permit floor area exclusions for floor area required for additional insulation and green building features.

Related: Building Regulation Bylaw 7230, Amendment Bylaw 9769

First Reading: June 25, 2018

### **Order of Business:**

- 1. Presentation from the applicant.
- 2. Acknowledgement of written submissions received by the City Clerk since first reading.
- 3. Submissions from the floor.

### **Council Consideration:**

1. Action on second and third readings of Richmond Official Community Plan Bylaw 7100, Amendment Bylaw 9770.

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	2. Action on second and third readings of Richmond Official Comm Plan Bylaw 9000, Amendment Bylaw 9771.							
	3.	Action on second and third readings of Richmond Zoning Bylaw 8500, Amendment Bylaw 9845.						
	4.	Adoption of Richmond Official Community Plan Bylaw 7100, Amendment Bylaw 9770.						
	5.	Adoption of Richmond Official Community Plan Bylaw 9000, Amendment Bylaw 9771.						
	6.	Adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9845.						
	7.	Adoption of Building Regulation Bylaw 7230, Amendment Bylaw 9769.						
ADJO	JRNN	MENT						



# **Report to Committee**

To: Planning Committee

Date:

June 13, 2018

From:

Wayne Craig

Director, Development

File:

RZ 15-692485

Re:

Application by 0989705 BC Ltd. for Rezoning at 7960 Alderbridge Way and

5333 & 5411 No. 3 Road from "Auto-Oriented Commercial (CA)" to "City Centre

High Density Mixed Use (ZMU34) - Lansdowne Village"

### Staff Recommendation

1. That Richmond Zoning Bylaw 8500, Amendment Bylaw 9825 to create the "City Centre High Density Mixed Use (ZMU34) - Lansdowne Village" zone, and to rezone 7960 Alderbridge Way and 5333 & 5411 No. 3 Road from "Auto-Oriented Commercial (CA)" to "City Centre High Density Mixed Use (ZMU34) - Lansdowne Village", be introduced and given first reading.

2. That staff be directed to prepare a service area bylaw to provide district energy services to the development at 7960 Alderbridge Way and 5333 & 5411 No. 3 Road.

Wayne Craig

Director, Development

(604-247-4625)

WC:jd Att. 8

REPORT CONCURRENCE						
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER				
Affordable Housing Child Care Recreation Sustainability Real Estate Services Transportation Law	विवयाताताताताताताताताता	Le Evreg				

### Staff Report

### Origin

0989705 BC Ltd. has applied to the City of Richmond for permission to rezone the properties at 7960 Alderbridge Way and 5333 & 5411 No. 3 Road from "Auto-Oriented Commercial (CA)" to a new site-specific zone; "City Centre High Density Mixed Use (ZMU34) – Lansdowne Village" (Attachment 1), in order to permit the development of a high-density commercial, office and residential use development in the City Centre's Lansdowne Village.

Key components of the rezoning proposal (Attachment 2) include:

- A podium and tower form of development with three levels of below grade parking, ground level commercial, one office tower and six residential towers.
- A floor area ratio (FAR) of 3.89 and a height of 41.5 m geodetic.
- A total floor area of approximately 81,063 m<sup>2</sup> (872,585 ft<sup>2</sup>) including approximately:
  - o 6,611 m<sup>2</sup> (71,163ft<sup>2</sup>) of commercial space.
  - o 12,000 m<sup>2</sup> (129,172 ft<sup>2</sup>) of office space.
  - o 62,452 m<sup>2</sup> (672,228 ft<sup>2</sup>) of residential space.
- Approximately 824 residential units including:
  - o Approximately 674 market strata units.
  - o Approximately 112 market rental units.
  - o 38 affordable housing units.
- Enhanced public open space at ground level including a mid-block pedestrian mews and central open air courtyard.
- Cash-in-lieu contributions to child care and community facilities.
- LEED NC v4 Silver equivalent design.
- DEU connection-ready and transfer of the on-site low carbon energy plant to the City.
- Creation of two new roads along with utility upgrades and frontage improvements on all frontages.

The floor area figures provided above are subject to refinement through the Development Permit process.

This application includes the proposed acquisition of a small, triangular portion of the City's No. 3 Road road allowance adjacent to the site's eastern boundary. The disposition of this land is subject to a companion report from Real Estate Services dated June 4, 2018.

The proposed transfer of an on-site low carbon energy plant to the City will enable immediate service by LIEC and connection to the City's District Energy Utility system in the future. Prior to rezoning adoption, a Service Area Bylaw for the subject site will be brought forward by Engineering for Council consideration.

### **Findings of Fact**

A <u>Development Application Data Summary</u> (Attachment 3) is provided for comparison of the proposed development with the proposed site-specific bylaw requirements.

### **Existing Site and Development**

Existing Site and Development: The subject site is located in Lansdowne Village (Attachment 4) on the west side of No. 3 Road to the south of Alderbridge Way. It is comprised of three lots that have been cleared in preparation for development.

Existing Housing Profile: The subject properties were not previously developed with residential uses.

### **Surrounding Development**

Surrounding development includes:

To the North: Across Alderbridge Way, existing low-scale commercial development.

To the East: Across No. 3 Road, the Lansdowne Mall site, which is subject to an Official

Community Plan (OCP) amendment application to adjust the land use designation

(CP 15-717017). This application is in process and will be the subject of a

separate Report to Council.

To the South: Across the future new east-west road, existing low- and medium-scale

commercial development. The lots at 5591, 5631, 5651 and 5671 No. 3 Road are subject to a rezoning application for a mixed use development (RZ 17-779262). This application is in process and will be the subject of a separate Report to Council. The lot at 5551 No 3 Road is not part of the development site to the

south.

To the West: Across the existing City lane, existing low-scale commercial and light industrial

development with surface parking. The property at 5520 Minoru Boulevard (located to the south-west of the subject site) is subject to a rezoning application for a mixed-use development (RZ 16-744658). The application is in process and

will be the subject of a separate Report to Council.

### Related Policies & Studies

### Official Community Plan/City Centre Area Plan

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

City Centre Area Plan: The City Centre Area Plan (CCAP) Lansdowne Village Specific Land Use Map designates the subject site as "Urban Centre T6 (45 m)". The proposed rezoning is consistent with this designation.

### Other Policies, Strategies & Bylaws

Floodplain Management Implementation Strategy: The proposed redevelopment must meet the requirements of the Richmond Flood Plain Designation and Protection Bylaw 8204 for Area "A". Registration of a flood indemnity covenant on Title is required prior to final adoption of the rezoning bylaw.

Aircraft Noise Sensitive Development Policy: The proposed development is located in Area 2 (aircraft noise sensitive uses may be considered) on the Aircraft Noise Sensitive Development Map. The proposed rezoning is consistent with this Policy. Registration of an aircraft noise covenant is required prior to rezoning adoption.

Mixed-Use Noise, Canada Line Noise, Commercial Noise and City Centre Impacts: The proposed development must address additional OCP Noise Management Policies related to mixed-use, Canada Line, commercial and ambient noise, as well as other impacts of densification. Requirements include provision of acoustic consultant reports recommending residential sound attenuation measures and registration of associated noise covenants prior to final adoption of the rezoning bylaw.

### Consultation

A rezoning application sign has been installed on the subject property. Staff have not received any comments from the general public in response to the sign. Should the Planning Committee endorse this application and Council grant First Reading to the proposed rezoning, the application will be forwarded to a Public Hearing; where any area resident or interested party will have further opportunity to comment. Public notification for the Public Hearing will be provided as per the *Local Government Act*.

### **Analysis**

### Proposed Zoning Bylaw Amendment

A new site-specific zone, "City Centre High Density Mixed Use (ZMU34) – Lansdowne Village", is proposed. It addresses land use, density, density bonusing, height, siting and parking and loading requirements. Key details of the proposed zone and the associated rezoning considerations are discussed in the report. Staff note that the maximum density for this site is 3.95 FAR and the maximum height is 41.5 m. geodetic. The rezoning considerations are attached (Attachment 5) and a signed copy is on file.

### Infrastructure Improvements

The proposed rezoning will contribute to utility, transportation and park infrastructure improvements as described below. Additional details are provided in the Servicing Agreement section of the rezoning considerations (Attachment 5). Detailed design will take place through the Servicing Agreement process.

### **Engineering**

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

- New watermains (north-south and east-west roads) and watermain upgrades (Alderbridge Way).
- New storm sewers (north-south and east-west roads) and storm sewer upgrades (No. 3 Road and Alderbridge Way).
- New and upgraded sanitary sewers (Alderbridge Way).

Where eligible, Development Cost Charge (DCC) credits will be applied to the required improvements. All other improvements will be funded by the developer.

Third Party Utilities: Requirements include undergrounding of private utility lines and location of all private utility equipment on site.

### Transportation

*No. 3 Road:* Improvements on No. 3 Road will include development of a wider off-street bike lane that is physically separated from the vehicular traffic with a raised barrier curb to enhance cyclist safety and creation of a mid-block pedestrian crossing to enhance east-west pedestrian connectivity to the Lansdowne Mall site.

Alderbridge Way: Widening of Alderbridge Way through dedication will be required to facilitate the addition of an additional traffic lane in the eastbound direction, which will be used as a right-turn only lane in the interim and as a second left-turn lane in the ultimate (when additional right-of-way is secured through the development of the Lansdowne Mall site) from Alderbridge Way, heading east, to No 3 Road, heading north. Various other adjustments of the road median and turning functions will support interim and ultimate traffic flow.

*New North-South Road:* A new north-south road will be established on the west side of the site with a dedication from the subject site to supplement the width of the existing north-south City lane.

*New East-West Road:* A new east-west road will be established toward the south end of the site with a dedication from the subject site. The new road will connect No 3 Road, at the existing intersection to the north of the Canada Line station, with the new north-south road to the west.

Where eligible, Development Cost Charge (DCC) credits will be applied to the required improvements. All other improvements will be funded by the developer.

Preliminary functional road drawings demonstrating the complete proposed road network changes are provided (Attachment 6).

### **Amenity Contributions**

The CCAP Implementation Strategy includes density bonusing and other measures to support the development of community amenities. The proposed rezoning includes contributions as outlined below. All cash-in-lieu contributions are based on formulas in order to accommodate floor area changes that may result from design development during the Development Permit process. The dollar multipliers in the formulas reflect the rates at the time of writing. These will be subject to indexing or similar adjustments, should the rezoning not be adopted within the relevant applicable time periods.

Market Rental Housing: The proposed rezoning includes approximately 112 market rental housing units within the development. The market rental floor area is 8,488 m² (0.41 FAR) and is proposed to be a component of the total allowable residential floor area (e.g. within CCAP maximum of 3.0 FAR for residential uses). As this proposal may precede adoption of a market rental housing policy and is not seeking a market rental density bonus, staff recommend that the following project-specific measures be utilized to support the applicant's market rental housing offer:

- Exclusion of the market rental floor area from the calculations of the affordable housing, T6 child care, community planning and public art contributions.
- A parking rate for market rental units of 0.8 spaces/unit for tenants.

The market rental units are proposed to be secured in perpetuity under single ownership by a legal agreement and covenant registered on title.

Affordable Housing: The CCAP Implementation Strategy, in conjunction with the Affordable Housing Strategy, provides for density bonusing to achieve affordable housing in residential and mixed-use developments. The rezoning application for the proposed development was received prior to July 24, 2017 and is subject to grandfathering of the five percent affordable housing contribution rate.

A total of 38 Low End Market Rental Housing (LEMR) units, with a combined net floor area of approximately 2,698 m<sup>2</sup> (29,044 ft<sup>2</sup>), are proposed. Per the foregoing market rental housing recommendations, the affordable housing floor area contribution is calculated on the total residential floor area minus the total rental housing floor area.

### AFFORDABLE HOUSING SUMMARY

	Affe	Project Targets (3)			
Unit Type	Minimum Unit Sizes	Current LEMR Maximum Rents (1) (2)	Total Maximum Household Income (1) (2)	Unit Mix	# of Units (3)
Bachelor	37 m² (400 ft²)	\$811	\$34,650 or less	0%	0
1-Bedroom	50 m <sup>2</sup> (535 ft <sup>2</sup> )	\$975	\$38,250 or less	42%	16
2-Bedroom	69 m <sup>2</sup> (741 ft <sup>2</sup> )	\$1,218	\$46,800 or less	29%	11
3-Bedroom	91 m <sup>2</sup> (980 ft <sup>2</sup> )	\$1,480	\$58,050 or less	29%	11
TOTAL		N/A	N/A	100%	38

- (1) Denotes 2017 amounts adopted by Council on July 24, 2017.
- (2) Subject to Council approval, total annual household incomes and maximum monthly rents may be increased annually by the Consumer Price Index.
- (3) 50% 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 the following terms: tenant access to indoor and outdoor common amenity areas; and, provision of affordable housing parking spaces at no additional charge.

Child Care: The proposed rezoning is located in the Lansdowne Village Specific Land Use Map "T6" area and is subject to the T6 Child Care density bonus provision, requiring that one percent of the residential floor area be provided to the City in the form of a turnkey child care facility or an equivalent cash-in-lieu contribution to the Child Care Development Reserve Fund and Child Care Operating Reserve Fund 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 (approximately 513 m²) and recommend that the City accept a cash-in-lieu contribution based on the finished value of the space (approximately \$3,587,061 calculated using the proposed residential floor area excluding affordable and market rental housing floor area [0.01 x (62,452  $m^2$  - 2,698  $m^2$  - 8,488  $m^2$ ) x \$6,997/ $m^2$ ] noting that the final amount will be subject to final floor area figures to be determined through the Development Permit process).

Community Facility: The proposed rezoning is located in the Lansdowne Village Specific Land Use Map "Village Centre Bonus (VCB)" area and currently incorporates a VCB density increase of 0.89 FAR. Five percent of this area is expected to be provided back to the City in the form of

a turnkey community amenity space or an equivalent cash-in-lieu contribution to the City Centre Facility Development Fund. Community Services staff have reviewed the location of the development and the potential for a community facility in the available floor area (931 m²) and recommend that the City accept a cash-in-lieu contribution based on the finished value of the space (approximately \$7,512,330 calculated using the proposed VCB floor area  $[0.05 \times 18,611 \text{ m}^2 \times \$8,073/\text{ m}^2]$  noting that the final amount will be subject to final floor area figures to be determined through the Development Permit process).

Community Planning: The proposed rezoning is subject to a community planning implementation contribution which will be deposited into the City Centre Community Planning and Engineering account for future community planning initiatives (approximately \$218,450 calculated using the proposed floor area excluding the affordable and rental housing floor area  $[(81,063 \ m^2-2,698 \ m^2-8,448 \ m^2) \ x \$3.01/m^2]$  noting that the final amount will be subject to final floor area figures to be determined through the Development Permit process).

Public Art: A Public Art Plan has been submitted proposing an on-site art contribution to be located within the central public courtyard. The contribution will be secured through the rezoning with a combination of cash deposit (5%) and Letter of Credit (95%) and is calculated on both the commercial and residential space (excluding affordable and market rental housing floor area) (approximately \$559,158 calculated using 100% non-residential floor area and 100% residential floor area excluding the affordable and market rental housing floor area [18,611  $m^2 x$  \$4.84/ $m^2$ + (62,452  $m^2$  - 2,698  $m^2$  - 8,488  $m^2$ ) x \$9.15/ $m^2$ ] noting that the final amount will be subject to final floor area figures to be determined through the Development Permit process).

### Sustainability

District Energy Utility (DEU): Under typical rezoning considerations, developments are required to be ready for connection to the City's DEU system. In this case, the applicant is proposing to construct and transfer the low carbon energy plant to the City at no cost so that the Lulu Island Energy Company (LIEC) can provide immediate service to the customers and the equipment can be integrated into the future DEU system for this neighbourhood. This servicing opportunity is consistent with the City Centre DEU due diligence analysis, which will be brought forward to Council in early 2019. While the City Centre DEU due diligence analysis is being completed, this interim servicing strategy will secure the customer base for the immediate implementation of GHG emissions reduction. LIEC staff have completed the business plan whereby LIEC can service new customers from the on-site low carbon energy plants at competitive cost to customers for the same level of service. The applicant is working with LIEC staff to ensure the design of the system and equipment will be compatible with the future system. Mirroring the process of affordable housing strategy, the transfer of the energy plant to the City will proceed only if Council adopts a new Service Area Bylaw which will be provided for Council consideration in a separate report. Otherwise, the development will be built as "DEU-Ready". Details are provided in the rezoning considerations (Attachment 5).

Sustainability Rating System: The proposed development is expected to achieve Leadership in Energy and Environmental Design (LEED) NC v4 Silver equivalency. The applicant has provided a preliminary checklist and will incorporate the recommendations into the Development and Building Permit drawings, where relevant.

### Site Access, Parking and Loading

Site Access: Proposed pedestrian access to the site includes storefront entries and tower lobbies on the ground level on all frontages. In addition, there will be pedestrian entries to ground level retail spaces located within the site, adjacent to the proposed public courtyard and pedestrian mews system. Tenant bicycle access will be provided via the parkade and individual building circulation systems. Car and truck vehicular access/egress to the site will be provided through two parkade entries on the new north-south road.

Parking and Loading Rates: Class 1 (tenant and resident) bicycle parking rates are consistent with current Bylaw requirements. Class 2 (customer and visitor) bicycle parking rates are proposed to be reduced by half. Transportation staff support the Class 2 reduction based on assessed need and the desire to ensure that ground level retail frontages are not obscured by lengths of bike racks. Typically, there will be about seven bicycle racks at each of the building entrances and another seventy distributed around the site. The proposed commercial car parking rates are also consistent with current bylaw rates. The applicant has proposed reduced residential unit and visitor parking rates as follows:

- Affordable housing (low end market rental) from 0.9 to 0.8 spaces/unit.
- Market rental housing from 1.0 to 0.8 spaces/unit.
- Market strata housing from 1.0 to 0.9 spaces/unit.
- Visitor parking from 0.2 to 0.1 spaces/unit.

Staff support the proposed vehicle parking rate reductions for the subject development, which are consistent with City Centre transit-oriented development objectives and substantiated by a transportation consultant report assessing parking needs in the area. Staff also support proposed reductions in truck loading spaces to provide for two large size truck space and seven medium size truck spaces. The consultant rationale for the proposed reductions is based on sharing of all truck spaces between non-residential and residential uses, as well as, the limited need for large size truck spaces given there is only one large format retail space proposed.

Transportation Demand Management Measures: Consistent with provisions of the Zoning Bylaw, the application proposes an additional 10% reduction in the overall car parking requirements with the support of transportation demand management measures. Measures include:

- Monthly transit passes (2-zone for one year) offered to 25% of market units; 50% of rental units; and 100% of affordable units;
- Bicycle facilities including end-of-trip facilities (one for each office and commercial uses) and bike repair/maintenance stations (one for each residential building);
- Four car share spaces located at grade along with vehicles and a management agreement with a car share company; and

*Electric Vehicle Charging:* Consistent with Council Policy, effective on April 1, 2018, 100% of the residential parking spaces (excluding visitor spaces) are to be provided with an energized outlet for EV charging.

### Tree Retention and Replacement

The applicant has submitted a Certified Arborist's Report and Tree Survey (Attachment 7) which identifies on-site and off-site bylaw-sized trees that may be affected by the proposed development.

City Trees: There are 39 existing City trees identified in the Tree Survey (Attachment 7). All are located in the back of curb and median areas of No. 3 Road. Parks Department staff have reviewed the locations, sizes and health of the trees in the context of the proposed development and recommend, as a consideration of rezoning, that 10 trees be retained; 27 trees be relocated at the developers cost to a location chosen by Parks staff; and two trees be removed with compensation of \$2600 provided [2 x \$1300/tree]. Staff recommend that the applicant install tree protection around retained trees prior to any preloading of the site.

### Development Form and Character

The CCAP includes a variety of policies intended to shape development to be liveable, 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.

Public Adjacencies: The project addresses public realm interfaces by defining the street edges with street walls and by allowing for sun and light penetration to the surrounding streets through separated tower forms, where possible. All street frontages on the ground level are proposed to include street animating commercial uses with large window areas, opportunities for outdoor patios/display and weather protection.

*Private Adjacencies:* As the proposed development will be surrounded by streets on all four sides, the impacts on surrounding existing and future private development are limited to those that can be expected under typical CCAP City Centre densification.

Massing: The massing of the proposed development is arranged to reflect the allocation of uses on the site; with commercial uses at grade and office and residential uses above grade. The office floor area is located in a tower at the southeast corner of the site near the Lansdowne Station. It includes large, open floor plates on the lower levels that are intended to be used as a "technology hub" and smaller office floor plates above. The residential floor area is distributed around the remaining perimeter of the site in six building blocks combining high street wall and low tower forms. This form of development varies somewhat from the more typical CCAP podium and tower massing and is a result of redistribution of floor area from the upper levels of the development due to anticipated aeronautical zoning height changes.

Amenity Space: A key feature of the design is the porous and interconnected ground level that includes an open air plaza toward the centre of the site and a partially covered pedestrian mews connecting the new north-south road and No. 3 Road. The mews and courtyard area is proposed to be secured with a public right-of-passage (PROP) statutory right of way (ROW). Private common outdoor amenity space is proposed for both the commercial and residential uses on the upper levels of the internal courtyard.

Design Development: The form and character of the proposed development, as well as functional details related to parking, loading, waste management, on-site utilities, rooftop equipment, pedestrian weather protection, CPTED, LEED, indoor and outdoor amenity space and accessibility requirements, will be assessed in more detail during the Development Permit

Application process. The proposal will be expected to respond to comments arising from Council consideration of the rezoning, as well as staff, Advisory Design Panel and Development Permit Panel review.

### Subdivision

Road Closure: A small triangular area of land along No. 3 Road has been identified for road closure (Attachment 8). The area, which is 955.9 m² (10,289.2 ft²), is surplus to Engineering, Transportation and Park needs. The applicant proposes to acquire the surplus for consolidation and inclusion in the subject development site. As identified in the attached rezoning considerations (Attachment 5), the applicant is required to enter into a purchase and sales agreement with the City for the purchase of the lands, which is to be based on the business terms approved by Council. The primary business terms of the purchase and sales agreement, and road closure bylaw, will be brought forward to Council in a separate report from the Senior Manager, Real Estate Services.

Dedications (Roads): Dedications are required along Alderbridge Way (for widening), the west side of the site (for a new north-south road) and at the south end of the site (for a new east-west road) (Attachment 8).

Transfer (Remainder Parcel): Due to the required location of the new east-west road, a small area of the existing development site (483.2 m<sup>2</sup>) will be remaindered at its south end (Attachment 8). The application proposes to transfer this land to the City as a consideration of rezoning. In future, Council may wish to dispose of this land to be added to the lot to the south upon redevelopment.

Temporary Use of City Land: The applicant wishes to construct a temporary sales centre at the south end of the existing site. The temporary sales centre is proposed to be located on land that will be dedicated and/or transferred to the City at the time of rezoning. To accommodate continued use of the land for the temporary sales centre, as well as to accommodate use of dedicated areas of the site for construction staging after rezoning, staff recommend that the City enter into a license agreement(s) with the developer. The agreement(s) would set out the City's financial, length of tenure, renewal, termination, maintenance, liability and other terms, as detailed in the Rezoning Considerations (Attachment 5). For the temporary sales centre, the proposed terms include:

- Fixed term of one year;
- Renewal option a maximum of four three-month terms;
- Nominal license fee:
- Termination of license by City at any time based on 6 months' notice;
- Demolition or removal of the temporary sales centre:
  - o at the developer's own cost;
  - o prior to the end of license agreement or termination date;
- Provision of a demolition bond of \$50,000, which the City will use if the demolition has not been completed by the developer consistent with the terms of the agreement;

For the other construction staging areas, the terms would be modelled on standard City licensing agreements. With respect to the financial terms for the agreement(s), staff recommend that the land be provided to the developer at a nominal rate given the timing of the dedications, the

temporary nature of the use, and the value to the City of the proposed off-street construction staging.

### Financial Impact or Economic Impact

As a result of the proposed development, the City will take ownership of developer contributed assets such as roadworks, waterworks, storm sewers, sanitary sewers, street lights, street trees and traffic signals. The anticipated Operating Budget Impact (OBI) for the ongoing maintenance of these assets is \$20,000.00. This will be considered as part of the 2019 Operating Budget.

### Conclusion

The application to rezone the properties at 7960 Alderbridge Way and 5333 & 5411 No. 3 Road to a new site-specific zone is consistent with the City Centre Area Plan Specific Land Use Map provisions and other Council policy. The mix of uses will contribute to a lively City core and the proposed affordable and market rental housing will support housing options for future residents. The design of the development, with its porous ground level and increased opportunity for retail frontages, will enhance pedestrian connectivity and utilization of the public realm. Contributions to child care and community facilities will assist with the future development of needed services for the neighbourhood.

It is recommended that Richmond Zoning Bylaw 8500, Amendment Bylaw 9825, be introduced and given first reading.

Janet Digby, Architect AIBC

Janet ho

Planner 3

(604-247-4620)

JD:blg

Attachment 1: Location Map and Aerial 2

Attachment 2: Conceptual Development Plans

Attachment 3: Development Application Data Sheet

Attachment 4: Lansdowne Village Specific Land Use Map

Attachment 5: Rezoning Considerations

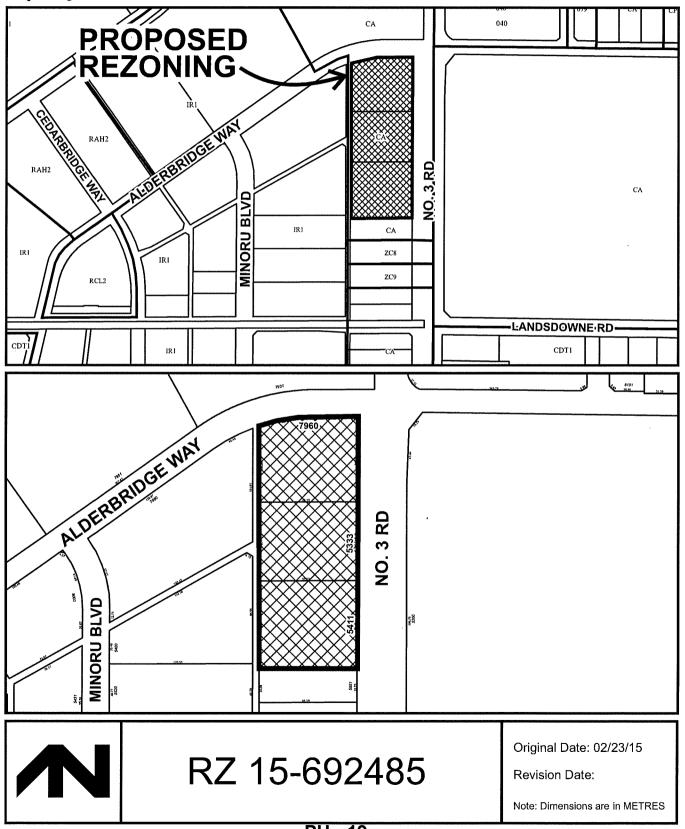
Attachment 6: Preliminary Functional Road Drawings

Attachment 7: Tree Survey

Attachment 8: Preliminary Subdivision Plan

Encl.











RZ 15-692485

Original Date: 02/23/15

Revision Date:

Note: Dimensions are in METRES





PROJECT TEAM:

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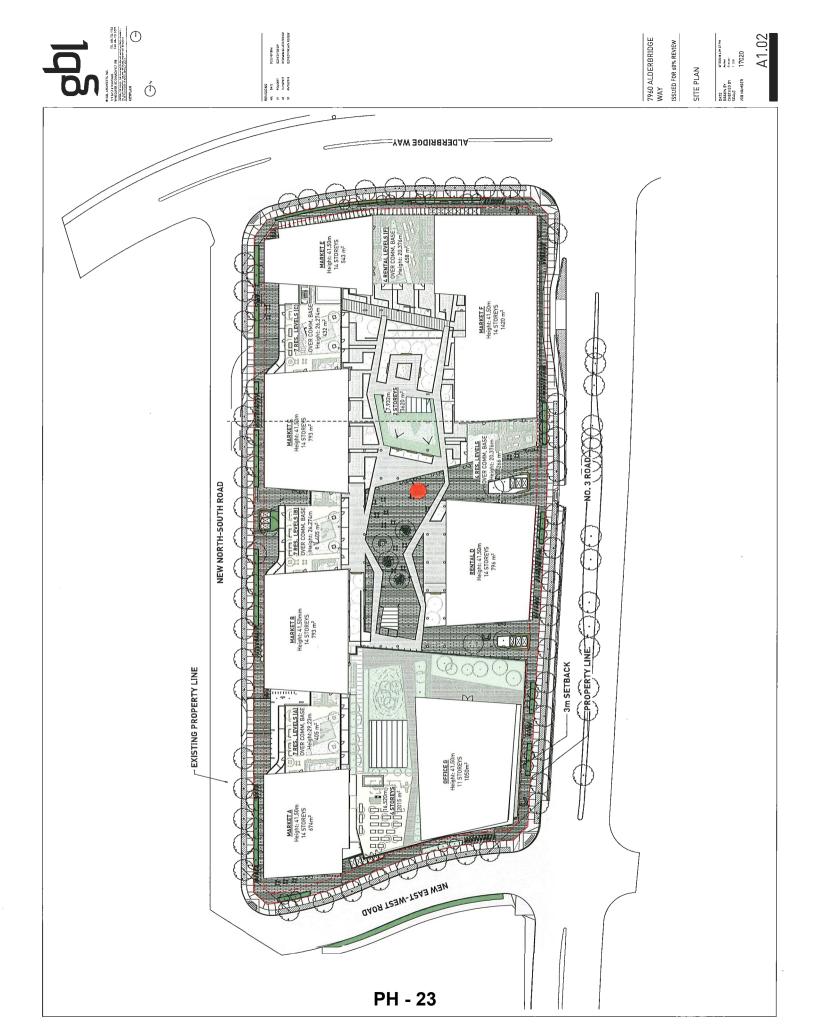


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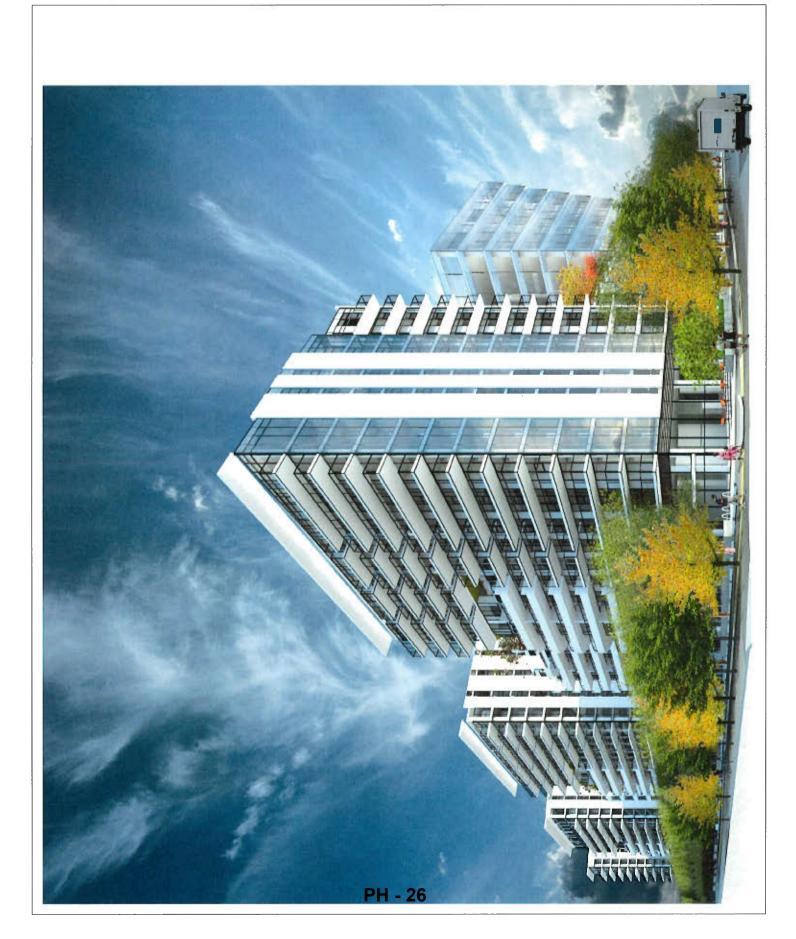
CONTEXT PLAN











7960 ALDERBRIDGE WAY ISSUED FOR 60% REVIEW NORTHWEST RENDER



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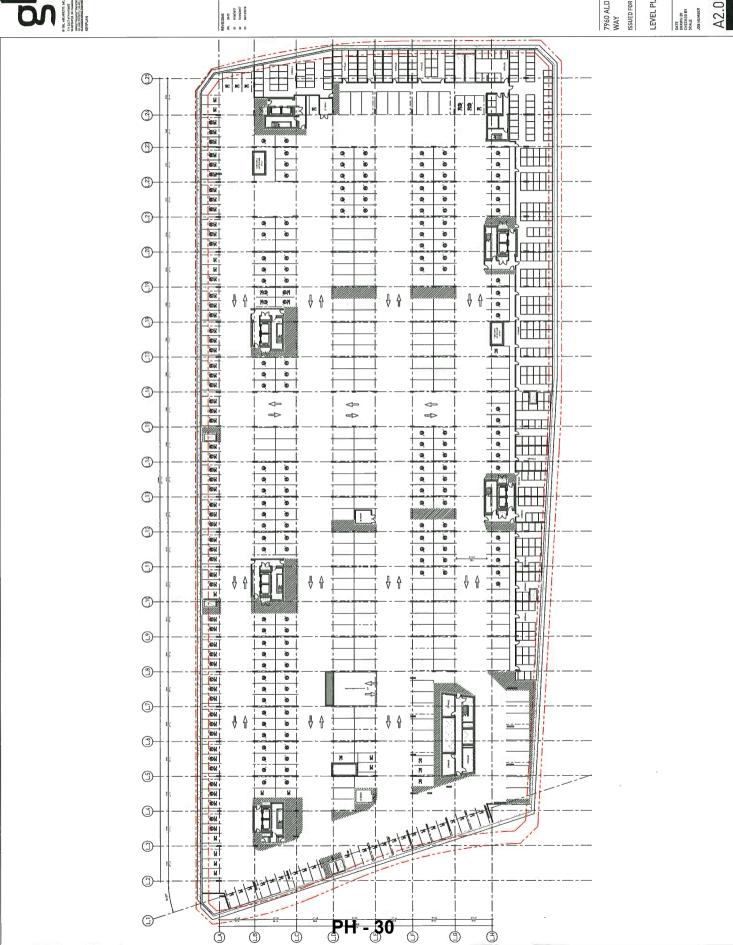




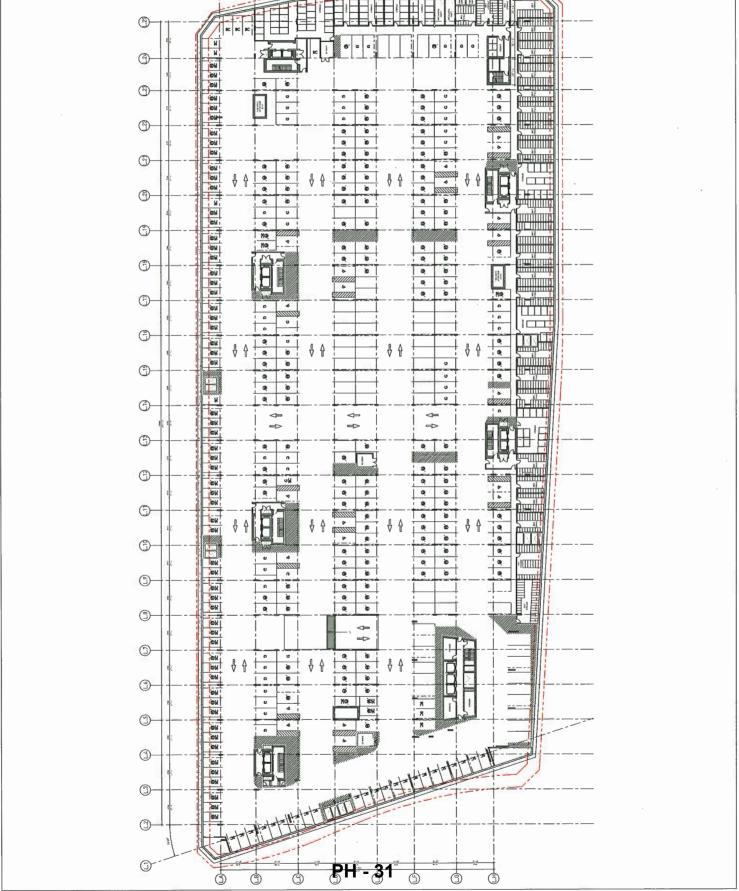
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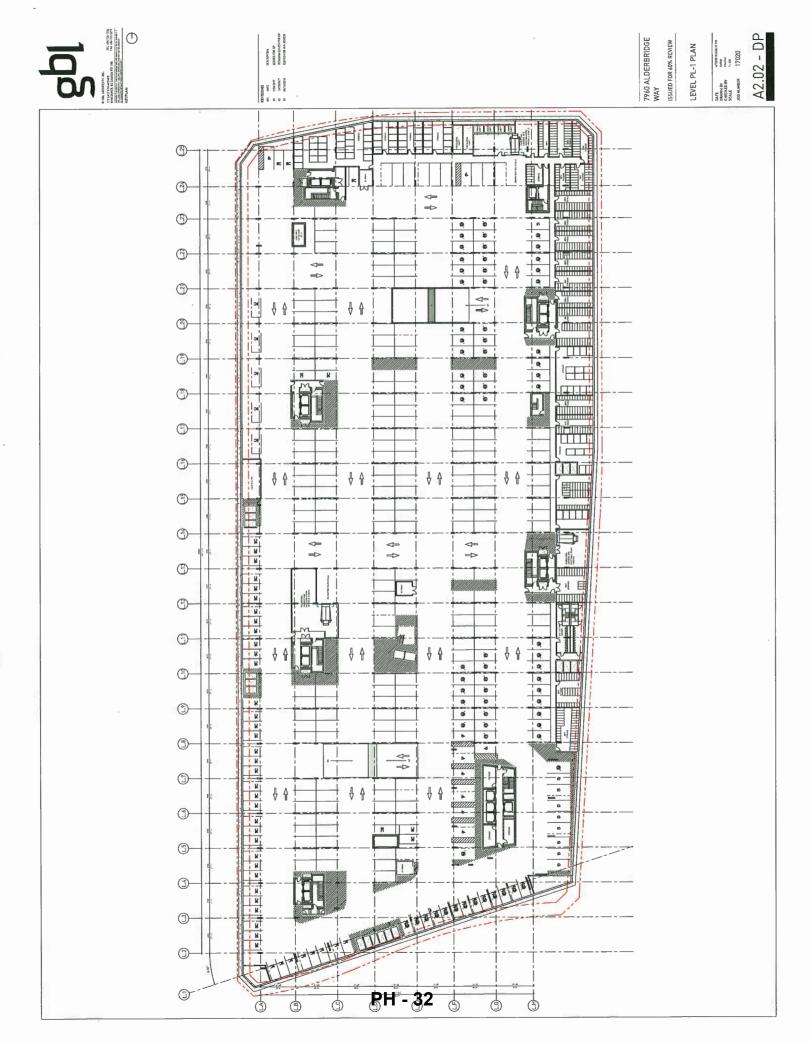


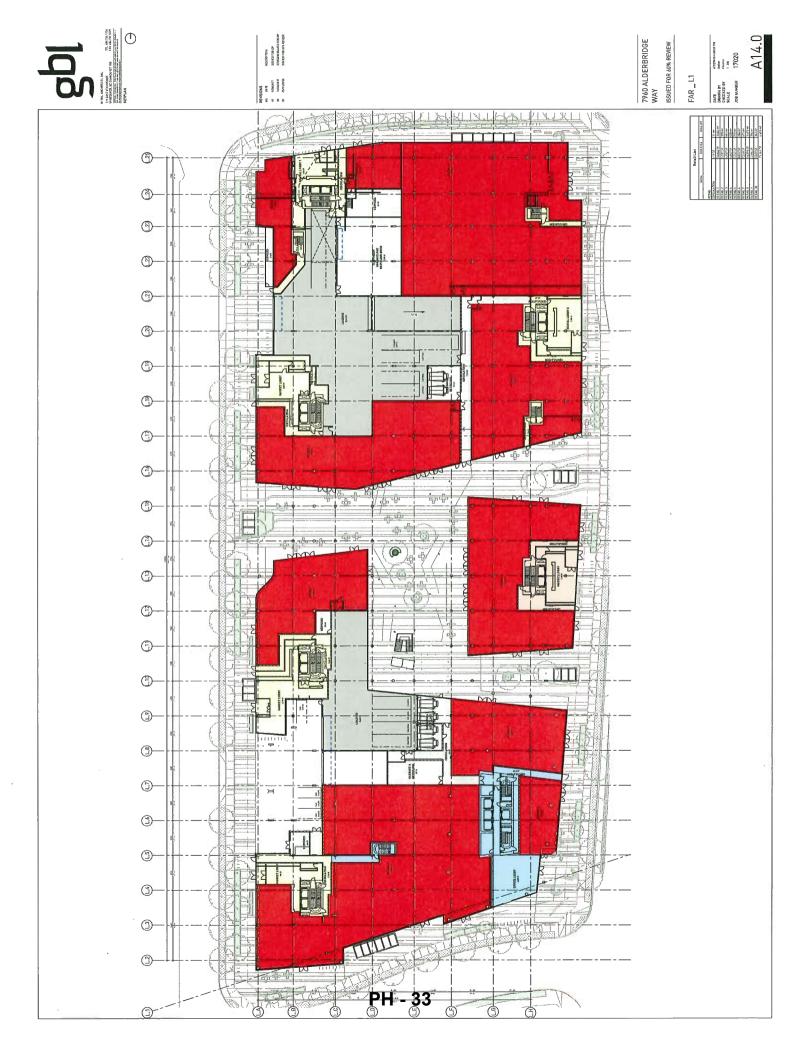
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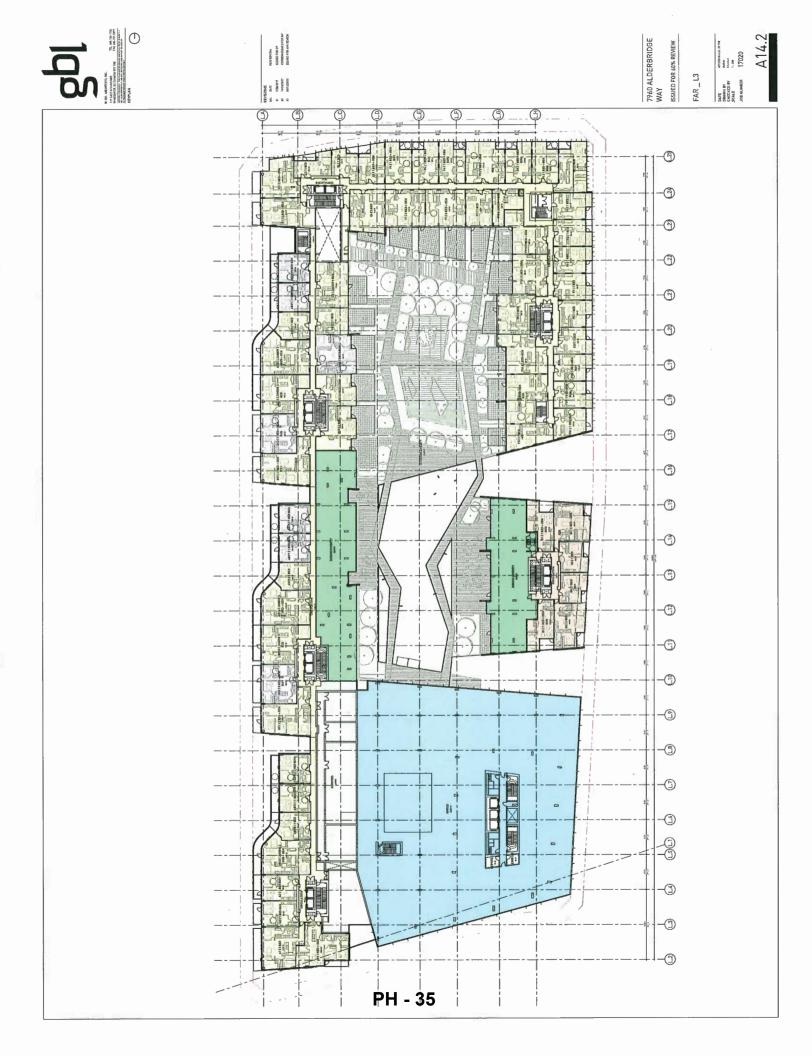












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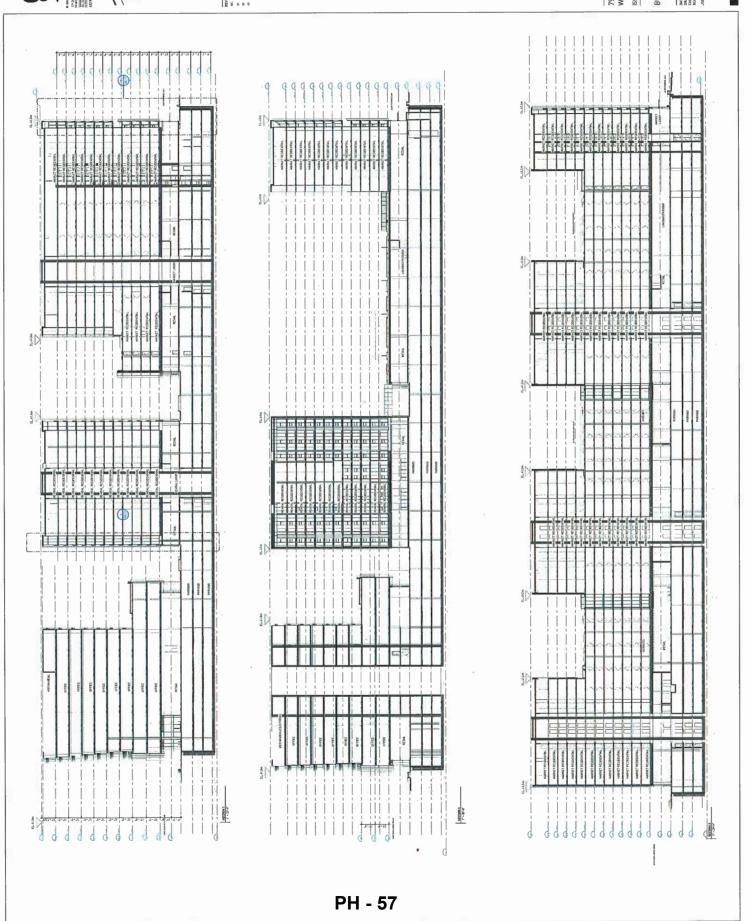
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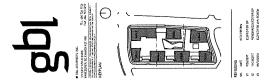
7960 ALDERBRIDGE WAY

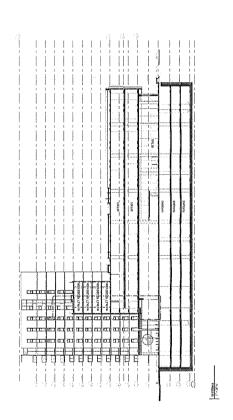
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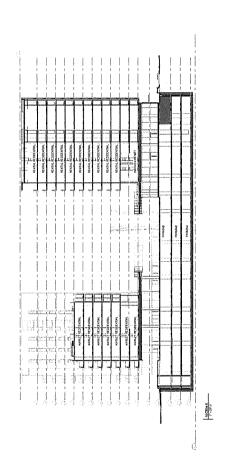
ELEVATIONS WITH PLANTING ISSUED FOR 60% REVIEW

A5.01 - DP











# Development Application Data Sheet Development Applications Department

RZ15-692485	
Address:	7960 Alderbridge Way and 5333 and 5411 No. 3 Road
Applicant:	0989705 BC Ltd.
Owner:	0989705 BC Ltd.
Planning Area(s):	City Centre – Lansdowne Village

RZ15-692485	Existing	Proposed
Site Area:	19,861 m <sup>2</sup>	16,931 m²
Net Development Site Area:	N/A	20,817 m <sup>2</sup>
Land Uses:	Commercial	Mixed Use
OCP Designation:	Downtown Mixed Use	Downtown Mixed Use
Area Plan Designation:	Urban Core T6 (45 m)	Urban Core T6 (45 m)
Zoning:	CA.	ZMU34
Number of Residential Units:	nil	824

RZ15-692485	Bylaw Req't	Proposed	Variance
Floor Area Ratio (FAR):	3.95	3.89	n/a
Floor Area per FAR:	82,227 m <sup>2</sup>	81,063 m <sup>2</sup>	n/a
Lot Coverage:	90%	78%	-
Lot Size:	470/16,800 m <sup>2</sup>	483/16,931 m <sup>2</sup>	-
Lot Dimensions:	n/a	n/a	-
Setback – Road:	3.0 m	3.0 m	-
Height Dimensional (geodetic):	41.5 m	41.5 m	_
Off-Street Parking Spaces – Residential Unit:	547	547	-
Off-Street Parking Spaces – Market Rental Housing Unit:	81	81	-
Off-Street Parking Spaces – Affordable Housing Unit:	29	29	-
Off-Street Parking – Visitor (shared):	91	91	
Off-Street Parking Spaces – L1 and L2:	237	237	-
Off-Street Parking – L3 Plus:	267	267	-
Off-Street Parking Spaces – Total:	1161	1161	-
Off-Street Parking – Car Share Spaces:	4	4	-
Loading Space – Large Size:	2	2	-
Loading Spaces – Medium Size:	7	7	-
Bicycle Parking Spaces – Class 1:	1081	1081	-
Bicycle Parking Spaces – Class 2:	120	120	-

Note: Site area and floor area figures rounded.

Note: Parking figures include 10% TDM reduction.

# Specific Land Use Map: Lansdowne Village (2031) Bylaws 8427 & 8516 2010/09/13 Middle Arm Fraser River SITE RD O ALDERBRIDGE WAY $\overline{\circ}$ GARDEN -GILBERY WESTMINSTER HWY 0 50100 200 400 Meters Non-Motorized Boating Proposed Streets General Urban T4 (15m) & Recreation Water Area Pedestrian-Oriented Urban Centre T5 (35m) Village Centre Bonus Retail Precincts-High Street & Linkages Urban Centre T5 (25m) Institution Pedestrian-Oriented Retail Precincts-Secondary Urban Core T6 (45m) Pedestrian Linkages Retail Streets & Linkages Park Canada Line Station Waterfront Dyke Trail Park - Configuration & **Enhanced Pedestrian** location to be determined Transit Plaza & Cyclist Crossing Village Centre: No. 3 Road & Lansdowne Road Intersection



# **Rezoning Considerations**

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

Address:

7960 Alderbridge Way and 5333 and 5411 No. 3 Road

File No.:

RZ 15-692485

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9825, the owner is required to complete the following.

Note: For the purposes of this document, the terms "owner" and "developer" are used interchangeably.

Note: All Builders Liens on the subject properties must be removed before the subdivision and registration of covenants can occur.

- 1. *(Subdivision)* Registration of a subdivision plan for the subject site that satisfies the following conditions, generally as shown in the sketch survey plan (Schedule 1):
  - a) dedication of approximately 3,403.5 m<sup>2</sup> for road purposes including widening of Alderbridge Way, creation of a new north-south street on the west side of the site and creation of a new east-west street on the south side of the site, along with required corner cuts, subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the City;
  - b) transfer to the City of approximately 483.2 m<sup>2</sup> at the south end of the site as a fee simple remainder lot, subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the Director of Transportation; and
  - c) consolidation of the 955.9 m<sup>2</sup> area of City land along No. 3 Road subject to Council approval of the associated Road Closure and subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the Director of Transportation.
- 2. (Road Closure and Sale) Council approval of the road closure bylaw for the adjacent surplus City road lands located to the east of the properties at 7960 Alderbridge Way and 5333 and 5411 No. 3 Road. The owner shall be required to enter into a purchase and sales agreement with the City for the purchase of the Land, which is to be based on the business terms approved by Council. The primary business terms of the purchase and sales agreement will be brought forward for consideration by Council in a separate report from the Manager, Real Estate Services. All costs associated with the purchase and sales agreement shall be borne by the owner.
- 3. (Statutory Right of Way) Granting of a Statutory Right-of-Way(s), subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the City, including:
  - a) public right of passage for pedestrians and City services vehicles;
  - b) approximately 1.5 m. parallel to the new east property line; and to include:
  - use of the statutory right of way for outdoor space by adjacent commercial uses in areas not needed to complete the back-of-curb public realm cross-section (e.g. minimum 2.0 m wide sidewalk) unless and until the area is identified as necessary to public circulation by the City, at the sole discretion of the City;
  - d) agreement to provide adequate below grade structure to support all Statutory Right-of-Way(s) functions;
  - e) design and construction, including but not limited to universal accessibility, decorative finishing, landscaping, lighting and utility infrastructure (e.g. fire hydrants), as well as, safety measures related to the vehicular and/or pedestrian use and/or crossing of the Statutory Right-of-Way(s), as determined through the Development Permit, Building and Servicing Agreement processes;

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- f) design and construction, at owner's cost; and
- g) maintenance and repair, at owner's cost.
- 4. (Statutory Right of Way) Granting of a blanket Statutory Right-of-Way(s), or alternative legal agreement(s), to the satisfaction of the City, securing public access between No. 3 Road and the new north-south road, approximately mid-site, along with public access to the internal ground level courtyard, with the right to modify the SRW, prior to occupancy, to reflect the volumetric dimensions of the public right of passage facility and providing for:
  - a) adequate below grade structure to support all Statutory Right-of-Way(s) functions, including possible use by emergency services vehicles;
  - b) design and construction, including but not limited to universal accessibility, decorative finishing, landscaping, lighting and utility infrastructure (e.g. fire hydrants), as determined through the Development Permit and/or Servicing Agreement processes;
  - c) design and construction, at owner's cost; and
  - d) maintenance and repair, at owner's cost.
- 5. (Use of City Property Temporary Licensing): Prior to rezoning adoption, execution of a licensing agreement(s) between the Owner and the City for the temporary use of City land that is dedicated and/or transferred to the City as a consideration of rezoning to permit the continued use of the land for a residential sales centre and associated parking, separately or in combination with use of the land for construction staging, including basic terms for those portions of the land associated with the residential sales centre as follows:
  - i) fixed term of one year;
  - ii) renewal option a maximum of four three-month terms;
  - iii) nominal license fee;
  - iv) termination of license by City at any time based on 6 months' notice;
  - v) demolition or removal of the temporary sales centre:
    - a. at the developer's own cost;
    - b. prior to the end of license agreement or termination date;
  - vi) provision of a demolition bond of \$50,000, which the City will use if the demolition has not been completed by the developer consistent with the terms of the agreement;
  - and, further, for the temporary use of additional areas of the dedicated and/or transferred land solely for construction staging purposes under standard City licensing terms.
- 6. *(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.
- 7. (Aircraft Noise) Registration of an aircraft noise sensitive use covenant on title addressing noise impacts on residential uses and establishing a Statutory Right-of-Way(s) in favour of the Airport Authority.
- 8. (*Mixed-Use Noise*) Registration of a mixed use noise sensitive use covenant on title addressing noise impacts on residential uses.
- 9. *(Canada Line Noise)* Registration of a mixed use noise sensitive use covenant on title addressing noise impacts on residential uses, including those related to the Canada Line.
- 10. (Commercial Noise) Registration of a commercial noise restrictive covenant on title addressing noise impacts generated by commercial uses and requiring demonstration that the building envelope is designed to avoid noise generated by the internal use from penetrating into residential areas that exceed noise levels allowed in the City's Noise Bylaw and that noise generated from rooftop HUAC units will comply with the City's Noise Bylaw.
- 11. (City Centre Impacts) Registration of a 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.

  Note: Some of the foregoing noise and impact covenants may be combined at the discretion of the City.

12. (Shared Parking)	Registration of	of a restrictive	covenant on title,	or alternative lega	al agreement,	subject to
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the final approval of the Director of Transportation, securing the owner's commitment to ensure that:

- a) all residential visitor parking spaces are shared with non-residential uses parking spaces,
- b) all shared parking spaces remain unassigned;
- c) all shared parking spaces are located on or close to the ground level of the parking structure;
- d) all shared parking spaces are identified with signage as to their intended usage;
- e) all shared parking spaces are fully accessible to all users (e.g. entry gate open) during standard business operating hours; and
- f) all shared parking spaces are fully accessible to residential visitor users (e.g. buzz entry) during non-standard business hours;
- g) the shared parking stalls are identified in the Development Permit and Building permit plans; and
- h) prior to building inspection permitting occupancy, wayfinding and stall identification signage for the shared visitor stalls have been provided to the satisfaction of the Director of Transportation.
- 13. *(Shared Loading)* Registration of a restrictive covenant on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to ensure that:
  - a) all large size and medium size loading spaces are shared between commercial and residential uses;
  - b) all shared loading spaces will remain unassigned;
  - c) all shared loading spaces are located on the ground level;
  - d) all shared loading spaces are identified with signage as to their intended usage;
  - e) all shared loading spaces are fully accessible to all users (e.g. entry gate open) during business hours; and
  - f) all shared loading spaces are accessible to all users (e.g. buzz entry) during non-standard business hours;
  - g) the shared loading stalls are identified in the Development Permit and Building Permit plans; and
  - h) prior to building inspection permitting occupancy, wayfinding and stall identification signage for the shared loading stalls have been provided to the satisfaction of the Director of Transportation.
- 14. *(Car Share)* Registration of a restrictive covenant and Statutory Right-of-Way(s) on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to:
  - a) provide a car share facility and car share equipment to a car share operator or the City, at no cost to the car share operator or the City, both as the case may be, the terms of which shall be generally as follows:
    - i) a minimum of four (4) car share parking spaces within the development, along with pedestrian and vehicular access, designed, constructed, equipped and maintained by the owner, at the owner's cost, to be:
      - a. co-located and located on the ground level of the parkade in a clearly marked and visible location;
      - b. provided with pedestrian access from surrounding streets;
      - c. provided with vehicle access from the new north-south road;
      - d. designed to be safe, convenient and universally-accessible;
      - e. provided with design features, decorative finishing, lighting and signage, as determined through the Development Permit and/or Servicing Agreement processes;
      - f. provided with one EV quick-charge (240 volt) charging station for each car share space for its exclusive use;
      - g. accessible to all intended users (e.g. general public, car share operator personnel and car share operator members) at no added cost;
      - h. accessible to all intended users as follows:
      - i. the general public -365 days a year for a time period equalling the lengthiest combination of standard business hours and the standard operating hours of local rapid transit; and
      - j. the car share operator personnel and members 365 days a year for a 24 hours per day (e.g. code entry):
      - k. identified on the Development Permit and Building Permit plans; and
      - 1. prior to building inspection permitting occupancy, provided with wayfinding and stall

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identification signage, to the satisfaction of the Director of Transportation;

- ii) a minimum of four (4) car share cars, all of which being electric vehicles, at the owner's initial cost;
- iii) terms of agreement between the owner and the car share operator which shall include:
  - a. a minimum contractual period for the provision of car share services of three years from the first date of building occupancy; and
  - b. additional provisions as negotiated by the owner and car share operator (e.g. maintenance, repair and replacement by car share vehicles by the car share operator), or as required by the City, subject to the approval of the Director of Transportation;
- iv) supporting submissions provided to the City (Transportation Department) as follows:
  - a. prior to the Public Hearing, a copy of the letter of intent addressed to the owner from the car share operator outlining the terms of the provision of car sharing services;
  - b. prior to Development Permit issuance, a copy of the draft contract between the owner and the car share operator describing the terms of the provision of car sharing services;
  - c. prior to building inspection permitting occupancy, a copy of the executed contract between the owner and the car share operator describing the terms of the provision of car sharing services;
- b) a Public Right of Passage Statutory Right of Way, in favour of the City, to secure the car share spaces and the vehicular and pedestrian accesses, subject to the final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the Director of Transportation; and
- c) 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), transfer control of the car-share facilities, to the City, at no cost to the City, with the understanding that the City at its sole discretion, without penalty or cost, shall determine how the facilities shall be used going forward.
- 15. (Bicycle End-of-Trip Facilities) Registration of a restrictive covenant on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to:
  - a) provide bicycle end-of-trip facilities within the development for each of commercial uses and office uses generally as follows:
    - i) a minimum of one male facility and one female facility for commercial uses and one male facility and one female facility for office uses, designed, constructed, equipped and maintained by the owner, each of which shall:
      - a. be fully accessible to all intended users;
      - b. be easily accessible from commercial Class 1 bicycle parking areas;
      - c. be fully handicapped accessible;
      - d. accommodate two or more people at one time; and
      - e. include, at minimum, a change room and lockers, two showers, a toilet, a wash basin and a grooming station (i.e. mirror, counter and electrical outlets);
  - b) identify the end-of-trip facilities in the Development Permit and Building Permit plans; and
  - c) prior to building inspection permitting occupancy, provide wayfinding and stall identification signage for the end-of-trip facilities, to the satisfaction of the Director of Transportation.
- 16. (Bicycle Maintenance and Repair Facilities) Registration of a restrictive covenant on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to:
  - a) provide bicycle maintenance and repair facilities within the development for each residential tower for the shared use of all residential users (e.g. owners, renters and their guests) generally as follows:
    - i) a minimum of one bicycle repair and maintenance station for each residential tower, designed, constructed, equipped and maintained by the owner, each of which shall:
      - a. be fully accessible to all intended users;
      - b. be easily accessible from residential Class 1 bicycle parking areas;
      - c. be fully handicapped accessible;
      - d. include, at minimum, a bicycle repair stand with tools, a foot pump and a faucet, hose and drain

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for bicycle washing;

- b) identify the bicycle maintenance and repair facilities in the Development Permit and Building Permit plans; and
- c) prior to building inspection permitting occupancy, provide wayfinding and stall identification signage for the bicycle maintenance and repair facilities, to the satisfaction of the Director of Transportation;
- 17. (*Bicycle Facilities*) Registration of a restrictive covenant on title or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to maintain all required bicycle parking spaces and other bicycle facilities for their intended uses, as well as, securing the owner's commitment to maintain the bicycle parking areas for shared common use.
- 18. (*Transit Pass Program*) Registration of a restrictive covenant on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to:
  - a) provide a transit pass program, at the owner's cost, generally as follows:
    - i) provide monthly two-zone transit passes for one year for:
      - a. 25% of market units;
      - b. 50% of rental units; and
      - c. 100% of affordable units,
  - b) extend the program, should it not be fully subscribed within one year, until the equivalent of the costs of the full one year transit pass program has been exhausted;
  - c) provide for administration by TransLink or a management company on behalf of the strata council;
  - d) notify the residents of the availability of the transit pass program;
  - e) indicate the availability and method of accessing the transit program in sales/rental contracts; and
  - f) submit a Letter of Credit prior to Development Permit issuance to secure the owner's commitment to provide the transit passes based on 110% of transit pass costs (including 100% for transit pass purchases and 10% for future transit pass cost increases and administration).
    - (Note: The remaining funds in the LOC will be released to the Owner/Developer when the 2-zone one year transit pass program is fully subscribed.)
- 19. (District Energy Utility) Registration of a restrictive covenant and statutory right of way and/or alternative legal agreement(s), to the satisfaction of the City, securing the owner's commitment to connect to District Energy Utility (DEU) and granting the statutory right of way(s) necessary for supplying the DEU services to the building(s), which covenant and statutory right of way 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 low carbon energy plant district energy utility (LCDEU) service area bylaw which applies to the site has been adopted by Council prior to the issuance of the development permit for the subject site, no building permit will be issued for a building on the subject site unless:
    - i) the owner designs, to the satisfaction of the City and the City's DEU service provider, Lulu Island Energy Company Ltd. (LIEC), a low carbon energy plant to be constructed and installed on the site, with the capability to connect to and be serviced by a DEU; and
    - ii) the owner enters into an asset transfer agreement with the City and/or the City's DEU service provider on terms and conditions satisfactory to the City to transfer ownership of the low carbon energy plant to the City or as directed by the City, including to the City's DEU service provider, at no cost to the City or City's DEU service provider, LIEC, on a date prior to final building inspection permitting occupancy of the first building on the site;
  - c) The owner agrees that the building(s) will connect to a DEU when a DEU is in operation, unless otherwise directed by the City and the City's DEU service provider, LIEC.
  - d) If a DEU is available for connection and the City has directed the owner to connect, no final building inspection permitting occupancy of a building will be granted unless, and until:
    - i) the building is connected to the DEU;

- ii) the owner enters into a Service Provider Agreement for that building with the City and/or the City's DEU service provider, LIEC, executed prior to depositing any Strata Plan with LTO and on terms and conditions satisfactory to the City; and
- iii) prior to subdivision (including Air Space parcel subdivision and Strata Plan filing), the owner grants or acquires, and registers, all Statutory Right-of-Way(s) and/or easements necessary for supplying the DEU services to the building.
- e) If a DEU is not available for connection, but a LCDEU service area bylaw which applies to the site has been adopted by Council prior to the issuance of the development permit for the subject site, no final building inspection permitting occupancy of a building will be granted unless and until:
  - 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;
  - ii) the building is connected to a low carbon energy plant supplied and installed by the owner, at the owner's sole cost, to provide heating, cooling and domestic hot water heating to the building(s), which energy plant will be designed, constructed and installed on the subject site to the satisfaction of the City and the City's service provider, LIEC;
  - iii) the owner transfers ownership of the low carbon energy plant on the subject site, to the City or as directed by the City, including to the City's DEU service provider, LIEC, at no cost to the City or City's DEU service provider, on terms and conditions satisfactory to the City;
  - iv) prior to depositing a Strata Plan, the owner enters into a Service Provider Agreement for the building with the City and/or the City's DEU service provider, LIEC, on terms and conditions satisfactory to the City; and
  - v) prior to subdivision (including Air Space parcel subdivision and Strata Plan filing), the owner grants or acquires, and registers, all additional Covenants, Statutory Right-of-Way(s) and/or easements necessary for supplying the services to the building and the operation of the low carbon energy plant by the City and/or the City's DEU service provider, LIEC.
- f) If a DEU is not available for connection, and a LCDEU service area bylaw which applies to the site has not been adopted by Council prior to the issuance of the development permit for the subject site, no final building inspection permitting occupancy of a building will be granted until:
  - 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; and
  - ii) the owner grants or acquires any additional Statutory Right-of-Way(s) and/or easements necessary for supplying DEU services to the building, registered prior to subdivision (including Air Space parcel subdivision and strata plan filing).
- 20. (Affordable Housing) The City's acceptance of the developer's offer to voluntarily contribute affordable housing, in the form of low-end market rental (LEMR) units, constructed to a turnkey level of finish at the sole cost of the developer, the terms of which voluntary contribution shall include, but will not be limited to, the registration of the City's standard housing agreement and covenant on title to each lot to secure the affordable housing units. The terms of the housing agreements and covenant shall indicate that they apply in perpetuity and provide for, but will not be limited to, the following requirements:
  - a) provide a minimum of 5% of the residential floor area to affordable housing dwelling units;
  - b) provide for affordable housing units, of numbers, types, sizes and associated rent and income levels in accordance with the table below:

# AFFORDABLE HOUSING SUMMARY

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	Affordable Housing Strategy Requirements			Project Targets (3)	
Unit Type	Minimum Unit Sizes	Current LEMR Maximum Rents (1) (2)	Total Maximum Household Income (1) (2)	Unit Mix	# of Units (3)
Bachelor	37 m <sup>2</sup> (400 ft <sup>2</sup> )	\$811	\$34,650 or less	0%	0
1-Bedroom	50 m <sup>2</sup> (535 ft <sup>2</sup> )	\$975	\$38,250 or less	42%	16

	Affordable Housing Strategy Requirements			Project Targets (3)	
Unit Type	Minimum Unit Sizes	Current LEMR Maximum Rents (1) (2)	Total Maximum Household Income (1) (2)	Unit Mix	# of Units (3)
2-Bedroom	69 m <sup>2</sup> (741 ft <sup>2</sup> )	\$1,218	\$46,800 or less	29%	11
3-Bedroom	91 m <sup>2</sup> (980 ft <sup>2</sup> )	\$1,480	\$58,050 or less	29%	11
TOTAL		N/A	N/A	100%	38

- 1. Denotes 2017 amounts adopted by Council on July 24, 2017.
- 2. Subject to Council approval, total annual household incomes and maximum monthly rents may be increased annually by the Consumer Price Index.
- 3. 50% of affordable housing units shall meet Richmond Basic Universal Housing (BUH) standards or better.
- c) occupants of the affordable housing units shall enjoy full and unlimited access to and use of all on-site indoor and outdoor amenity spaces provided for the residential development as per OCP, City Centre Area Plan, and Development Permit requirements, at no additional charge to the affordable housing tenants (i.e. no monthly rents or other fees shall apply for the casual, shared, or exclusive use of any amenities); and
- d) on-site parking, "Class 1" bike storage, and related electric vehicle (EV) charging stations shall be provided for the use of affordable housing occupants as per the OCP, Zoning Bylaw, and approved Development Permit at no additional charge to the affordable housing tenants (i.e. no monthly rents or other fees shall apply for the casual, shared, or exclusive use of the parking spaces, bike storage, EV charging stations, or related facilities by affordable housing tenants).
- 21. *(Rental Housing)* The City's acceptance of the developer's offer to provide market rental housing, constructed to a turnkey level of finish at the sole cost of the developer, the terms of which voluntary contribution shall include, but will not be limited to:
  - a) a minimum of 8,488 m<sup>2</sup> (0.41 FAR) of market rental housing floor area; and
  - b) registration of a legal agreement and covenant on title:
    - i) securing the market rental housing units in perpetuity;
    - ii) requiring the market rental floor area to be maintained under single ownership; and
    - iii) prohibiting the separate sale of less than all the units.
- 22. (Child Care) City acceptance of the owner's offer to voluntarily contribute to the development and operation of child care (approximately \$3,587,061 calculated using the proposed residential floor area excluding affordable and market rental housing floor area [0.01 x 62,452 m² 2,698 m² 8,488 m²) x \$6,997/m²] noting that the final amount will be subject to final floor area figures to be determined through the Development Permit process) (90% to Childcare Development Reserve Fund Account # 7600-80-000-90157-0000 and 10% to Childcare Operating Contributions Account # 7600-80-000-90159-0000).
- 23. (Community Facility) City acceptance of the owner's offer to voluntarily contribute to the development of community facilities (approximately \$7,512,330 calculated using the proposed Village Centre Bonus floor area [0.05 x 18,611 m² x \$8,073/m²] noting that the final amount will be subject to final floor area figures to be determined through the Development Permit process) (City Centre Facility Development Fund Account #7600-80-000-90170-0000).
- 24. (Community Planning) City acceptance of the owner's offer to voluntarily contribute to City Centre community planning (approximately \$218,450 calculated using the proposed floor area excluding the affordable and rental housing floor area [(81,063 m² 2,698 m² 8,448 m²) x \$3.01/m²] noting that the final amount will be subject to final floor area figures to be determined through the Development Permit process) (CC-Community Planning and Engineering Account # 3132-10-520-00000-0000).
- 25. (*Public Art*) City acceptance of the owner's offer to voluntarily contribute to public art (approximately \$559,158 calculated using 100% non-residential floor area and 100% residential floor area excluding affordable and market rental housing floor area [18,611 m² x \$4.84/m² + (62,452 m² 2,698 m² 8,488 m²) x \$9.15/m²]] noting that the final amount will be subject to final floor area figures to be determined through the Development Permit process) (5% to Public Art Provision Account # 7500-10-000-90337-0000 and 95% as a Letter of Credit).

26. (Servicing Agreement) 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:

# Engineering

## Water Works:

- a) Using the OCP Model, there is 585 L/s of water available at a 20 psi residual at the Alderbridge Way frontage, and 526 L/s of water available at a 20 psi residual at the No 3 Road frontage. Based on your proposed development, your site requires a minimum fire flow of 220 L/s.
- b) At Developer's cost, the Developer is required to:
  - i) Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm 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.
  - ii) Install approximately 260 m of new 300 mm water main in the proposed north-south road, from the south property line of 551 No 3 Road to tie in to the proposed water main in Alderbridge Way.
  - iii) Install approximately 120 m of new 300 mm water main in the proposed east-west road, tying in to the proposed water main on the new north-south road and existing water main in No 3 Road.
  - iv) Install approximately 75 m of new 300 mm water main in Alderbridge Way to replace the two AC water mains on the north and south sides of Alderbridge Way. At the intersection of Alderbridge Way and the new north-south road, the new water main shall be tied in to the proposed water main in the north-south road, and the existing water mains along the north and south side of Alderbridge Way.
  - v) Remove, or fill and abandon where appropriate, the existing water mains on the north and south sides of Alderbridge Way along the development's frontage and reconnect existing fire hydrants to the proposed water main.
  - vi) Review hydrant spacing along all road frontages and install new fire hydrants as required per City spacing requirements for commercial land use.
  - vii) Install one new water service connection. Meter to be located onsite, i.e. in a mechanical room. Connection shall be to the proposed water main along the north-south road.
- c) At Developer's cost, the City is to:
  - iv) Complete all tie-ins for the proposed works to existing City infrastructure.
  - v) Cut, cap, and remove all existing water service connections to the development site.

#### Storm Sewer Works:

- d) At Developer's cost, the Developer is required to:
  - i) Install approximately 390 m of new 900 mm storm sewer in No 3 Road from Alderbridge Way to the box culvert on Lansdowne Road, and reconnect all existing leads and connections to the new main.
  - ii) Remove, or fill and abandon where appropriate, the existing 300-375 mm storm sewer in No 3 Road from Alderbridge Way to Lansdowne Road.
  - iii) Install approximately 160 m of new 600 mm storm sewer in Alderbridge Way from existing manhole STMH10078 to the proposed storm sewer in No 3 Road, and reconnect all existing leads and connections to the new main.
  - iv) Fill and abandon approximately 165 m of existing 200-300 mm storm sewer on the north side of Alderbridge Way from existing manhole STMH4146 to manhole STMH4155.
  - v) Install approximately 230 m of new 600 mm storm sewer in the new north-south road.
  - vi) Install approximately 100 m of new 600 mm storm sewer in the new east-west road.
  - vii) Install one new storm service connection, complete with inspection chamber. Storm connection shall be made to the proposed 900 mm storm sewer in No 3 Road.
  - viii) Direct all drainage from the proposed development and proposed roads towards the proposed storm sewer on No 3 Road.
- e) At Developer's cost, the City is to:

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- i) Complete all tie-ins for the proposed works to existing City infrastructure.
- ii) Cut, cap, and remove all existing storm service connections to the development site.

## Sanitary Sewer Works:

- f) At Developer's cost, the Developer is required to:
  - i) Install approximately 330 m of new 300-375 mm sanitary sewer at minimum 0.4% slope from manhole SMH56636 at the northwest corner of 5003 Minoru Boulevard to the northwest corner of the development site, and connect all existing service connections to the new main. The 300 mm section has adequate capacity to serve the proposed development and the future development at 7931 Alderbridge Way; all downstream sections with large catchments to be 375 mm.
  - ii) Remove the existing sanitary main along the existing lane from the service connection for 7931 Alderbridge Way to the south property line of the development site. Replace existing inspection chamber SIC7041 with a manhole and reconnect all existing service connections.
  - iii) Fill and abandon the existing sanitary sewer along Alderbridge Way fronting 7811 and 7851 Alderbridge Way, from existing inspection chamber SIC13559 to existing manhole SMH4690. Reconnect the existing sanitary connections to the new sanitary sewer in Alderbridge Way.
  - iv) Install a new sanitary service connection, complete with inspection chamber, and connect to the proposed sanitary sewer in Alderbridge Way.
- g) At Developer's cost, the City is to:
  - i) Complete all tie-ins for the proposed works to existing City infrastructure.
  - ii) Cut, cap, and remove all existing sanitary service connections to the development site. Ensure that 5551 No 3 Road continues to be serviced.

# Frontage Works:

- h) At Developer's cost, the Developer is required to:
  - i) Provide street lighting along all road frontages according to the following:
    - d. No 3 Road (West side of street):
      - i. Pole colour: Grey
      - ii. Roadway lighting: N/A (No change to existing lighting in centre median)
      - iii. Pedestrian lighting @ back of curb: Type 8 (LED) INCLUDING 1 pedestrian luminaire, 1 duplex receptacle, and flower basket holders, but EXCLUDING any banner arms or irrigation.
    - e. Alderbridge Way (South side of street)
      - i. Pole colour: Grey
      - ii. Roadway lighting @ back of curb: Type 7 (LED) INCLUDING 1 street luminaire, banner arms, and 1 duplex receptacle, but EXCLUDING any pedestrian luminaires, flower basket holders, or irrigation.
    - f. New North-South Street @ west side of site (East side of street)
      - i. Pole colour: Grey
      - ii. Roadway lighting @ back of curb: Type 7 (LED) INCLUDING 1 street luminaire, banner arms, and 1 duplex receptacle, but EXCLUDING any pedestrian luminaires, flower basket holders, or irrigation.
    - g. New East-West Street @ south side of site (Both sides of the street)
      - i. Pole colour: Grey
      - ii. Roadway lighting @ back of curb: Type 7 (LED) INCLUDING 1 street luminaire, banner arms, and 1 duplex receptacle, but EXCLUDING any pedestrian luminaires, flower basket holders, or irrigation.
  - ii) Locate/relocate all above ground utility cabinets and kiosks required to service the proposed development, and all above ground utility cabinets and kiosks located along the development's frontages, within the developments site (see list below for examples). A functional plan showing conceptual locations for such infrastructure shall be included in the development design review process. Please coordinate with the respective private utility companies and the project's lighting and

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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 on the architectural plans/functional plan, the servicing agreement drawings, and registered prior to SA design approval:

- BC Hydro PMT 4.0 x 5.0 m
- BC Hydro LPT 3.5 x 3.5 m
- Street light kiosk 1.5 x 1.5 m
- Traffic signal kiosk 2.0 x 1.5 m
- Traffic signal UPS 1.0 x 1.0 m
- Shaw cable kiosk 1.0 x 1.0 m
- TELUS FDH cabinet 1.1 x 1.0 m
- iii) Coordinate with BC Hydro, TELUS and other private communication service providers:
  - a. To pre-duct for future hydro, telephone and cable utilities along all road frontages.
  - b. Before relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
  - c. To remove the existing private utility poles along the lane frontage and underground existing overhead lines.

### General Items:

- i) At Developer's cost, the Developer is required to:
  - a. Coordinate with TransLink regarding any potential impact to the existing Canada Line guiderail on the east side of No 3 Road due to site preparation or building construction, and to understand and comply with any requirements or regulations relating to the Canada Line.
  - b. Manage any contamination encountered during construction of the servicing agreement works in compliance with the Environmental Management Act.
  - c. Replace the existing road structure along Alderbridge Way, which is constructed as a local road, with the appropriate arterial road structure as per City specifications.
  - d. Provide, prior to start of site preparation works or within the first servicing agreement submission, whichever comes first, a preload plan and geotechnical assessment of preload, dewatering, and soil preparation impacts on the existing utilities fronting the development site and provide mitigation recommendations.
  - e. Provide a video inspection report of the existing storm and sanitary sewers along the road and lane frontages prior to start of site preparation works or within the first servicing agreement submission, whichever comes first. A follow-up video inspection after site preparation works are complete (i.e. pre-load removal, completion of dewatering, etc.) to assess the condition of the existing utilities is required. Any utilities damaged by the pre-load, de-watering, or other ground preparation shall be replaced at the Developer's cost.
  - f. Monitor the settlement at the adjacent utilities and structures during pre-loading, dewatering, and soil preparation works per a geotechnical engineer's recommendations, and report the settlement amounts to the City for approval.
  - g. 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.

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## **Transportation**

### Road and Frontage Improvement Work:

- j) The Developer is required to enter into a Servicing Agreement for the design and construction of road and frontage improvement works, including but not limited to the items listed in this document. All road and frontage improvement works are to be completed to the satisfaction of the City before the issuance of Occupancy Permits(s). The road and frontage improvements have four main components.
  - Construction of a new road (in a north-south orientation) complete with frontage improvements along the entire length of the west side of the site. This new road is referred to as the North-South Road.
  - Construction of a new road (in an east-west orientation) complete with frontage improvements along the entire length of the south side of the site. Full frontage improvements are to be provided along both sides of the road. This new road is referred to as the East-West Road.
  - Alderbridge Way frontage works: widening of the south side of Alderbridge Way along the development frontage to provide an additional eastbound lane; construction of behind the curb frontage improvements along the entire length of the north side of the site; and extension of the existing concrete median on Alderbridge Way west of No. 3 Road.
  - No. 3 Road frontage works: widening of a section of No. 3 Road south of Alderbridge Way and construction of behind the curb frontage improvements along the entire length of the east side of the site. The new off-road bike path design standards are to be incorporated in the No. 3 Road development frontage works.

### i. North-South Road

- a. Scope of Work The works include the construction of a new partial interim roadway along the entire length of the west side of the site from Alderbridge Way to the new East-West Road. The Developer is to construct a 10.0 m wide pavement (two traffic lanes and a parking lane) and 3.65 m wide behind the curb frontage improvements (including curb and gutter on the east side of the road, landscaped boulevard with a single row of street trees, and concrete sidewalk). Other features shall include: hard landscape features, street furnishings, and street lights. The typical road cross-section elements, measuring from the west side of the existing lane, are to include:
  - 0.5 m wide paved shoulder.
  - 3.5 m wide southbound traffic lane.
  - 3.5 m wide northbound traffic lane.
  - 2.5 m wide northbound parking lane.
  - 0.15 m wide top of curb.
  - 1.5 m wide landscaped/treed boulevard, incorporating street trees @ 6.0 m on centre or as otherwise directed by the City, some combination of groundcover and decorative planting, City Centre streetlights, benches and furnishings.
  - 2.0 m wide sidewalk, incorporating some combination of concrete and decorative paving, as determined to the City's satisfaction.
  - 3.0 m +/- wide building setback.

Towards the Alderbridge Way end of this roadway, the lane configuration (measuring from west to east) is to be modified in the interim to the following cross section with no change to the behind the curb frontage elements:

- 3.0 m wide paved shoulder.
- 3.5 m wide southbound traffic lane.
- 3.5 m wide northbound traffic lane.
- b. <u>Road Dedication / Statutory Right-of-Way Requirements</u> The following road dedication and Statutory Right-of-Way (SRW) are required. The exact road dedication and SRW requirements are to be confirmed by legal surveys and the approved road functional plans.

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- A road dedication measuring 7.65 m wide along the entire length of the west side of the site is required. There is an existing 6.0 m wide city lane making a total width of 13.65 m available for the construction of this new roadway.
- Two corner cuts (4.0 m x 4.0 m) are required at: North-South Road/Alderbridge Way intersection (southeast corner); and North-South Road/East-West Road intersection (northeast corner).
- c. <u>Road Functional Design</u> A functional design for this road construction project, prepared to the satisfaction of the City, is required. The criteria of the functional design are as follows.
  - <u>Horizontal/vertical profiles</u> The center line of this roadway is to be established between the northbound and southbound traffic lanes. In general, the elevation of the new road should be similar to existing grades with detailed elevations to be finalized as part of the SA detailed design process and confirmation with Engineering.
  - Road cross-section and frontage improvements Refer to Section j) i. a. above.
  - <u>Interim and ultimate design</u> The interim design is to include all the road elements and frontage improvements described in Section j) i. a. over a width of 13.65 m before the property to the west of the site is redeveloped. The ultimate design is to include all road elements and frontage improvements for the full 19.3 m width with future road dedication from the property to the west. The functional design is to identify the interim and ultimate configurations of the Alderbridge Way/North-South Road intersection.
  - Road network continuity For both the interim and ultimate conditions, the functional design is to show how this new roadway would be connected to the existing city lane to the south as well as when the same lane is widened to a full 12.0 m wide (curb to curb) roadway.

#### ii. East-West Road

- a. Scope of Work The works include the construction of a new roadway connecting No. 3 Road and the new North-South Road along the south side of the site. The Developer is to construct the full 12.0 m wide pavement (two traffic lanes and two parking lanes) and 3.65 m wide behind the curb frontage improvements on both sides of the road (including curb and gutter, landscaped boulevard with a single row of street trees, and concrete sidewalk). Other features shall include: hard landscape features, street furnishings, and street lights. The road cross-section elements, measuring from the south building face, are to include:
  - 3.0 m +/- wide building setback.
  - 2.0 m wide sidewalk, incorporating some combination of concrete and decorative paving, as determined to the City's satisfaction.
  - 1.5 m wide landscaped/treed boulevard, incorporating street trees @ 6.0 m on centre or as otherwise directed by the City, some combination of groundcover and decorative planting, City Centre streetlights, benches and furnishings.
  - 0.15 m wide top of curb.
  - 2.5 m wide westbound parking lane.
  - 3.5 m wide westbound traffic lane.
  - 3.5 m wide eastbound traffic lane.
  - 2.5 m wide eastbound parking lane.
  - 0.15 m wide top of curb.
  - 1.5 m wide landscaped/treed boulevard, incorporating street trees @ 6.0 m on centre or as otherwise directed by the City, some combination of groundcover and decorative planting, City Centre streetlights, benches and furnishings.
  - 2.0 m wide sidewalk, incorporating some combination of concrete and decorative paving, as determined to the City's satisfaction.
  - 3.0 m +/- wide building setback.
- b. Road Dedication / Statutory Right-of-Way Requirements The following road dedication and

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Statutory Right-of-Way (SRW) are required. The exact road dedication and SRW requirements are to be confirmed by legal surveys and the approved road functional plans.

- The East-West Road will be aligned to meet the existing signalized intersection at the No. 3 Road Lansdowne Centre access. A road dedication measuring 19.3 m wide along the entire length of the south side of the site is required. In addition, the remainder area to the south (between the East-West Road and the existing south property line of the site) will be owned by the City after rezoning has been adopted.
- Three corner cuts (4.0 m x 4.0 m) are required at: North-South Road/East-West Road intersection (northeast corner); and East-West Road/No. 3 Road intersection (northwest and southwest corners).
- c. <u>Road Functional Design</u> A functional design for this road construction project, prepared to the satisfaction of the City, is required. The criteria of the functional design are as follows.
  - <u>Horizontal/vertical profiles</u> The center line of this roadway is to be established between the eastbound and westbound traffic lanes. At No. 3 Road, this road is to be aligned with the Lansdowne Centre access. In general, the elevation of the new road should be similar to existing grades with detailed elevations to be finalized as part of the SA detailed design process and confirmation with Engineering.
  - Road cross-section and frontage improvements Refer to Section j) ii a. above.
  - Interim and ultimate design The functional plan is to show the entire 12.0 m wide pavement and full frontage improvements on both sides of the road. Along the south side of the road, property permitting, the full frontage works are to be shown as far to the west as possible. The east end of this new roadway is to be aligned with the existing signalized intersection midblock on No. 3 Road between Alderbridge Way and Lansdowne Road. In the interim, the west end of this roadway is to form a T-intersection with the existing lane and the new North-South road. An interim design of this T-intersection is required for the condition before the adjacent properties are redeveloped. The configuration of this T-intersection may be modified as part of the SA detailed design process. An ultimate design is also required to establish the configuration of the new property lines of adjacent properties as part of the rezoning process of the site.
  - Road network continuity The functional design is to show how this roadway would be extended beyond the new North-South Road/East-West Road intersection to Minoru Boulevard and the future roadway to the south.
  - <u>Bicycle friendly route designation</u> This new roadway is designated in the City Centre Area Plan (CCAP) as a "bicycle-friendly route". The functional design is to incorporate special features of bicycle pavement markings, signage and signal loop detectors. Also required are "sharrow" (bike stencil with chevrons) pavement markings with the stencil in the middle of the travel lane (since the lane width is less than 4.3 m wide), "Share the Road" signage, and bicycle detection stencil placed on the loop detector at signalized intersections.
- iii. Alderbridge Way (North-South Road to No. 3 Road)
  - a. Scope of Work The works include road widening and construction of behind the curb frontage improvements along the entire length of the north side of the site (from the new North-South Road to No. 3 Road). The Developer is to widen Alderbridge Way along the development frontage to provide an additional eastbound lane. The behind the curb frontage improvements are to include landscaped boulevard with a single row of street trees and concrete sidewalk. Other features shall include: hard landscape features, street furnishings, and street lights. The works shall also include extending the existing concrete median on Alderbridge Way west of No. 3 Road pass the new North-South Road. The ultimate cross-section of the frontage improvements, measuring from the median on Alderbridge Way, is to include:
    - Two 3.25 m wide left turn lane.

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- 3.10 m wide eastbound lane.
- 3.25 m wide eastbound curb lane.
- 0.15 m wide top of curb.
- 1.5 m wide landscaped/treed boulevard, incorporating street trees @ 6.0 m on centre or as otherwise directed by the City, some combination of groundcover and decorative planting, City Centre streetlights, benches and furnishings.
- 2.0 m wide sidewalk, incorporating some combination of concrete and decorative paving, as determined to the City's satisfaction.
- 3.0 m +/- wide building setback.
- b. <u>Road Dedication /Statutory Right-of-Way Requirements</u> The following road dedication and Statutory Right-of-Way (SRW) are required. The exact road dedication and SRW requirements are to be confirmed by legal surveys and the approved road functional plans.
  - A minimum 1.7 m wide road dedication along the development Alderbridge Way frontage is required for the provision of an additional eastbound lane. The exact road dedication will be determined based on approved functional road plans.
  - Two corner cuts are also required: 4.0 m x 4.0 m at the North-South Road/Alderbridge Way intersection (southeast corner); and, 5.0 m x 5.0 m at the Alderbridge Way/No. 3 Road intersection (southwest corner).
- c. <u>Road Functional Design</u> A functional design for this road construction project, prepared to the satisfaction of the City, is required. The criteria of the functional design are as follows.
  - Road cross-section and frontage improvements Refer to Section j) iii. a above.
  - Interim and ultimate design The functional design is to show the full widened pavement and behind the curb frontage improvements. The interim eastbound lane configuration shall consist of: one left turn lane, two through lanes and one right turn lane. The ultimate eastbound lane configuration, with redevelopment of other properties adjacent to this intersection, shall consist of: two left turn lanes, one through lane and one through/right turn lane. The permitted vehicle turning movements for both the interim and ultimate conditions at the Alderbridge Way/North-South Road intersection are restricted to right-in and in right-out.
  - Extension of median on Alderbridge Way The functional design plan is to show the existing median on Alderbridge Way extended beyond the Alderbridge Way/North-South Road intersection. Two median breaks are to be incorporated in the design to maintain the existing all-directional accesses to the site on the north side of Alderbridge Way.
- iv. No. 3 Road (Alderbridge Way to East-West Road)
  - a. Scope of Work -

Road Widening - The works include widening a section of the west side of No. 3 Road south of Alderbridge Way. The requirement for this road widening is to: (i) establish the permanent curb line along the development frontage that would be compatible to the ultimate configuration of the No. 3 Road/ Alderbridge Way intersection; and (ii) make provisions for extending the No. 3 Road center median at this location. The southbound lane configuration at the intersection, measuring from the west curb, is as follows:

- 2.5 m wide raised bike lane (tapered to 2.0 m typical width further south).
- 5.75 m wide curb lane (tapered to 3.25 m typical width further south).
- 3.65 m wide center lane (tapered to 3.1 m typical width further south).

Behind the curb frontage improvements - The works include these improvements across the entire length of the No. 3 Road development frontage: widening of the existing raised bike lane, landscaped boulevard with a single row of street trees, and concrete sidewalk. The frontage works are to incorporate the new off-road bike path design standards (including widening the bike path from 1.5 m to 2.0 m, the replacement of the existing roll curb by concrete barrier curb,

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and providing a buffer strip between the curb traffic lane and the bike path). Other features shall include: hard landscape features, street furnishings, and street lights. The cross-section of the frontage improvements, measuring from the west curb line of No. 3 Road, shall include:

- 0.15 m wide concrete barrier curb (replacing the existing 0.175 m wide rollover curb).
- 0.25 m wide buffer strip, incorporating decorative paving (e.g., split face stone sets).
- 2.0 m wide off -road bike path (with 0.15 m +/- wide concrete bands along each edge within the 2.0 m wide bike path).
- 1.5 m wide landscaped/treed boulevard, incorporating street trees @ 6.0 m on centre or as otherwise directed by the City, some combination of groundcover and decorative planting, City Centre streetlights, benches and furnishings.
- 2.0 m wide sidewalk, incorporating some combination of concrete and decorative paving, as determined to the City's satisfaction.
- 3.0 m +/- wide building setback.

The above frontage improvements are to be provided across the entire No. 3 Road development frontage, including the short section of frontage south of the new East-West Road.

Accessible Bus Stop Requirements – There is an existing southbound bus stop at the development No. 3 Road frontage just south of Alderbridge Way. This bus stop needs to be upgraded to meet accessible standards and provisions made for a bus shelter. The frontage improvement cross section at this bus stop is as follows:

- 0.15 m wide concrete barrier curb (replacing the existing 0.175 m wide rollover curb).
- 3.0 m wide x 9.0 m long concrete bus stop pad with prewiring for lighting.
- 2.0 m wide off -road bike path (with 0.15 m +/- wide concrete bands along each edge within the bike path).
- 2.0 m wide sidewalk, incorporating some combination of concrete and decorative paving, as determined to the City's satisfaction.
- 3.0 m +/- wide building setback.
- b. <u>Transit Amenities</u> The following transit amenities are required.
  - Construct a concrete bus stop/bus shelter pad at the southbound No. 3 Road bus stop south of Alderbridge Way. This bus pad is to be constructed to accessibility standards (minimum dimensions of 3.0 m x 9.0 m) and pre-ducting for electricity connections. This bus stop (measured from the bus stop post) is to be located a minimum 26.0 m from the crosswalk bar on the south leg of the No. 3 Road / Alderbridge Way intersection. The exact placement of the bus stop pad is to be confirmed with Coast Mountain Bus Company.
  - The Developer is required to make a minimum contribution of \$35,000 towards the purchase and installation of a City approved bus shelter. The exact amount will be determined as part of the SA process.
- c. <u>Road Dedication Statutory Right-of-Way Requirements</u> The following road dedication and Statutory Right-of-Way (SRW) are required. The exact road dedication and SRW requirements are to be confirmed by legal surveys and the approved road functional plans.
  - Two corner cuts are required: southwest corner of the No. 3 Road / Alderbridge Way intersection (5.0 m x 5.0 m): and northwest corner of the No. 3 Road / East-West Road intersection (4.0 m x 4.0 m).
  - To accommodate the full frontage improvements, including incorporating the new off-road bike lane standards, an additional 1.4 m wide strip across the entire No. 3 Road site frontage, measured from the previously identified property line, is required.
  - The requirements for additional road dedications, SRW, corner cuts at Alderbridge Road and/or the disposition of any resulting land surplus shall be determined based on legal surveys, the completion of staff review of the road functional design plan, and other land disposition considerations.

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- d. <u>Road Functional Design</u> A functional design for this road construction project, prepared to the satisfaction of the City, is required. The criteria of the functional design are as follows.
  - Road cross-section and frontage improvements Refer to Section j) iv. a above.
  - <u>Interim design</u> The functional design plan is to show the road and frontage improvements that establish the permanent curb line along the No. 3 Road development frontage. The southbound lane widths will vary and will taper to the existing lane widths further south.
  - <u>Ultimate design</u> The functional design plan is to show the ultimate southbound lane widths taking into consideration of road works associated with future development of the site to the north. The curb line and other improvement works along the No. 3 Road development frontage should not be affected.

# Traffic Signals and Control Devices:

- k) The Developer is required to enter into a Servicing Agreement for the design and construction of off-site traffic signal works including, but not limited to the works identified in the Rezoning Considerations for the subject development. Above and beyond what is specifically identified in the Rezoning Considerations, the Developer is also responsible for the design and construction of any of the following elements at a traffic signal device and/or communications network. This type of work is typically identified during the detailed design stage of the Servicing Agreement and may not have been known over the course of the Rezoning Application process.
  - Modify, relocate and/or replace traffic signal poles/bases, conduits, junction boxes, street light fixtures, cable and conductors.
  - Modify, relocate and/or replace traffic signal equipment such as controller cabinet/base, UPS (Uninterrupted Power Supply) and service panel.
  - Modify vehicle/pedestrian detection and vehicle phasing including left turn arrows.
  - Modify, relocate and /or replace communications conduit, cable and junction boxes. This development will be directly served by four traffic signal devices. In addition to the general descriptions of works listed above, the specific traffic signal related works at these intersections/locations are shown as follows.
  - i. Future Traffic Signal at the new East-West Road/North-South Road Intersection
    - Works shall include the installation of conduits, junction boxes, traffic pole bases, UPS base and controller cabinet base. New communications conduit/cable are also required to tie in this future signal with City owned communication network. A full set of traffic signal design drawings will be required. Pre-ducting works shall be completed in such a fashion that any new frontage improvements that are done as part of this development will not have to be disturbed for future works as related to the installation of the new traffic signal. The Developer may have to assign a SRW for the placement of some of this equipment (to be identified through the Servicing Agreement phase of the project).
  - ii. Two Existing Traffic Signals: No. 3 Road/Alderbridge Way and No. 3 Road/East-West Road
    - The Developer will be responsible for all costs related to the modifications of existing traffic signals as a result of any frontage improvement works. These signals include those installed at the No. 3 Road / Alderbridge Way intersection and No. 3 Road / East-West Road intersections. The works shall include, but are not limited to: new "ornamental traffic poles" powder coated to match surrounding street light poles, pole bases, video detection, UPS system, controller cabinet/controller, illuminated street name signs and APS (Accessible Pedestrian signals). A full set of traffic signal modification design drawings will be required. The developer may have to assign a SRW for the placement of some of this equipment (to be identified through the Servicing Agreement phase of the project).

# iii. Special Crosswalk

• The Developer is responsible for the design and construction of a special crosswalk on No. 3 Road at approximately the mid-point of the No. 3 Road development frontage. The purpose of

this special crosswalk is to accommodate pedestrian crossing of No. 3 Road between the development's on-site walkway to Lansdowne Centre. This special crosswalk will provide the following features: illuminated crosswalk signs with downward lighting, flashing amber lights, push buttons, raised button lane delineation; accessible pedestrian signal features, and advance warning beacons and signage.

- 1) Registration of the Servicing Agreement on title.
- 27. (Development Permit) 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, as necessary, to address:
    - i) form and character objectives noted in the associated Report to Planning Committee;
    - ii) Council directions arising out of Public Hearing;
    - iii) pertinent comments of the Advisory Design Panel;
    - iv) form and character objectives described in the OCP and CCAP Development Permit Guidelines:
    - v) technical resolution of building services, private utilities, public utilities, fire access, parking and loading and waste management including provision of final utility, fire access, loading, waste management and signage and wayfinding plans; and
    - vi) technical resolution of the landscape plans including:
      - i. the protection, installation and/or maintenance (including automatic irrigation) of retained and/or new landscape; and
      - ii. the protection, installation and/or maintenance (including automatic irrigation) of retained and/or new trees;
  - 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) prepared by qualified professionals including, but not limited to:
    - i) statutory rights of way, easements, encroachments, no build areas, agreements and other legal restrictions, as applicable;
    - ii) flood construction level(s);
    - iii) use, density, height, siting, building form, landscaping, parking and loading and other zoning requirements;
    - iv) floor area calculation overlays;
    - v) site access locations;
    - vi) horizontal and vertical clearance dimensions for all vehicular circulation, including heights of doors, gateways and other passages;
    - vii) the required shared non-residential parking and residential visitor parking spaces;
    - viii) the required shared loading spaces;
    - ix) the required EV-charging vehicle parking spaces;
    - x) the required car-share parking spaces;
    - xi) the required end-of-trip facilities, including their location, number, size, type and use;
    - xii) the required bicycle maintenance facilities;
    - xiii) identification and wayfinding marking and /or signage for all bicycle, vehicle and truck spaces and associated facilities;
    - xiv) the location of all above ground utility equipment required to be on site including that needed for street lighting and traffic signals as well as that need for third parties;
    - xv) the location of areas reserved for DEU equipment and/or connection facilities and a notation regarding the need for DEU pre-ducting, as applicable in the case of the final DEU strategy;
    - xvi) the required affordable housing units, including their size and location;
    - xvii) the required market residential floor area;

- xviii) aging in place, basic universal, accessible, adaptable and/or convertible dwelling units, as established through the DP review;
  - xix) an accessibility checklist and identification of specific recommended measures to be incorporated into the Building Permit plans, where relevant;
  - a CPTED checklist and identification of specific recommended measures to be incorporated into the Building Permit plans, where relevant;
  - a LEED checklist for the overall development prepared by a LEED AP BD+C to achieve LEED v4 Silver equivalency and identification of specific measures to be incorporated into the Building Permit plans, where relevant;
- an Acoustic and Mechanical Report with recommendations prepared by a 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 various noise covenants;
- an Arborist Contract entered into between the applicant and a Certified Arborist for supervision of any 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;
- xxiv) the required common indoor, common outdoor and private outdoor amenity areas including their location, size and use;
- xxv) the location, plans, detailing and specifications for landscaping, including but not limited to required replacement trees and irrigation for private and common open space; and
- the location and dimensions of on- and off-site any tree protection fencing illustrated on the Tree Retention/Management Plan provided with the application.
- c) Submission of a Letter of Credit for landscaping, including required replacement trees, based on 100% of the cost estimate provided by the Landscape Architect, including installation costs, plus a 10% contingency cost.

# **Building Permit Notes:**

- 1. 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.
- 2. Prior to Building Permit issuance, the applicant is to submit a detailed <u>Construction Parking and Traffic Management Plan</u> to the Transportation Division for approval. The Management Plan shall identify (for each development phase): construction vehicle access, emergency vehicle access, parking facilities for construction workers, staging areas for construction vehicles, areas for deliveries and loading, and application for any lane closures. The Plan will require the use of proper construction traffic control procedures and certified personnel as per Traffic Control Manual for works on roadways (Ministry of Transportation and Infrastructure) and MMCD Traffic Regulation Section 01570.
- 3. Prior to Building Permit issuance the developer must obtain a <u>Building Permit for construction hoarding</u>. 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.
- 4. Prior to Building Permit issuance the developer must obtain and provide to the City TransLink concurrence, in writing, regarding adequate completion or otherwise successful resolution of the AID process.

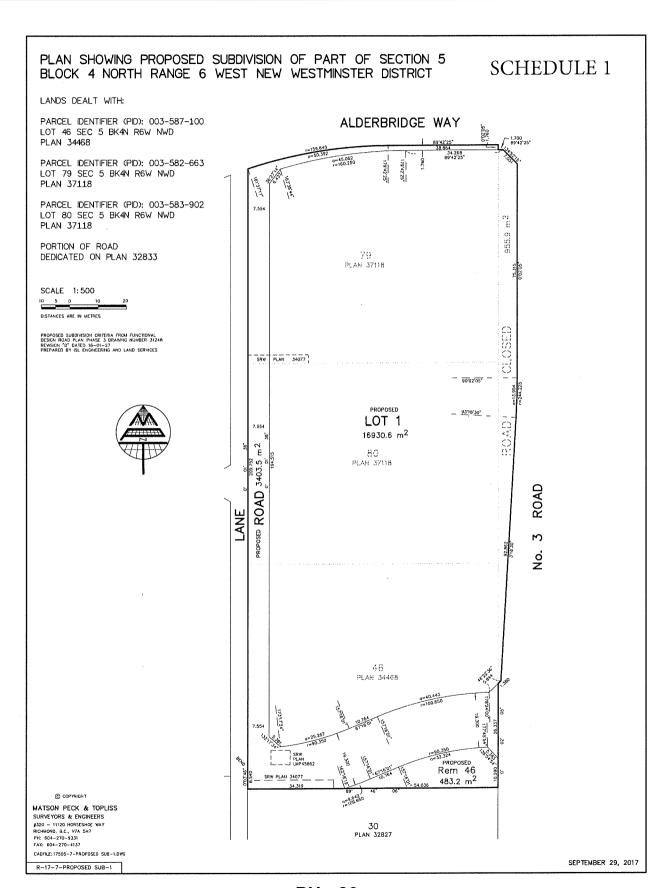
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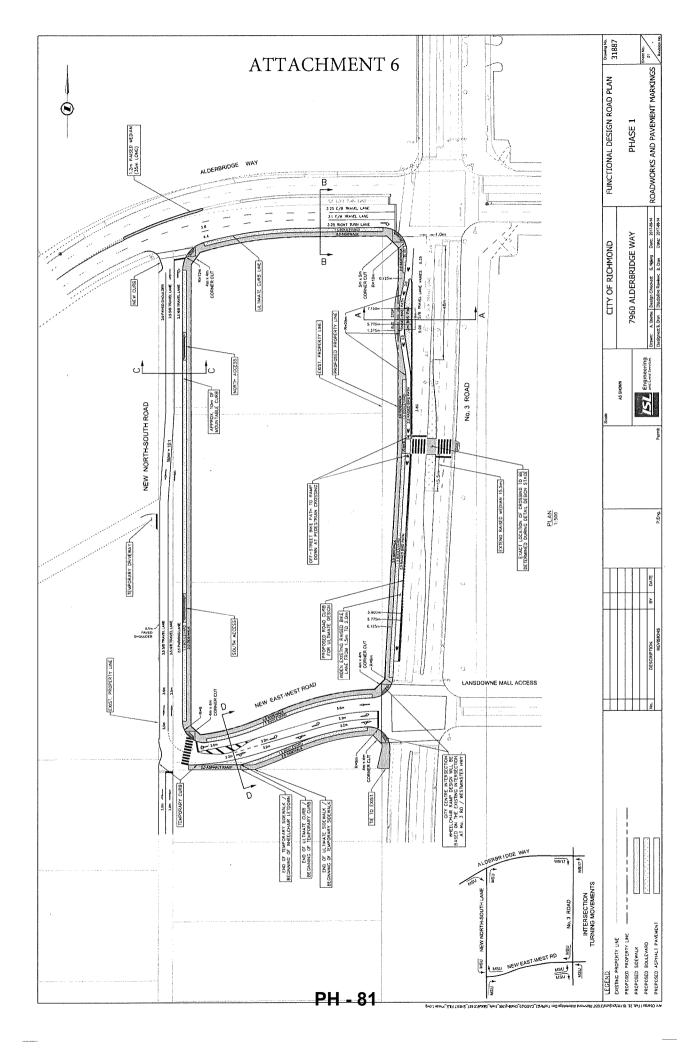
- 1. Some of the foregoing items (\*) may require a separate application.
- 2. Where the Director of Development deems it appropriate, legal agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act
- 3. All agreements 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.
- 4. 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.
- 5. 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, dewatering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
- 6. 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 be retained.

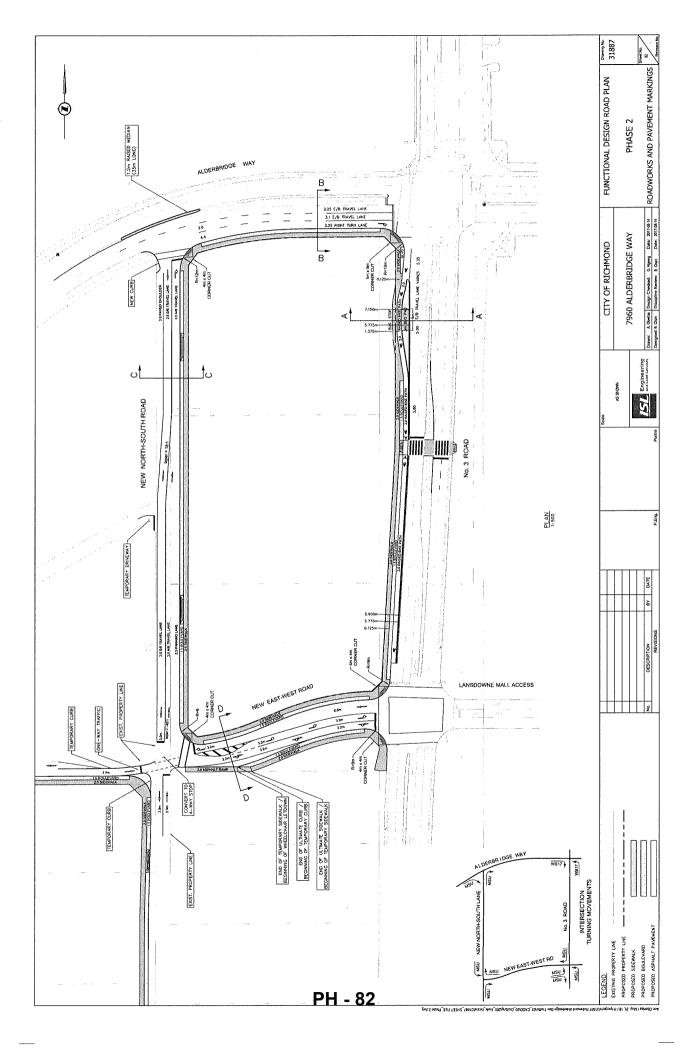
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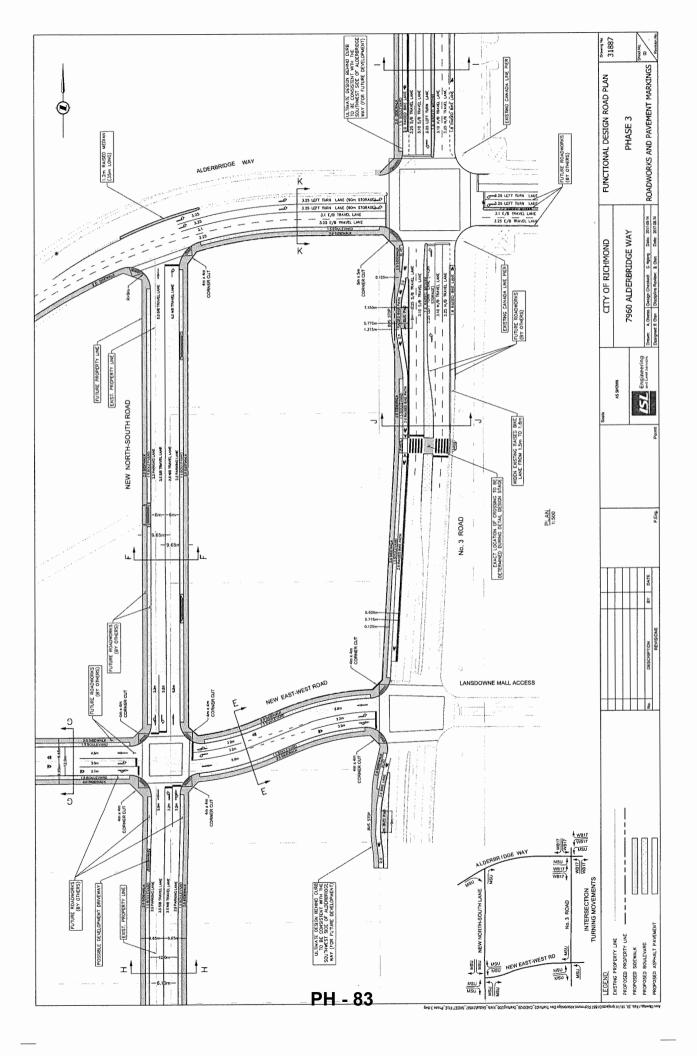
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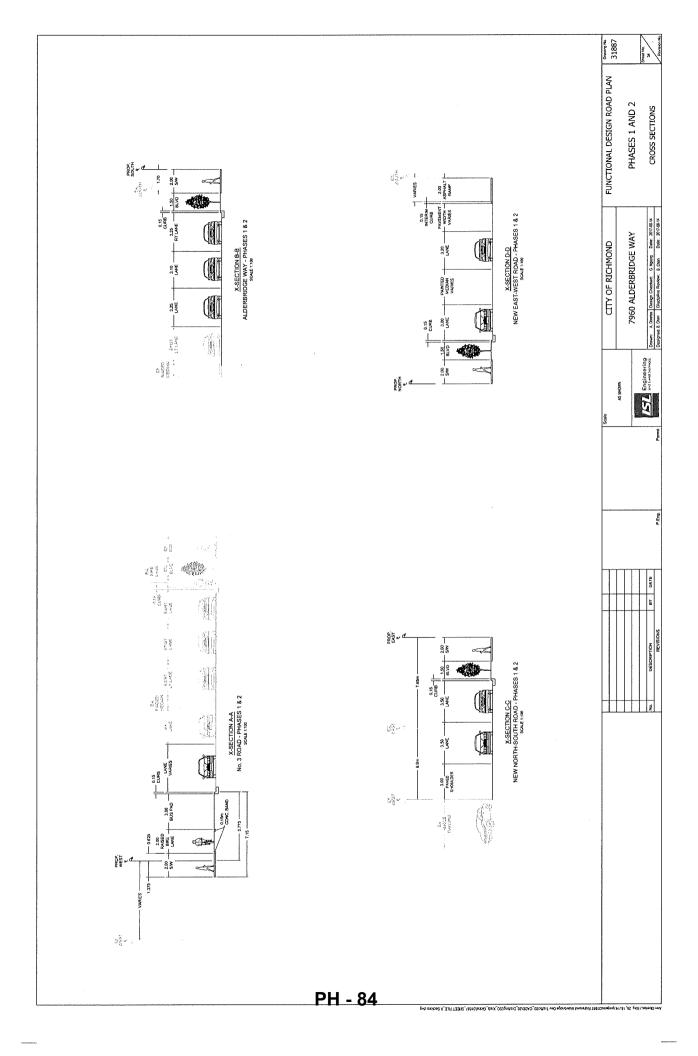
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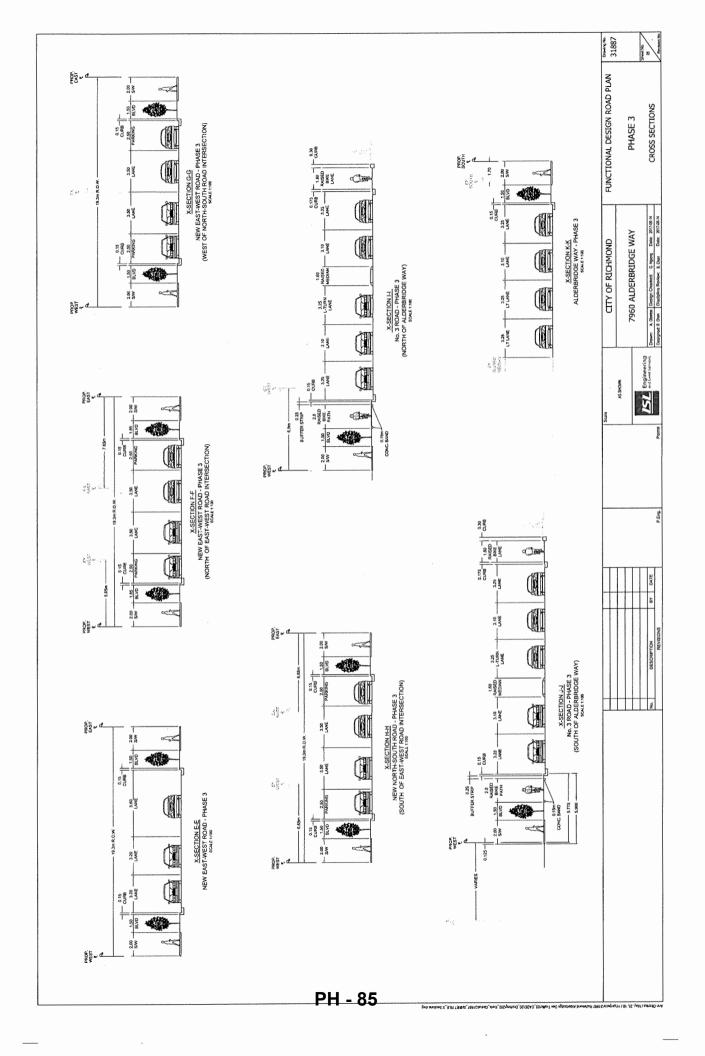


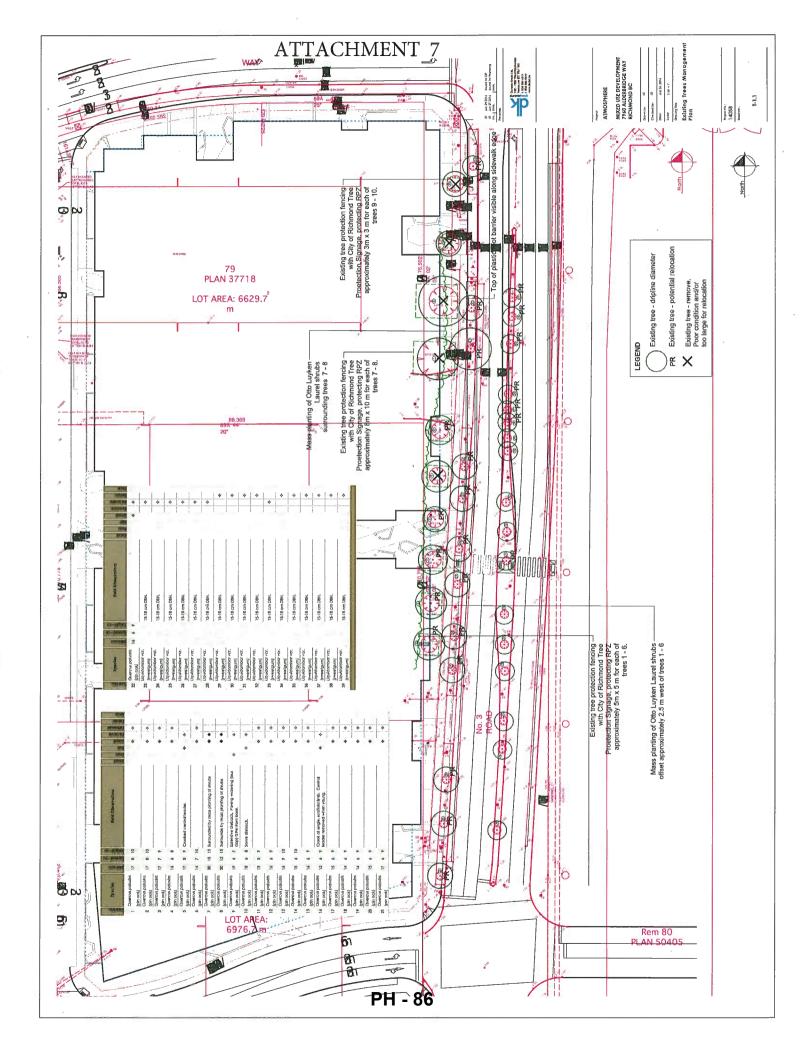












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PLAN SHOWING PROPOSED SUBDIVISION OF PART OF SECTION 5 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT LANDS DEALT WITH: ALDERBRIDGE WAY PARCEL IDENTIFIER (PID): 003-587-100 LOT 46 SEC 5 BK4N R6W NWD 1.700 89'42'25" PLAN 34468 PARCEL IDENTIFIER (PID): 003-582-663 LOT 79 SEC 5 BK4N R6W NWD PLAN 37118 PARCEL IDENTIFIER (PID): 003-583-902 LOT 80 SEC 5 BK4N R6W NWD PLAN 37118 7.554 PORTION OF ROAD 79 PLAN 37118 DEDICATED ON PLAN 32833 SCALE 1:500 PROPOSED SUBDIVISION CRITERIA FROM FUNCTIONAL DESIGN ROAD PLAN PHASE 3 DRAWNG NUMBER 31248 REVISION TO DATED 16-01-27 PREPARED BY ISL EXPONERING AND LAND SERVICES SRW PLAN 34077 PROPOSED 93'18'30" LOT 1 16930.6 m<sup>2</sup> PLAN 37118 ROAD LANE 3 ģ 46 PLAN 34468 PROPOSED Rem 46 483.2 m<sup>2</sup> © COPYRIGHT MATSON PECK & TOPLISS SURVEYORS & ENGINEERS #320 - 11120 HORSESHOE WAY RICHMONO, B.C., V7A 5H7 30 PLAN 32827 PH: 604-270-9331 FAX: 604-270-4137 SEPTEMBER 29, 2017 R-17-7-PROPOSED SUB-1



# Richmond Zoning Bylaw 8500 Amendment Bylaw 9825 (RZ 15-692485) 7960 Alderbridge Way and 5333 & 5411 No. 3 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:
  - "20.34 City Centre High Density Mixed Use (ZMU34) Lansdowne Village

# 20.34.1 Purpose

The zone provides for a broad range of commercial, office, service, institutional, education, 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, office uses and community amenities.

### 20.34.2 Permitted Uses

- amenity space, community
- animal day care
- animal grooming
- broadcasting studio
- child care
- education
- education, commercial
- education, university
- · emergency service
- entertainment, spectator
- · government service
- grocery store
- health service, minor
- housing, apartment
- library and exhibit
- liquor primary establishment
- manufacturing, custom indoor

- microbrewery, winery and distillery
- neighbourhood public house
- office
- 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
- veterinary service

# 20.34.3 Secondary Uses

- boarding and lodging
- home business
- home-based business

#### 20.34.4 Additional Uses

· district energy utility

### 20.34.5 Permitted Density

- 1. For the purposes of this **zone**, the calculation of **floor area ratio** is based on a net **development site** area of 20,817 sq. m.
- 2. The maximum **floor area ratio** is "2.0" for residential **uses** and mixed **uses** including residential **uses**, together with an additional:
  - a) "0.1" **floor area ratio** provided that the additional **floor area** is used entirely to accommodate indoor **amenity space**.
- 3. Notwithstanding Section 20.34.5.2, the reference to "2.0" is increased to a higher **floor area ratio** of "3.0" if the **owner**:
  - a) provides 38 affordable housing units on the site and the combined habitable space of the affordable housing units is not less than 5% of the total residential floor area minus the total market rental housing floor area;
  - b) enters 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:
  - c) provides market rental housing units on the **site** with a combined **floor area ratio** of not less than 0.41 FAR:
  - d) enters into a legal agreement with respect to the market rental housing units and registers the legal agreement against title to the **lot**; and
  - e) pays a sum to the City (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 and the market rental housing floor area ratio (i) multiplied by the "equivalent to construction value" rate of \$6997/ sq. m., if the payment is made within one year of third reading of the zoning amendment bylaw, or (ii) thereafter, multiplied by the "equivalent to construction value" rate of \$6,997/ sq. m. adjusted by the cumulative applicable annual changes to the Statistics Canada "Non-residential Building Construction Price Index" for Vancouver, where such change is positive.
- 4. Notwithstanding Section 20.34.5.3, the reference to "3.0" is increased to a higher **floor area ratio** of "3.95" if the **owner**:

- a) uses the additional "0.95" **floor area ratio** for non-residential **uses** only; and
- b) pays a sum to the **City** (*City Centre Facility Development Fund*) based on 5% of the additional non-residential **floor area ratio** provided in the **development**, calculated using the "equivalent to construction value" rate of \$8,073/ sq. m., if the payment is made within one year of third reading of the zoning amendment bylaw, or (ii) thereafter, multiplied by the "equivalent to construction value" rate of \$8,073/ sq. m. adjusted by the cumulative applicable annual changes to the Statistics Canada "Non-residential Building Construction Price Index" for Vancouver, where such change is positive.
- 5. Notwithstanding Section 4.5.1, the following items are not included in the calculation of maximum **floor area ratio**:
  - common mechanical, heating, ventilation, air conditioning, electrical, telephone and similar type service rooms not co-located with an enclosed parking area and not intended as habitable space; and
  - b) storage areas for residential **uses** to a maximum area of 3.3 sq. m. per **dwelling unit** where co-located with below-grade, **enclosed parking**.

# 20.34.6 Permitted Lot Coverage

1. The maximum **lot coverage** is 90% for **buildings**.

#### 20.34.7 Yards & Setbacks

- 1. Minimum setbacks shall be:
  - a) from a **road**, measured to a **lot line**, 6.0 m., except that a **road setback** may be reduced to:
    - i) 3.0 m for parts of a **building** above **finished site grade**, as specified in a Development Permit approved by the **City**; and
    - ii) 0.0 m. for parts of a **building** below **finished site grade**, as specified in a Development Permit approved by the **City**; and
  - b) from a side lot line, measured to a lot line, 0.0 m.
- 2. Notwithstanding 20.34.7.1, minimum **setbacks** for parts of a building directly adjacent to City land or land secured for public use via **right-of-way**, measured to a **lot line** or the boundary of the **right-of-way**, shall be:
  - a) where a door provides **access**, 1.5 m or the depth of the door swing, whichever is greater.
- 3. Notwithstanding Sections 4.11 and 4.12, projections into setbacks for architectural features, cantilevered roofs, balconies, awnings, sunshades, canopies, privacy screens or similar building elements located 3.0 m or more above finished site grade may be increased, subject to the depth of the approiated setback, to a maximum of:

- a) for road setbacks, 2.5 m., as specified in a Development Permit approved by the City;
- b) for **side lot line** and **rear lot line setbacks**, 2.0 m., as specified in a Development Permit approved by the **City**.

# 20.34.8 Permitted Heights

- 1. The maximum **building height** for **principal buildings** is 41.5 m. geodetic.
- 2. The maximum building height for accessory structures is 12.0 m.

#### 20.34.9 Subdivision Provisions/Minimum Lot Size

1. The minimum lot area for development is 16,800 sq. m.

# 20.34.10 Landscaping & Screening

1. **Landscaping** and **screening** shall be provided according to the provisions of Section 6.0 of Richmond Zoning Bylaw 8500.

# 20.34.11 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.
- 2. Notwithstanding Section 20.34.11.1, the minimum number of required bicycle **parking spaces** shall be:
  - a) for Class 2, for general retail, convenience retail, restaurant, office and other non-residential uses, excluding education, commercial education and university education uses, calculated as 0.2 spaces per 100.0 sq. m. of floor area; and
  - b) for Class 2, for residential **uses**, calculated as 0.1 spaces per **dwelling unit**.
- Notwithstanding Section 20.34.11.1, the minimum number of parking spaces required by this bylaw for residential uses may be reduced to be calculated as follows:
  - a) 0.9 resident parking space per residential dwelling unit;
  - b) 0.8 resident parking space per affordable housing unit;
  - c) 0.8 resident parking space per market rental dwelling unit;
  - d) 0.1 visitor parking space per residential dwelling unit;
  - e) 0.1 visitor parking space per affordable housing unit; and
  - f) 0.1 visitor parking space per market rental dwelling unit.

and then the minimum on-**site** parking requirements for residential **uses** (set out above) and for non-residential **uses** (set out in Section 7) may be further reduced by up to a maximum of 10%, where:

- g) the City implements transportation demand management measures, including the use of car co-operatives, transit passes, private shuttles, carpools, enhanced end-of-trip cycling facilities, and other pedestrian, bicycle and transit connectivity improvements suitable to the site and the surrounding neighbourhood; and
- h) the minimum on-**site** parking requirements are substantiated by a parking study that is prepared by a registered professional engineer and is subject to review and approval of the **City**.
- 4. Notwithstanding Section 20.34.11.1, the required number of **loading** spaces is:
  - a) 2.0 large size truck spaces shared between residential uses and nonresidential uses; and
  - b) 7.0 medium size truck spaces shared between non-residential and residential uses.

# 20.34.12 Other Regulations

- 1. Signage must comply with the City of Richmond's Sign Bylaw 5560, as it applies to **development** in the Downtown Commercial (CDT1) **zone**.
- 2. **Telecommunication antenna** must be located a minimum 20.0 m above the ground (i.e., on a roof of a **building**).
- 3. In addition to the regulations listed above, the General Development Regulations in Section 4.0 and the Specific Use Regulations in Section 5.0 apply."
- 2. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning Bylaw 8500, is amended by repealing the existing zoning designation of the following parcels and by designating them CITY CENTRE HIGH DENSITY MIXED USE (ZMU34) LANSDOWNE VILLAGE:
  - P.I.D. 003-582-663 LOT 79 SECTION 5 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN 37118
  - P.I.D. 003-583-902 LOT 80 SECTION 5 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN 37118
  - P.I.D. 003-587-100 LOT 46 SECTION 5 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN 34468

FIRST READING	JUN 2 5 2018	CITY OF RICHMOND
PUBLIC HEARING		APPROVED
SECOND READING		APPROVED by Director or Solicitor
THIRD READING	<u> </u>	— H
OTHER CONDITIONS SATISFIED		
ADOPTED		
MAYOR	CORPORATE OFFIC	 F

3. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9825".



# **Report to Committee**

To:

Planning Committee

Date:

May 30, 2018

From:

Wayne Craig

Director, Development

File:

RZ 17-773703

Re:

Application by GBL Architects Ltd. on behalf of Keltic (Brighouse) Development Ltd. for Rezoning at 6340 No. 3 Road from " Land Use Contract 062 " to "High Density Mixed Use and ECD Hub (ZMU37) – Brighouse Village (City Centre)"

### Staff Recommendation

- 1. That Richmond Zoning Bylaw 8500, Amendment Bylaw 9859 to:
  - a) create the "High Density Mixed Use and ECD Hub (ZMU37) Brighouse Village (City Centre)" zone;
  - b) rezone 6340 No. 3 Road from "Land Use Contract 062" to "High Density Mixed Use and ECD Hub (ZMU37) Brighouse Village (City Centre);" and
  - c) discharge "Land Use Contract 062," entered into pursuant to "Techram Securities Ltd. Land Use Contract Bylaw No. 3366, 1977" (RD50359) from the Title of 6340 No. 3 Road;

be introduced and given first reading; and

2. That staff be directed to prepare a service area bylaw to provide district energy services to the development at 6340 No 3 Road.

Wayne Craig

Director, Development

(604-247-4625)

WC:jd

Att. 7

REPORT CONCURRENCE				
ROUTED TO:	Concurrence	CONCURRENCE OF GENERAL MANAGER		
Law Affordable Housing Childcare Recreation Services Project Management Real Estate Services Engineering (Sustainability) Transportation	व व व व व व व	h Eneg		

# **Staff Report**

# Origin

May 30, 2018

GBL Architects Ltd., on behalf of Keltic (Brighouse) Development Ltd., has applied to the City of Richmond to create the "High Density Mixed Use and ECD Hub (ZMU37) – Brighouse Village (City Centre)" zone, and to rezone the property at 6340 No. 3 Road from "Land Use Contract 062" to a new site-specific zone, "High Density Mixed Use and ECD Hub (ZMU37) – Brighouse Village (City Centre)" (Attachment 1), in order to permit the development of a commercial, office, residential and institutional use development in the City Centre's Brighouse Village. The proposed zoning amendment bylaw includes discharge of Land Use Contract 062. The application includes an offer by the developer to design and construct an Early Childhood Development Hub (ECD Hub), at its sole cost, and to transfer the facility to the City, along with access to parking and loading.

Key components of the rezoning proposal (Attachment 2) include:

- A podium and tower form of development with two levels of below-grade parking, ground level retail uses, one office tower and three residential towers and a podium level Early Childhood Development Hub (ECD Hub).
- A maximum floor area ratio (FAR) of 4.007 and a maximum height of 47.0 m geodetic.
- A total floor area of approximately 53,794 m<sup>2</sup> (579,034 ft<sup>2</sup>) including approximately:
  - o 2,784 m<sup>2</sup> (29,967 ft<sup>2</sup>) of commercial space.
  - o 9,621 m<sup>2</sup> (103,560 ft<sup>2</sup>) of office space.
  - o 39,624 m<sup>2</sup> (426,509 ft<sup>2</sup>) of residential space.
  - o 1,765 m<sup>2</sup> (19,000 ft<sup>2</sup>) of ECD Hub space.
- Approximately 546 residential units including:
  - o approximately 519 residential units.
  - o 27 affordable residential units.
- LEED Silver equivalent design with LEED ID+C Gold certification for the ECD Hub.
- DEU connection-ready and transfer of the on-site low carbon energy plant to the City.
- Widening of No. 3 Road and of Cook Road and provision of public right-of-passage (PROP) statutory rights-of-way (SRW) on the north and east sides of the site, various storm and sanitary sewer upgrades and frontage improvements.

The proposed transfer of an on-site low carbon energy plant to the City will enable immediate service by LIEC and connection to the City's District Energy Utility system in the future. A Service Area Bylaw for the subject site will be brought forward, in a subsequent report from Engineering, for Council consideration before adoption of the rezoning bylaw.

### **Findings of Fact**

A <u>Development Application Data Summary</u> (Attachment 3) is provided for comparison of the proposed development with the proposed site-specific bylaw requirements.

# **Existing Site and Development**

Existing Site and Development: The subject site is located in Brighouse Village of the City Centre (Attachment 4) on the east side of No. 3 Road between Cook Road and the future Bus Mall site. It is comprised of one lot and currently is developed with low-scale commercial uses and surface parking.

Existing Housing Profile: The subject properties were not previously developed with residential uses.

# **Surrounding Development**

Surrounding development includes:

To the North: Adjacent, an undeveloped City lot subject to an application (DP 11-593871) to

construct a Bus Mall adjacent to the Brighouse Canada Line Station in keeping with the City Centre Area Plan (CCAP). This application is in process and will be the subject of a separate report to Council. To the north of the Bus Mall site, a recently-constructed mixed commercial and residential use development on a site

zoned "Downtown Commercial (CDT1)" (DP 11-584010).

To the East: Across the north-south City lane, at 6411 Buswell Street, an existing, low scale

commercial and office use development. This site is part of the Bus Mall

development application noted above, and will provide SRWs connecting the Bus Mall with Buswell Street. Adjacent to the subject site, at 8171 Cook Road, is an

existing, low scale commercial and office use development.

To the South: Across Cook Road, existing, low-scale commercial buildings with surface

parking.

To the West: Across No. 3 Road, the Richmond Centre Mall site, which is zoned "Downtown

Commercial (CDT1)" and is subject to an Official Community Plan (OCP) amendment application (CP 16-752923) to adjust land use and form of development policies, as well as a Development Permit application

(DP 17-768248) for the first phase of mall redevelopment and new mixed use

building development. This application is in process and will be the subject of a

separate report to Council.

### **Related Policies & Studies**

# Official Community Plan/City Centre Area Plan

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

City Centre Area Plan: The City Centre Area Plan (CCAP) Brighouse Village Specific Land Use Map designates the subject site as "Urban Centre T6 (45 m)". The proposed rezoning is consistent with this designation.

# Other Policies, Strategies & Bylaws

Floodplain Management Implementation Strategy: The proposed redevelopment must meet the requirements of the Richmond Flood Plain Designation and Protection Bylaw 8204 for Area "A". Registration of a flood indemnity covenant on Title is required prior to final adoption of the rezoning bylaw.

Aircraft Noise Sensitive Development Policy: The proposed development is located in Area 2 (aircraft noise sensitive uses may be considered) on the Aircraft Noise Sensitive Development Map. Registration of an aircraft noise covenant is required prior to rezoning adoption.

Mixed-Use Noise, Canada Line Noise, Commercial Noise and City Centre Impacts: The proposed development must address additional OCP Noise Management Policies related to mixed-use, Canada Line, commercial and ambient noise, as well as other impacts of densification. Requirements include provision of acoustic consultant reports recommending residential sound attenuation measures and registration of associated noise covenants prior to final adoption of the rezoning bylaw. Provisions will be added to the mixed-use noise covenant to address noise from the ECD Hub indoor and outdoor facilities.

#### Consultation

*Public:* A rezoning application sign has been installed on the subject property. Staff have not received any comments from the general public in response to the sign. Should the Planning Committee endorse this application and Council grant first reading to the proposed rezoning, the application will be forwarded to a Public Hearing; where any area resident or interested party will have further opportunity to comment. Public notification for the Public Hearing will be provided as per the *Local Government Act*.

Ministry of Environment and Climate Change Strategy (MOECCS): With respect to potential site contamination, MOECCS has issued a release for the City to approve rezoning and demolition. The applicant is required to expand this release before rezoning adoption to include Development Permit and Subdivision. As the proposed rezoning includes dedication of land to the City, a Certificate of Compliance, Final Determination or alternative legal instrument with associated indemnification must also be provided prior to rezoning adoption, as outlined in the rezoning considerations (Attachment 5).

TransLink: The site is adjacent to the terminus of the Canada Line at Brighouse Station and the future Bus Mall. TransLink has confirmed that the property owner has entered into an Adjacent and Integrated Development (AID) agreement for formal review and has worked cooperatively to date.

### **Analysis**

#### Proposed Zoning Bylaw Amendment

A new site-specific zone, "High Density Mixed Use and ECD Hub (ZMU37) – Brighouse Village (City Centre)", is proposed. It addresses land use, density, density bonusing, height, siting and parking and loading requirements. Key details of the proposed zone and the associated rezoning considerations are discussed in the report. The rezoning considerations are attached (Attachment 5) and a signed copy is on file.

## Infrastructure Improvements

The proposed rezoning will contribute to utility, transportation and park infrastructure improvements as described below. Additional details are provided in the Servicing Agreement section of the rezoning considerations (Attachment 5). Detailed design will take place through the Servicing Agreement process.

# **Engineering**

City Utilities: The developer is required to undertake a variety of storm sewer and sanitary sewer frontage works. Included are:

- Up-graded lane drainage to meet City standards.
- A new sanitary sewer on Cook Road running through to Buswell Street.
- New street and/or pedestrian lighting on the roads and pedestrian statutory rights-of-way (SRW).

Relocation of existing sanitary sewers within the development site is subject to a separate Servicing Agreement application (SA 17-769245). Discharge of the five existing sanitary sewer SRWs is a consideration of the separate Servicing Agreement application, and must be completed prior to final adoption of the rezoning bylaw.

Development Cost Charges (DCCs): In Engineering's 2016 DCC program, there are:

- DCC credits available for 146 m of sanitary sewer between manhole SMH842 in Cook Road and manhole SMH775 in the north-south aligned right-of-way bisecting the development site under 2006-CC-1122.
- No available DCC credits for the storm or water works for this development.

Third Party Utilities: Requirements include undergrounding and/or pre-ducting of private utility lines and location of all private utility equipment on-site.

# **Transportation**

*No. 3 Road Frontage:* Required back of curb improvements on No. 3 Road will necessitate a dedication and will include a boulevard wide enough to accommodate trees and bus stop infrastructure, development of an off-street bike lane to enhance cyclist safety, a buffer strip/greenway with a second row of trees, and, a 3.0 m wide sidewalk.

Cook Road Frontage: Improvements will include road widening and back of curb cross-section elements similar to No. 3 Road (a boulevard wide enough to accommodate trees and bus stop infrastructure, development of an off-street bike lane, a buffer strip/greenway with a second row of trees, and, a 3.0 m wide sidewalk). A dedication is required.

Bus Mall Frontage: A 4.0 m SRW PROP is required along the north property line to supplement the approximately 3.0 m sidewalk to be constructed on the adjacent Bus Mall site. This will be combined with SRW PROPs in favour of the City on the north-east and north-west corners of the site (overlaid on the SRWs provided to TransLink by the applicant).

North-South Pedestrian Mews: A SRW/PROP is required to accommodate a 6.0 m wide north-south pedestrian mews running from Cook Road to the Bus Mall site. This intended to add connectivity for users of the Canada Line and the Bus Mall and will be landscaped.

Kiss and Ride: An SRW/PROP is required over the north-east corner of the site to provide for a 437.6 sq. m. "kiss and ride" facility serving the Canada Line and Bus Mall. This will provide for approximately seven parking spaces for passenger pick up and drop off by taxis and private citizens.

*Traffic Signals:* The developer is required to install signal and associated facilities at the new Cook Road access and provide modifications of the signals at the Cook Road/Buswell Street and the Cook Road/No. 3 Road intersections to accommodate road widening and realignment.

Where eligible, Development Cost Charge (DCC) credits will be applied to the required improvements. All other improvements will be funded by the developer.

Preliminary functional road drawings demonstrating the proposed road improvements have been provided (Attachment 6). Design development of the back of curb cross-sections will occur through the DP and SA processes.

# **Amenity Contributions**

The CCAP Implementation Strategy includes density bonusing and other measures to support the development of community amenities. The proposed rezoning includes contributions to community amenities as outlined below. Staff note that all contributions are based on rates at the time of writing and will be subject to indexing adjustments, should the rezoning not be adopted within the relevant applicable time periods.

Child Care and Community Facility: The proposed rezoning is located in the Brighouse Village Specific Land Use Map "T6" and "Village Centre Bonus" areas and is subject to the T6 Child Care and Village Centre Bonus provisions requiring contribution of floor area or cash-in-lieu for development of child care and/or community facilities. In the case of this development, Community Services staff propose that the contribution be taken in the form of floor area and that the floor area be used for a combined child care and community service facility, generally described as an Early Childhood Development Hub, to serve the Brighouse Village area of the City Centre. This use of the density bonus contribution for an ECD Hub is consistent with the 2017-2022 Richmond Child Care Needs Assessment and Strategy and the City Centre Area Plan and leverages opportunities inherent in a large mixed-use development located at the centre of Brighouse Village and adjacent to the Canada Line Station and Bus Mall.

The proposed ECD Hub would combine child care programs and child and family services programs in a facility with approximately 1,765 m<sup>2</sup> (19,000 ft<sup>2</sup>) of floor area. The density bonusing provisions used to derive the developer's floor area contributions to the ECD Hub include:

- for "T6 Child Care", 1% of the proposed residential floor area minus affordable housing floor area (377 m<sup>2</sup> f0.01 x (39,624 m<sup>2</sup> 1,981 m<sup>2</sup>f1); and
- for "Village Centre Bonus Community Facility", 5% of the Village Centre Bonus floor area (671 m $^2$  [0.05 x 13,425 m $^2$ ]).

The combined floor area of these two contributions is 1,048 m<sup>2</sup> (11,281 ft<sup>2</sup>), which is 717 m<sup>2</sup> (7,718 ft<sup>2</sup>) less than the optimum facility size noted above. The developer has proposed an additional voluntary contribution of 717 m<sup>2</sup> (7,718 ft<sup>2</sup>) to address the shortfall. Staff support this proposal and have been working with the applicant to expedite the staff review process in recognition of this significant community amenity offer.

The ECD Hub facility is proposed to include space for up to four child care programs as well as offices and multi-purpose spaces for child and family development services. The facility may also be used for after-hours community purposes (e.g. outside of the normal operating hours for the ECD Hub). The facility will be located on the third floor of the development, in the southwest corner of the site, and will have its own entry system from No. 3 Road and the parkade (Attachment 5 - Schedule 4). Outdoor space will be provided for the child care programs in the podium courtyard and, for the child and family development space, in the podium courtyard and overlooking No. 3 Road. Ancillary functions, such as bicycle storage, parking, loading and waste management, will be provided on various levels of the parkade. The required vehicle parking for the facility includes 22 staff spaces and 19 client spaces, as well as a designated space for a van or small delivery truck. These will be located on the ground and upper levels of the parkade, directly adjacent to the ECD Hub access lobbies. Additional parking spaces are provided for the after-hours community use of the facility within the shared non-residential / residential visitor parking area. Program and technical requirements are outlined in the rezoning considerations (Attachment 5) and detailed in the Brighouse Village Early Childhood Development Hub - Terms of Reference (Attachment 5 – Schedule 5).

In addition to contributing floor area to the facility (including the facility proper, ancillary facilities, such as parking, and outdoor space), the developer will undertake the design and construction of the facility, to a turnkey level of finish, at the developer's cost. Once completed and deemed acceptable, the facility will be provided to the City, at no cost, primarily in the form of an air space parcel. Ancillary facilities not practically included in the air space parcel will be secured with easements/statutory rights-of-way and associated cost sharing terms.

Further to contributing the facility, the developer will provide a project management fee based on 5% of the anticipated construction cost of the contributed floor area (e.g. minus the supplementary contributed floor area) in order to support the City's involvement in developing the facility program and construction documents, construction review and providing other input, as necessary. A Construction Agreement will be required to secure completion of the facility to the City's standards. If the Construction Agreement has not been signed before rezoning, a No Build Covenant will also be required. Registration of a No Occupancy Covenant, including terms regarding occupancy of the development and transfer of the completed facility to the City, is also a consideration of rezoning. The detailed conditions of the amenity contribution are provided in the rezoning considerations (Attachment 5).

Community Planning: The proposed rezoning is subject to a community planning implementation contribution which will be deposited into the City Centre - Community Planning and Engineering account for future community planning initiatives (a minimum of \$161,919.94 calculated using the proposed floor area  $[53,794 \text{ m}^2 \text{ x } \$3.01/\text{m}^2]$ ).

Public Art: The rezoning must address the Richmond Public Art Policy and proposes a voluntary cash contribution in lieu of installation of a site-specific artwork by the applicant. The applicant is working with staff to develop a combination of works that would support the City's "art walk" concept for No.3 Road and highlight the Brighouse Village Centre. The Public Art Plan will be subject to Council approval. The contribution will be secured through the rezoning in the form of a cash deposit (a minimum total of \$404,812.20 calculated using the proposed floor areas, excluding the ECD Hub community amenity floor area and the affordable housing floor area,  $\int (14,170 \text{ m}^2 - 1,765 \text{ m}^2) x \$4.84/\text{m}^2 + (39,663 \text{ m}^2 - 1,983 \text{ m}^2) x \$9.15/\text{m}^2]$ ).

Affordable Housing: The CCAP Implementation Strategy, in conjunction with the Affordable Housing Strategy, provides for density bonusing to achieve affordable housing in residential and mixed-use developments. The rezoning application for the proposed development was received prior to July 24, 2017 and is subject to grandfathering of the five percent affordable housing contribution rate. A total of 27 Low End Market Rental Housing (LEMR) units, with a combined floor area of 1,981 m<sup>2</sup> (21,323 ft<sup>2</sup>), are proposed and allocated as follows.

#### AFFORDABLE HOUSING SUMMARY

Affo		ordable Housing Strategy Requirements		Project Targets (3)	
Unit Type	Minimum Unit Sizes	Current LEMR Maximum Rents (1) (2)	Total Maximum Household Income (1) (2)	Unit Mix	# of Units (3)
Bachelor	37 m <sup>2</sup> (400 ft <sup>2</sup> )	\$811	\$34,650 or less	15%	4
1-Bedroom	50 m <sup>2</sup> (535 ft <sup>2</sup> )	\$975	\$38,250 or less	33%	9
2-Bedroom	69 m <sup>2</sup> (741 ft <sup>2</sup> )	\$1,218	\$46,800 or less	26%	7
3-Bedroom	91 m <sup>2</sup> (980 ft <sup>2</sup> )	\$1,480	\$58,050 or less	26%	7
TOTAL		N/A	N/A	100%	27

- (1) Denotes 2017 amounts adopted by Council on July 24, 2017.
- (2) Subject to Council approval, total annual household incomes and maximum monthly rents may be increased annually by the Consumer Price Index.
- (3) 50% 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 the following terms: clustering of units in one area of the development; tenant access to indoor and outdoor common amenity areas; and, provision of affordable housing parking spaces at no additional charge.

Accessibility: The applicant proposes to include the following accessibility unit types in the development.

# ACCESSIBILITY SUMMARY

Туре	Affordable	Market	Intent	Standard
Aging in Place	13	330	- support mobility and usability	Per OCP
Adaptable + Basic Universal Housing (1)	14	206	- renovation potential for wheelchair plus added floor area for manoeuvering	Per BCBC and RZB
Barrier Free (2)	-	-	- move in with wheelchair	Per BCDH
Total Units	27	536		

- Includes Aging-in-Place
- (2) Includes Aging-in-Place, Adaptable and Basic Universal Housing

#### Sustainability

District Energy Utility (DEU): Under typical rezoning considerations, developments are required to be ready for connection to the City's DEU system. In this case, the applicant is proposing to construct and transfer the low carbon energy plant to the City at no cost so that the Lulu Island Energy Company (LIEC) can provide immediate service to the customers and the equipment can be integrated into the future DEU system for this neighbourhood. This servicing opportunity is consistent with the City Centre DEU due diligence analysis, which will be brought forward to Council in early 2019. While the City Centre DEU due diligence analysis is being completed, this interim servicing strategy will secure the customer base for the immediate implementation of GHG emissions reduction. LIEC staff have completed the business plan

whereby LIEC can service new customers from the on-site low carbon energy plants at competitive cost to customers for the same level of service. The applicant is working with LIEC staff to ensure the design of the system and equipment will be compatible with the future system. Mirroring the process of affordable housing strategy, the transfer of the energy plant to the City will proceed only if Council adopts a new Service Area Bylaw which will be provided for Council consideration in a separate report. Otherwise, the development will be built as "DEU-Ready". Details are provided in the rezoning considerations (Attachment 5).

Sustainability Rating System: The proposed development is expected to achieve Leadership in Energy and Environmental Design (LEED) v4 Silver equivalency. The applicant has provided a preliminary checklist and will incorporate the recommendations into the development and Building Permit drawings, where relevant. The ECD Hub, as a City-owned facility, is expected to achieve LEED v4 ID+C Gold Certification for Commercial Interiors.

# Site Access, Parking and Loading

Site Access: Proposed pedestrian access to the site includes storefront entries, an office lobby at the corner of No. 3 Road and Cook Road, residential lobbies on the ground level on No. 3 Road, Cook Road and the north-south pedestrian mews, and an exclusive ECD Hub lobby on No. 3 Road. Vehicle and truck access is proposed to be provided from Cook Road, where there will be a new traffic signal to manage the vehicle and pedestrian movements at the intersection. A second car entry will be located on the east side of the site and will be accessed via the existing City lane that runs west from Buswell Street. Truck and waste management loading spaces are proposed to be grouped near the Cook Road access. An extra high drive aisle is provided between the loading area and the lane access, in order to support its use by trucks when the east-west lane is realigned and widened in the future.

Parking and Loading Rates: Bicycle parking rates are proposed to be consistent with the current bylaw requirements except as follows:

- the required Class 1 spaces for the ECD Hub are proposed to be specified based on anticipated staffing numbers rather than a floor area rate; and
- the required Class 2 spaces are proposed to be calculated at reduced rates due to the proximity of transit and opportunities to share amongst the varied on-site uses.

Vehicle parking rates are proposed to be consistent with the current bylaw requirements for commercial, office, residential and affordable residential uses. Required parking space numbers (rather than rates) have been established for the ECD Hub child care and community services uses in conjunction with actual facility programming. Parking necessitated by after-hours community use of the ECD Hub by the community (approximately 8 spaces) will be provided within the shared commercial/visitor parking area. The applicant has proposed adjusted rates for loading vehicles that include waiving of the requirement for large size truck spaces as there are no large format retail spaces, and, a reduction in the number of medium size truck spaces as these can be shared between non-residential (including the ECD Hub) and residential uses. The ECD Hub program has requested an additional small loading space to accommodate a passenger van that would be located close to the ECD Hub entry system. The alternative bicycle and vehicle parking and loading requirements are reflected in the draft site-specific zone provisions.

Transportation Demand Management (TDM) Measures: The applicant is not proposing a TDM reduction but is proposing to provide TDM measures nonetheless. The proposed measures are detailed in the rezoning considerations (Attachment 5) and include:

- Provision of the end-of-trip bicycle facilities (showers and changing rooms for the office building) and maintenance tools located in the bicycle storage area.
- Provision of bicycle maintenance and repair facilities for each residential tower.
- Provision of on-site public kiss & ride area for pick-up/drop-off near the Canada Line Brighouse Canada Line Station and the proposed Bus Mall.
- Provision of one-year, two-zone transit passes for the ECD Hub staff (maximum 25).
- Provision of two car share spaces within the parkade to be operated by a car share operator.

*Electric Vehicle Charging:* Consistent with Council Policy, effective on April 1, 2018, 100% of the residential parking spaces (excluding visitor spaces) are to be provided with an energized outlet for electrical vehicle charging.

### Tree Retention and Replacement

The applicant has submitted a Certified Arborist's Report and Tree Survey (Attachment 7) which identifies on-site and off-site bylaw-sized trees that may be affected by the proposed development.

*On-site Trees*: There are 13 existing trees on site (eight Sweetgum and five Pine trees). None are in good condition and all interfere with the proposed development. Staff recommend that all be removed and replaced at a 2:1 ratio. Two trees located on the adjacent property at 8171 Cook Road will require tree protection.

# Development Form and Character

The CCAP includes a variety of policies intended to shape development to be liveable, functional and complementary to the surrounding public and private realm. Those policies most critical to the development concept (Attachment 2) at the rezoning stage are reviewed below.

Public Adjacencies: The project has public frontages on all four sides and the proposed design concept provides for street animating uses at ground level and above. The massing of the development will intersperse podium and tower forms and provide for low podium heights on the No. 3 Road and Cook Road frontages. This will improve scale and light conditions on the streets, as well as enhance the visual connection to the ECD Hub indoor and outdoor facilities on the third level. The Bus Mall frontage will be lined with retail uses and will be overlooked by residential uses. The pedestrian mews will include a residential tower lobby, a landscape-lined passage and residential uses above. The No. 3 Road and Cook Road intersection, the focus of the Brighouse Village Centre, will be marked with a signature office tower.

*Private Adjacencies:* Because the proposed development has public open space on all four sides, it is well separated from existing and future development on nearby private properties. Consequently there are no immediate adjacency impacts. The property at 8171Cook Road is relatively small by City Centre Area Plan (CCAP) standards. The applicant has provided a viability study that demonstrates the property will be developable.

Massing: The applicant has proposed a four-tower massing concept that is intended to:

- Optimize space, light access and noise reduction for the ECD Hub child care outdoor space.
- Provide for towers with adequate separation and outlook.
- Enhance liveability for podium-oriented units with views through to the streets.
- Add to the rhythmical line of towers that is developing along No. 3 Road to the north and south.
- Create common outdoor spaces that will benefit from southern and western sunlight.
- Develop different identities for the office tower and the residential towers.

Amenity Space: The proposed outdoor amenity space includes enhanced public realm space on the ground level, separate child care and residential use outdoor areas on the podium and commercial and residential use spaces on the transition areas between the mid-rise and high rise components of the development. Indoor amenity space is provided for the residents on the third level and opens directly to the podium outdoor space.

Design Development: The form and character of the proposed development, as well as functional details related to on-site public realm design, parking, loading, waste management, on-site utilities, rooftop equipment, pedestrian weather protection, DEU, CPTED, LEED, indoor and outdoor amenity space, landscape, accessibility and acoustic requirements, will be assessed in more detail during the Development Permit Application process. The proposal will be expected to respond to comments arising from Council consideration of the rezoning, as well as, from staff, Advisory Design Panel and Development Permit Panel review.

### Financial Impact or Economic Impact

As a result of the proposed development, the City will take ownership of developer contributed assets such as roadworks, waterworks, storm sewers, sanitary sewers, street lights, street trees and traffic signals. The anticipated operating budget impact for the ongoing maintenance of these assets is \$16,000. This will be considered as part of the 2019 Operating Budget.

With respect to the ECD Hub, it is anticipated that an operating budget impact (OBI) of approximately \$115,396.20 (based on today's costs) will be needed to fulfill landlord maintenance responsibilities for a nominal lease with a non-profit society. The Council approved non-profit operator will be responsible for operating costs. The estimated OBI, revised to reflect the costs of the day, will be included in the City's future Five Year Financial Plan to commence in the year the facility becomes operational. Other potential financial impacts may include: an annual permissible tax exemption for a future non-profit operator seeking relief from paying property taxes for a City leased facility; and \$35,000 for legal fees for conveyance of an air space parcel and advertising required in advance of leasing the facility to a non-profit. The source of funding for these costs would be an existing City-wide child care project budget.

#### Conclusion

The application to rezone the property at 6340 No. 3 Road to a new site-specific zone is consistent with the City Centre Area Plan Specific Land Use Map provisions including a maximum density of 4.007 FAR and a maximum height of 47.0 m. The mix of uses will contribute to a lively City core and the design of the development, with its emphasis on creating an animated and connected public realm on all sides of the development, will enhance the experience of the Brighouse Village Centre. Contributions, such as the kiss & ride, will improve civic functionality. Contributions to affordable housing will increase housing options for City residents. Most significantly, the contribution of an Early Childhood Development Hub for Brighouse Village will provide much needed child care and child and family development services for those living and working in the neighbourhood.

It is recommended that Richmond Zoning Bylaw 8500, Amendment Bylaw 9859, be introduced and given first reading.

Janet Digby, Architect AIBC

Planner 3

(604-247-4620)

JD:blg

Attachment 1: Location Map and Aerial

Attachment 2: Development Concept

Attachment 3: Development Application Data Sheet

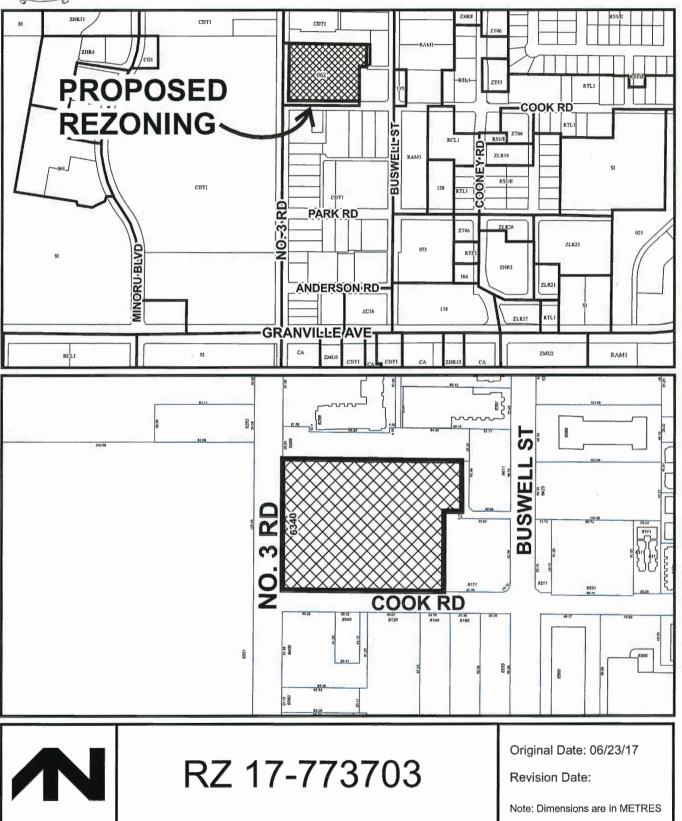
Attachment 4: Brighouse Village Specific Land Use Map

Attachment 5: Rezoning Considerations

Attachment 6: Preliminary Functional Road Drawings

Attachment 7: Tree Survey











RZ 17-773703

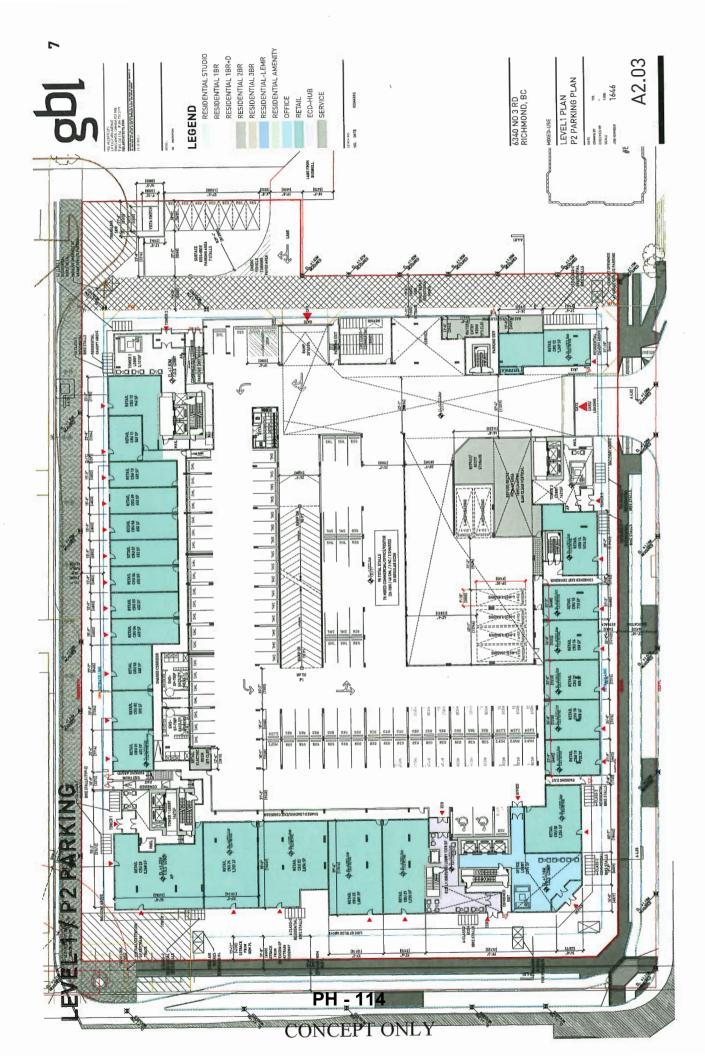
Original Date: 06/23/17

Revision Date:

Note: Dimensions are in METRES



CORNER OF 3 RD & COOK

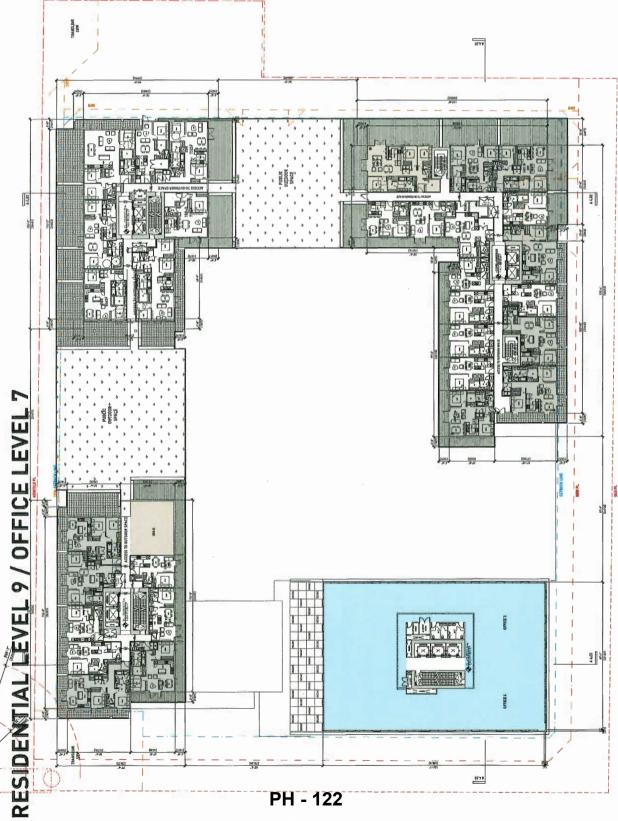


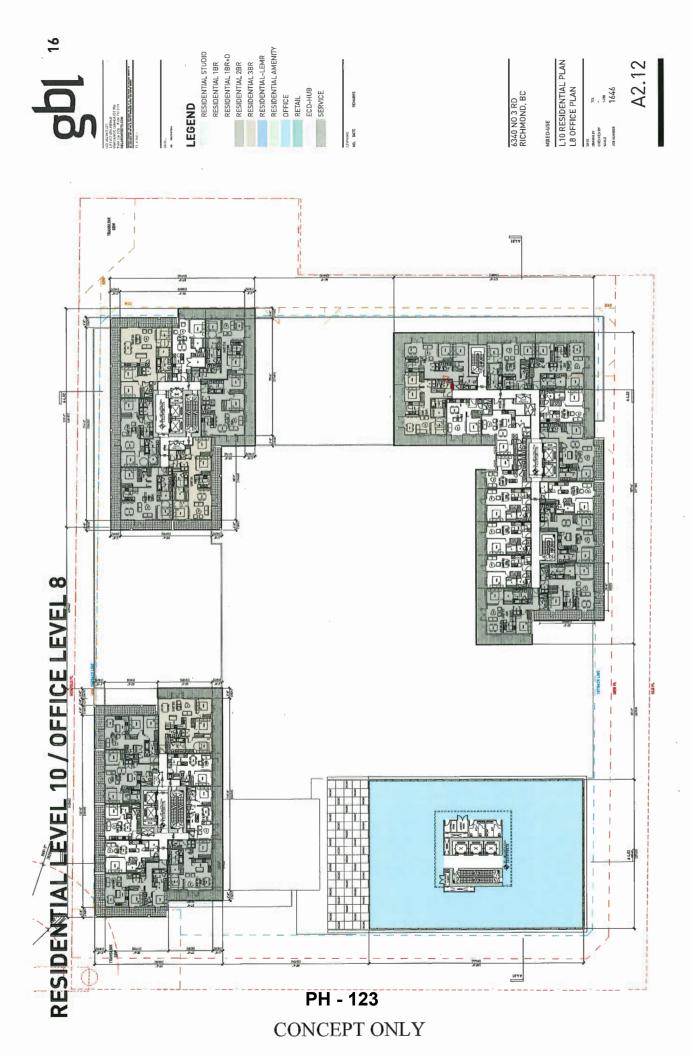


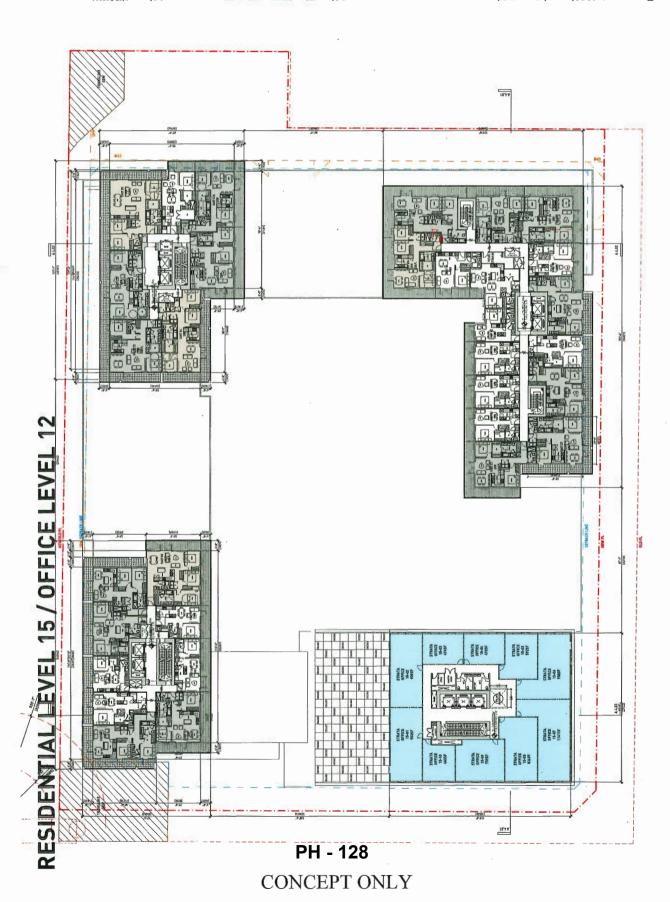
MIXED-USE

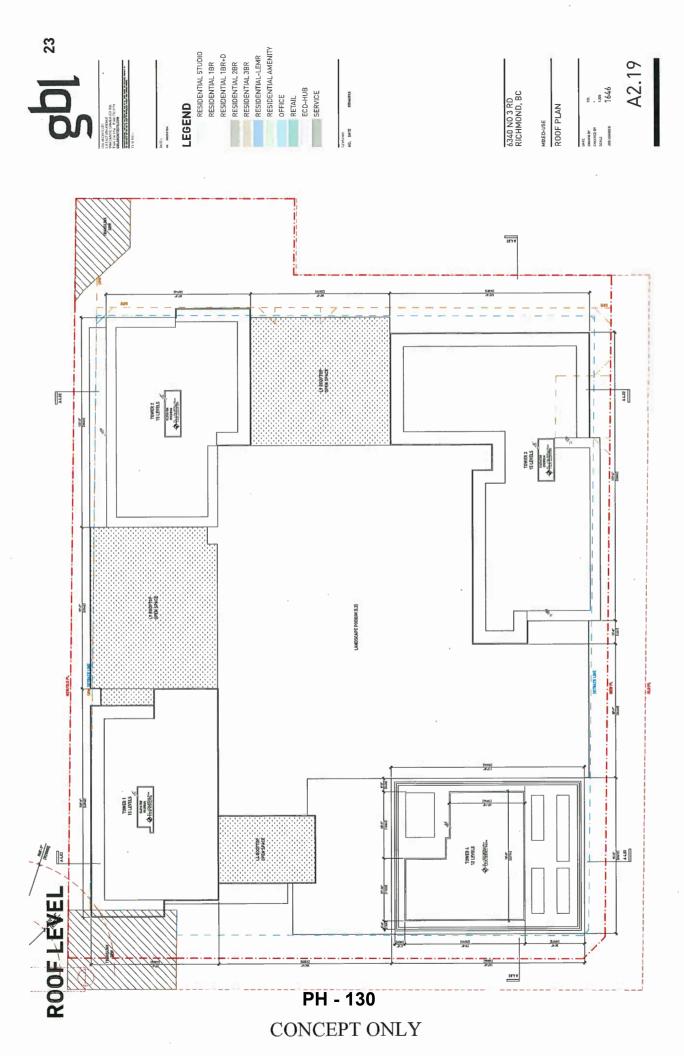
L9 RESIDENTIAL PLAN

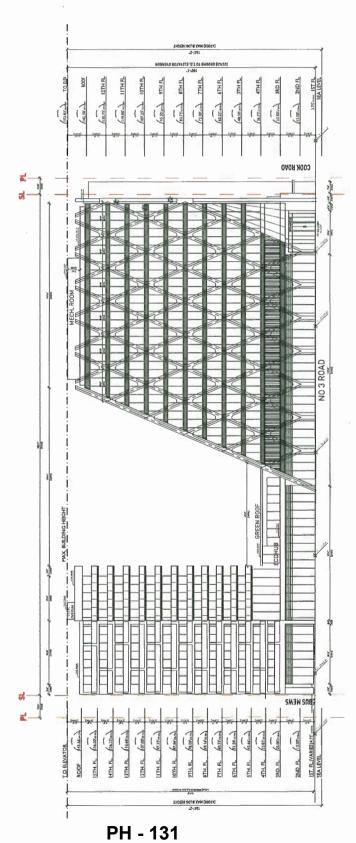
L7 OFFICE PLAN 6340 NO 3 RD RICHMOND, BC



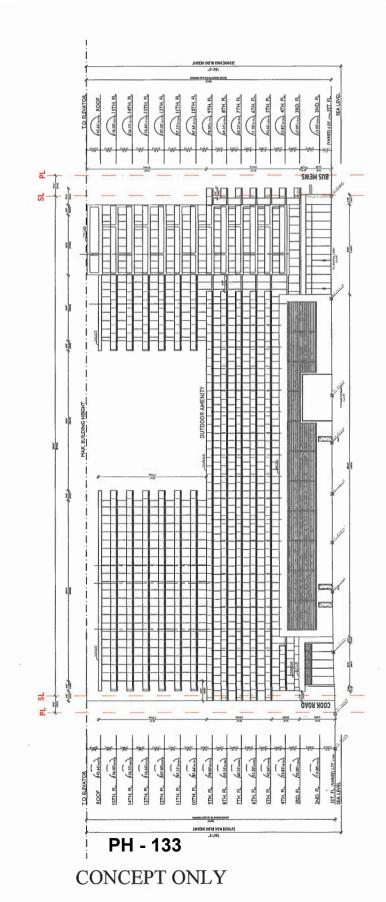


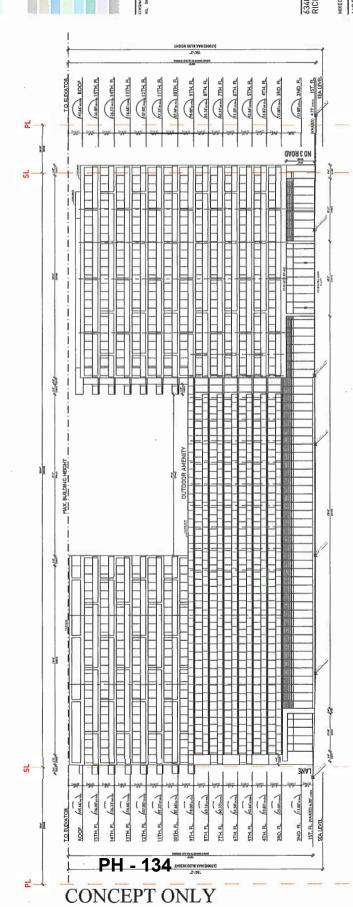




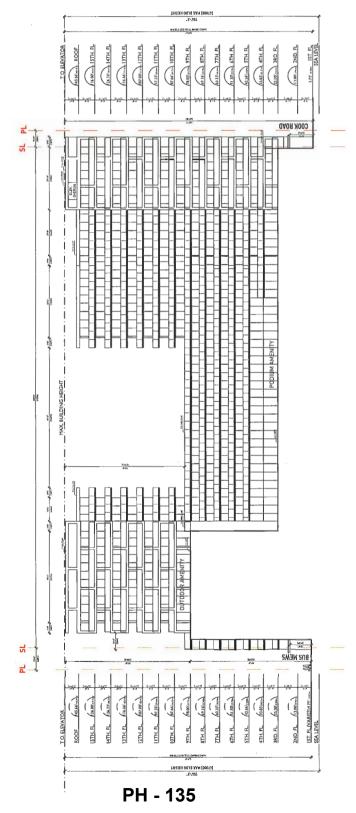


CONCEPT ONLY









RESIDENTIAL 18R+D RESIDENTIAL 18R+D RESIDENTIAL 28R RESIDENTIAL 38R RESIDENTIAL AMENITY RESIDENTIAL STUDIO RESIDENTIAL-LEMR ECD-HUB SERVICE OFFICE RETAIL LEGEND LL VOLENA

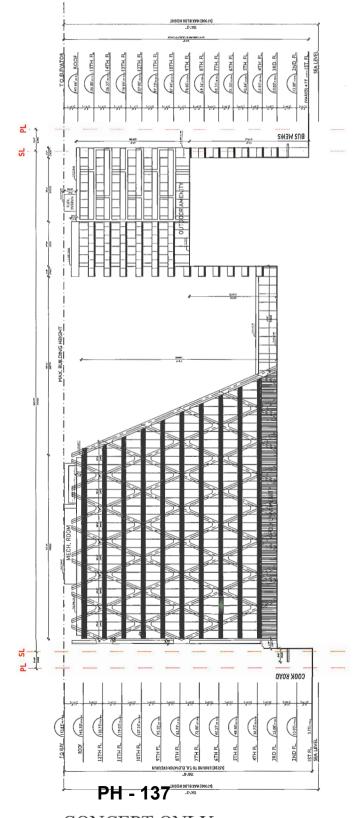
6340 NO 3 RD RICHMOND, BC MIXED-USE

INTERIOR SOUTH ELEVATION

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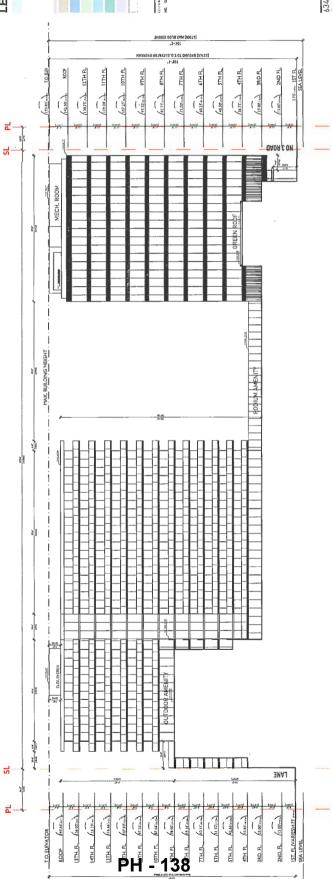
30 RESIDENTIAL STUDIO
RESIDENTIAL 18R-D
RESIDENTIAL 18R-D
RESIDENTIAL 28R
RESIDENTIAL 38R
RESIDENTIAL-LEMR
RESIDENTIAL-LEMR LEGEND

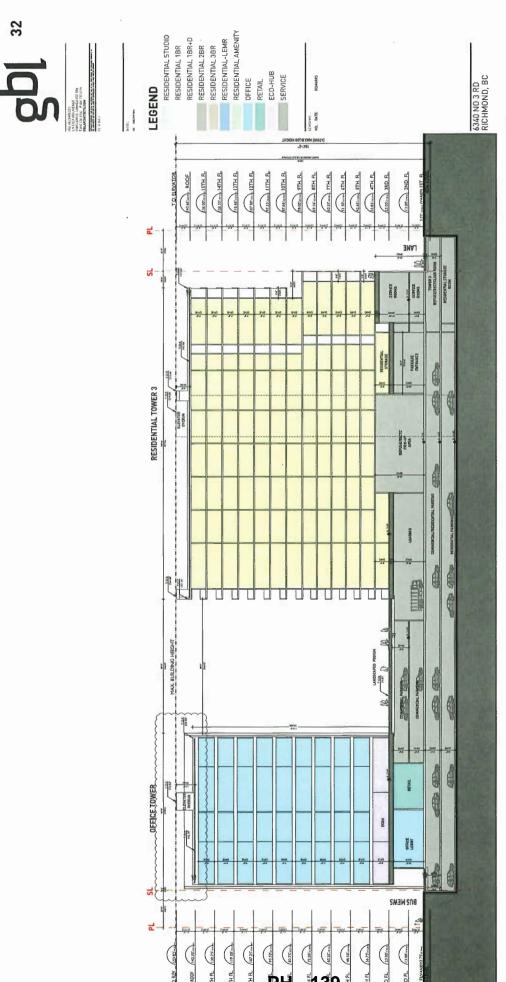
MIXED-USE
INTERIOR EAST ELEVATION 6340 NO 3 RD RICHMOND, BC



PANCHES.

CONCEPT ONLY





CONCORPS PRODE ONLY

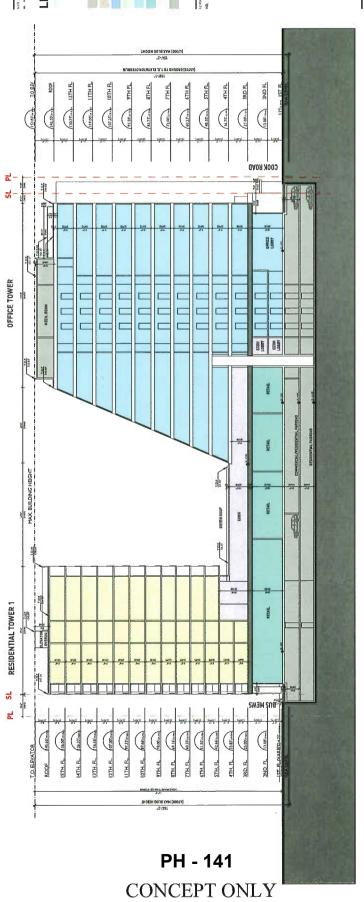
ARCHMOND, BC
RICHMOND, BC
SECTION 1
SECTION 1
Secure In Inches In

RESIDENTIAL-LEMR RESIDENTIAL AMENITY RESIDENTIAL 18R+D
RESIDENTIAL 28R
RESIDENTIAL 38R RESIDENTIAL STUDIO ECD-HUB SERVICE LEGEND LEVENDS NR, DATE

6340 NO 3 RD RICHMOND, BC

MIXED-USE SECTION 2

53.83'mm 4TH, FL \$1.50'mm 6TH, FL 69.16 mm 8TH. FL. 933 HTH. FL. S RESIDENTIAL TOWER 2 MAX. BUILDING HEIGHT RESIDENTIAL TOWER 3 CORRÍDOR CORRIDOR PL SL PH-2-751 140





## **Development Application Data Sheet**

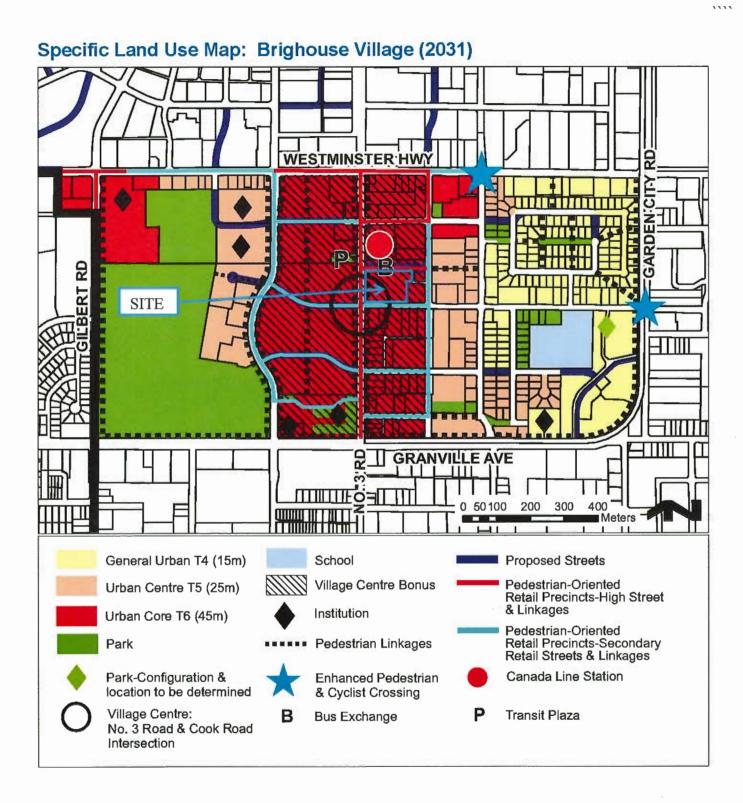
**Development Applications Department** 

RZ15-694855	
Address:	6340 No. 3 Road
Applicant:	Keltic (Brighouse) Development Ltd.
Owner:	Keltic (Brighouse) Development Ltd.
Planning Area(s):	City Centre – Brighouse Village

RZ15-694855	Existing	Proposed
Site Area:	14,484 m <sup>2</sup>	12,999 m²
Net Development Site Area:	N/A	13,425 m <sup>2</sup>
Land Uses:	Commercial	Mixed Use
OCP Designation:	Downtown Mixed Use	Downtown Mixed Use
Area Plan Designation:	Urban Core T6 (45 m)	Urban Core T6 (45 m)
Zoning:	LUC 062	ZMU37
Number of Residential Units:	nil	546

RZ15-694855	Bylaw Req't	Proposed	Variance
Floor Area Ratio (FAR):	4.007	4.007	n/a
Floor Area per FAR:	53,794 m <sup>2</sup>	53,794 m <sup>2</sup>	n/a
Lot Coverage:	90%	74%	-
Lot Size:	12,600 m <sup>2</sup>	12,999 m <sup>2</sup>	-
Lot Dimensions:	n/a	n/a	-
Setback – No. 3 Road:	4.0 m	4.2 m	-
Setback – Cook Road:	3.0 m	3.0 m	
Setback – Interior Side Yard (north):	4.0 m	4.0 m	-
Setback – Rear Yard (east):	6.0 m	7.5 m	-
Height Dimensional (geodetic):	47.0 m	47.0 m	-
Off-Street Parking Spaces – Residential Unit:	519	572	-
Off-Street Parking Spaces – Affordable Housing Unit:	24	24	
Off-Street Parking – Visitor (shared):	109	109	
Off-Street Parking Spaces – Commercial (shared):	83	83	-
Off-Street Parking – Office (shared):	135	135	
Off-Street Parking – ECD Hub Overflow (shared):	8	8	
Off-Street Parking – ECD Hub:	41	41	-
Off-Street Parking – Car Share Spaces:	2	2	
Off-Street Parking Spaces – Total:	804	856	-
Loading Space – ECD Hub:	1	1	
Loading Spaces – Medium Size:	6	6	-
Bicycle Parking Spaces – Class 1:	722	722	-
Bicycle Parking Spaces – Class 2 (shared):	69	69	-

Note: Site area and floor area figures rounded.



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## **Rezoning Considerations**

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

Address: 6340 No. 3 Road File No.: RZ 17-773703

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9859, the owner is required to complete the following.

- 1. (Site Contamination General) Prior to rezoning bylaw adoption, submission to the City of a contaminated sites legal instrument (e.g. Certificate of Compliance (CoC) or Final Site Determination (FSD) showing no contamination in the project footprint) or an alternative notice from the Ministry of Environment and Climate Change Strategy that the City may approve the zoning, development, subdivision, and demolition applications.
- (Site Contamination Dedicated Land) Prior to rezoning bylaw adoption, submission to the City of
  sufficient information and/or other assurances satisfactory to the City in its sole discretion to support the
  City's accepting the proposed dedicated land. Such assurances could include one or more of the
  following:
  - a) a contaminated sites legal instrument (e.g. Certificate of Compliance (CoC) or Final Site Determination (FSD) showing no contamination in the dedication lands);
  - b) evidence satisfactory to the City, in its sole discretion, that the lands to be dedicated to the City are in a satisfactory state from an environmental perspective; and
  - c) the registration of a legal agreement on the title to the Lands which provides that:
    - i) no occupancy of any building on the Lands shall be granted until such time that the Owner/Developer has satisfied the City in its sole discretion that the lands to be dedicated to the City are in a satisfactory state from an environmental perspective and a contaminated sites legal instrument has been obtained for the proposed dedication lands; and
    - the Owner/Developer shall release and indemnify the City from and against any and all claims or actions that may arise in connection with those portions of the lands being dedicated to the City being contaminated in whole or in part.
- 3. *(Subdivision)* Registration of a subdivision plan for the subject site that satisfies the following conditions, generally as shown in the sketch survey plan (Schedule 1):
  - a) dedication of approximately 5.75 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 City;
  - b) dedication of approximately 6.95 m. along the Cook 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 City;
  - c) dedication of approximately 0.41 m. along the mid-site east-west property line to contribute to the extension of the east-west lane from Buswell Street, subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the City; and
  - d) dedication of 4 m. x 4 m. corner cut (road dedication) No. 3 Road / Cook Road intersection (northeast corner).

Note: All Builders Liens on the subject properties must be removed before the subdivision and registration of covenants can occur.

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- 4. *(Statutory Right of Way)* Granting of a Statutory Right-of-Way(s), generally as shown in the sketch Statutory Right-of-Way(s) plan (Schedule 2) and subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the City, including:
  - a) public right of passage for pedestrians, bicycles and emergency services, City services and thirdparty utility services vehicles;
  - b) approximately 175.4 m<sup>2</sup> at the north west corner of the site, blanketing the portion of the TransLink Statutory Right-of-Way(s) that will be within the new property lines;
  - c) approximately 4.0 m. parallel to the north property line adjacent to the future Bus Mall site;
  - d) approximately 6.0 m. parallel to the east property lines, configured to run from Cook Road in a direct line toward the Bus Mall site;
  - e) a 3.0 m. x 3.0 m. corner cut at the intersection of the 4.0 m. and 6.0 m. portions of the Statutory Right-of-Way(s) noted above;
  - f) two 3.0 m. x 3.0 m. corner cuts at the parkade access on the east side of the development; and
  - g) a 3.0 m. x 3.0 m. corner cut on the west side of the 6.0 m. north-south pedestrian mews at Cook Road,
    - and to include:
  - h) agreement to provide adequate below grade structure to support all Statutory Right-of-Way(s) functions, including possible use by emergency services vehicles and waste management trucks;
  - i) agreement to accommodate fire truck access and manoeuvring as determined through the Development Permit, Building Permit and/or Servicing Agreement processes;
  - j) design and construction, including but not limited to universal accessibility, decorative finishing, landscaping, lighting and utility infrastructure (e.g. fire hydrants), as well as, safety measures related to the vehicular and/or pedestrian use and/or crossing of the Statutory Right-of-Way(s), as determined through the Development Permit, Building and Servicing Agreement processes;
  - k) design and construction, at owner's cost; and
  - 1) maintenance and repair, at owner's cost.
- 5. (Statutory Right of Way) Granting of a Statutory Right-of-Way(s) in favour of the City over Statutory Right-of-Way(s) Plan EPP57357 and EPP57356 for purposes described in any current or future agreements between the City and TransLink, which may include construction and/or maintenance of road and equipment (reference Schedule 2).
- 6. (Statutory Right of Way) Granting of a Statutory Right-of-Way(s), generally as shown in the sketch Statutory Right-of-Way(s) plan (Schedule 3) and subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the City, including:
  - a) public right of passage for pedestrians, bicycles, public and emergency services, City services and third-party utility services vehicles;
  - a) approximately 437.6 m<sup>2</sup> in the north eastern corner of the site for a kiss and ride facility; and to include:
  - b) agreement to provide adequate below grade structure to support all Statutory Right-of-Way(s) functions, including possible use by emergency services vehicles and waste management trucks;
  - c) agreement to accommodate fire truck access and manoeuvring as determined through the Development Permit, Building Permit and/or Servicing Agreement processes;
  - d) design and construction, including but not limited to universal accessibility, decorative finishing, landscaping, lighting and utility infrastructure (e.g. fire hydrants), as well as, safety measures related to the vehicular and/or pedestrian use and/or crossing of the Statutory Right-of-Way(s), as determined through the Development Permit, Building Permit and Servicing Agreement processes;
  - e) design and construction, at owner's cost; and
  - f) maintenance and repair, at owner's cost.
- 7. (Statutory Right of Way) Granting of a Statutory Right-of-Way(s) generally as shown in the sketch Statutory Right-of-Way(s) plan (Schedule 2) and subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the City, including:

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- a) public right of passage;
- b) an area adjacent to the new south property line that is the width of the parkade access and 10.0 m. deep; and
- c) two 3 m. x 3m corner cuts at the vehicle and truck access on Cook Road, and to include:
- d) agreement to provide adequate below grade structure to support all Statutory Right-of-Way(s) functions, including possible use by emergency services vehicles and waste management trucks;
- e) design and construction, including but not limited to universal accessibility, decorative finishing, landscaping, lighting and utility infrastructure (e.g. traffic equipment), as well as, safety measures related to the vehicular use and/or crossing of the Statutory Right-of-Way(s), as determined through the Development Permit and Servicing Agreement processes;
- f) design and construction, at owner's cost; and
- g) maintenance and repair, at owner's cost.
- 8. (Statutory Right of Way) Registration of a restrictive covenant on title or alternative legal agreement(s), to the satisfaction of the City, securing the owner's commitment to provide any additional Statutory Right-of-Way(s) and/or easements, as determined via the Development Permit\* and/or Servicing Agreement\* processes, to the satisfaction of the City.
- 9. *(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.
- 10. (Aircraft Noise) Registration of an aircraft noise sensitive use covenant on title addressing noise impacts on residential uses and establishing a Statutory Right-of-Way(s) in favour of the Airport Authority.
- 11. (Mixed-Use Noise) Registration of a mixed use noise sensitive use covenant on title addressing noise impacts on residential uses, including those related to the on-site ECD Hub indoor and outdoor facilities.
- 12. *(Canada Line Noise)* Registration of a mixed use noise sensitive use covenant on title addressing noise impacts on residential uses, including those related to the Canada Line and associated proposed Bus Mall.
- 13. (Commercial Noise) Registration of a commercial noise restrictive covenant on title addressing noise impacts generated by commercial uses and requiring demonstration that the building envelope is designed to avoid noise generated by the internal use from penetrating into residential areas that exceed noise levels allowed in the City's Noise Bylaw and that noise generated from rooftop HVAC units will comply with the City's Noise Bylaw.
- 14. *(City Centre Impacts)* Registration of a 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.
  - *Note:* Some of the foregoing noise and impact covenants may be combined at the discretion of the City.
- 15. *(Shared Parking)* Registration of a restrictive covenant on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to ensure that:
  - a) all residential visitor parking spaces are shared with commercial and office uses,
  - b) the ECD Hub after hours (evening and weekend) uses is shared with commercial and office uses;
  - c) all shared parking spaces remain unassigned;
  - d) all shared parking spaces are located on or close to the ground level of the parking structure;
  - e) all shared parking spaces are identified with signage as to their intended usage;
  - f) all shared parking spaces are fully accessible to all users (e.g. entry gate open) during standard business operating hours; and
  - g) all shared parking spaces are fully accessible to residential visitor users (e.g. buzz entry) during nonstandard business hours;
  - h) identify the shared parking stalls in the Development Permit plans;
  - i) identify the shared parking stalls in the Building Permit plans; and
  - j) prior to building inspection permitting occupancy, provide wayfinding and stall identification

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signage for the shared visitor stalls, to the satisfaction of the Director of Transportation.

- 16. *(Shared Loading)* Registration of a restrictive covenant on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to ensure that:
  - a) all loading spaces are shared between commercial, residential and ECD Hub uses;
  - b) all shared loading spaces will remain unassigned;
  - c) all shared loading spaces are located on the ground level;
  - d) all shared loading spaces are identified with signage as to their intended usage;
  - e) all shared loading spaces are fully accessible to all users (e.g. entry gate open) during business hours; and
  - f) all shared loading spaces are accessible to all users (e.g. buzz entry) during non-standard business hours;
  - g) identify the shared loading stalls in the Development Permit plans;
  - h) identify the shared loading stalls in the Building Permit plans; and
  - i) prior to building inspection permitting occupancy, provide wayfinding and stall identification signage for the shared loading stalls, to the satisfaction of the Director of Transportation.
- 17. *(Truck Size)* Registration of a restrictive covenant on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to ensure that the maximum truck size for any truck servicing the site is a medium size truck (e.g. SU9). *(Note: No WB-17 size trucks are permitted.)*
- 18. *(Car Share)* Registration of a restrictive covenant and Statutory Right-of-Way(s) on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to provide a car share facility and car share equipment to a car share operator or the City, at no cost to the car share operator or the City, both as the case may be, the terms of which shall be generally as follows:
  - a) a minimum of two (2) car share parking spaces within the development, along with pedestrian and vehicular access, designed, constructed, equipped and maintained by the owner, at the owner's cost, to be:
    - i) co-located and located on the ground level of the parkade;
    - ii) provided with satisfactory pedestrian access;
    - iii) provided with vehicle access from the lane;
    - iv) designed to be safe, convenient and universally-accessible;
    - v) provided with design features, decorative finishing, lighting and signage, as determined through the Development Permit and Servicing Agreement processes;
    - vi) provided with one EV quick-charge (240 volt) charging station for each car share space for its exclusive use;
    - vii) accessible to all intended users (e.g. general public, car share operator personnel and car share operator members) at no added cost;
    - viii) accessible to all intended users as follows:
      - i. the general public -365 days a year for a time period equalling the lengthiest combination of standard business hours and the standard operating hours of local rapid transit; and
      - ii. the car share operator personnel and members 365 days a year for a 24 hours per day (e.g. code entry);
    - ix) identify the car share stalls in the Development Permit plans;
    - x) identify the car share stalls in the Building Permit plans; and
    - xi) prior to building inspection permitting occupancy, provide wayfinding and stall identification signage for the car share stalls, to the satisfaction of the Director of Transportation;
  - b) terms of agreement between the owner and the car share operator which shall include:
    - i) a minimum contractual period for the provision of car share services of three years from the

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- first date of building occupancy; and
- ii) additional provisions as negotiated by the owner and car share operator (e.g. maintenance, repair and replacement by car share vehicles by the car share operator), or as required by the City, subject to the approval of the Director of Transportation;
- c) supporting submissions provided to the City (Transportation Department) as follows:
  - i) prior to the Public Hearing, a copy of the letter of intent addressed to the owner from the car share operator outlining the terms of the provision of car sharing services;
  - ii) prior to Development Permit issuance, a copy of the draft contract between the owner and the car share operator describing the terms of the provision of car sharing services;
  - prior to building inspection permitting occupancy, a copy of the executed contract between the owner and the car share operator describing the terms of the provision of car sharing services;
- d) a Public Right of Passage Statutory Right of Way, in favour of the City, to secure the car share spaces and the vehicular and pedestrian accesses, subject to the final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the Director of Transportation; and
- e) 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), transfer control of the car-share facilities, to the City, at no cost to the City, with the understanding that the City at its sole discretion, without penalty or cost, shall determine how the facilities shall be used going forward.
- 19. (Bicycle End-of-Trip Facilities) Registration of a restrictive covenant on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to provide bicycle end-of-trip facilities within the development for the shared use of all non-residential users (e.g. commercial and office) generally as follows:
  - a) a minimum of one male facility and one female facility, designed, constructed, equipped and maintained by the owner, each of which shall:
    - i) be fully accessible to all intended users;
    - ii) be easily accessible from commercial Class 1 bicycle parking areas;
    - iii) be fully handicapped accessible;
    - iv) accommodate two or more people at one time; and
    - v) include, at minimum, a change room and lockers, two showers, a toilet, a wash basin and a grooming station (i.e. mirror, counter and electrical outlets);
    - vi) identify the end-of-trip facilities in the Development Permit plans;
    - vii) identify the end-of-trip facilities in the Building Permit plans; and
    - viii) prior to building inspection permitting occupancy, provide wayfinding and stall identification signage for the end-of-trip facilities, to the satisfaction of the Director of Transportation.
- 20. (Bicycle Maintenance and Repair Facilities) Registration of a restrictive covenant on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to provide bicycle maintenance and repair facilities within the development for the shared use of all residential users (e.g. owners, renters and their guests) generally as follows:
  - a) a minimum of one bicycle repair and maintenance station for each residential tower, designed, constructed, equipped and maintained by the owner, each of which shall:
    - i) be fully accessible to all intended users;
    - ii) be easily accessible from residential Class 1 bicycle parking areas;
    - iii) be fully handicapped accessible; and
    - iv) include, at minimum, a bicycle repair stand with tools, a foot pump and a faucet, hose and drain for bicycle washing;
    - v) identify the bicycle maintenance and repair facilities in the Development Permit plans;
    - vi) identify the bicycle maintenance and repair facilities in the Building Permit plans; and

- vii) prior to building inspection permitting occupancy, provide wayfinding and stall identification signage for the bicycle maintenance and repair facilities, to the satisfaction of the Director of Transportation;
- 21. (Bicycle Facilities) Registration of a restrictive covenant on title or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to maintain all required bicycle parking spaces and other bicycle facilities for their intended uses, as well as, securing the owner's commitment to maintain the bicycle parking areas for shared common use.
- 22. *(Transit Pass Program)* Registration of a restrictive covenant on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to provide a transit pass program, at the owner's cost, generally as follows:
  - a) provide 25 monthly two-zone transit passes for one year for ECD Hub staff;
  - b) extend the program, should it not be fully subscribed within one year, until the equivalent of the costs of the full one year transit pass program has been exhausted;
  - c) provide for administration by TransLink or a management company on behalf of the strata council;
  - d) notify the operator of the ECD Hub of the availability of the transit pass program;
  - e) indicate to the operator of the ECD Hub the availability and method of accessing the transit program; and
  - f) submit a Letter of Credit prior to Development Permit issuance to secure the owner's commitment to provide the transit passes based on 110% of transit pass costs (including 100% for transit pass purchases and 10% for future transit pass cost increases and administration).

    (Note: The remaining funds in the LOC will be released to the Owner/Developer when the 2-zone one year transit pass program is fully subscribed.)
- 23. (District Energy Utility) Registration of a restrictive covenant and Statutory Right-of-Way(s) and/or alternative legal agreement(s), to the satisfaction of the City, securing the owner's commitment to connect to District Energy Utility (DEU) and granting the Statutory Right-of-Way(s) necessary for supplying the DEU services to the building(s), which covenant and Statutory Right-of-Way(s) 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 low carbon energy plant district energy utility (LCDEU) service area bylaw which applies to the site has been adopted by Council prior to the issuance of the development permit for the subject site, no building permit will be issued for a building on the subject site unless:
    - the owner designs, to the satisfaction of the City and the City's DEU service provider, Lulu Island Energy Company Ltd. (LIEC), a low carbon energy plant to be constructed and installed on the site, with the capability to connect to and be serviced by a DEU; and
    - the owner enters into an asset transfer agreement with the City and/or the City's DEU service provider on terms and conditions satisfactory to the City to transfer ownership of the low carbon energy plant to the City or as directed by the City, including to the City's DEU service provider, at no cost to the City or City's DEU service provider, LIEC, on a date prior to building inspection permitting occupancy of the first building on the site;
  - c) The owner agrees that the building(s) will connect to a DEU when a DEU is in operation, unless otherwise directed by the City and the City's DEU service provider, LIEC.
  - d) If a DEU is available for connection and the City has directed the owner to connect, no building inspection permitting occupancy of a building will be granted unless, and until:
    - i) the building is connected to the DEU;
    - the owner enters into a Service Provider Agreement for that building with the City and/or the City's DEU service provider, LIEC, executed prior to depositing any Strata Plan with LTO and on terms and conditions satisfactory to the City; and

iii)	prior to subdivision	(including Air Sp.	ace parcel subdivision a	nd Strata Plan filing), the ow	vner

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grants or acquires, and registers, all Statutory Right-of-Way(s) and/or easements necessary for supplying the DEU services to the building.

- e) If a DEU is not available for connection, but a LCDEU service area bylaw which applies to the site has been adopted by Council prior to the issuance of the development permit for the subject site, no building inspection permitting occupancy of a building will be granted unless and until:
  - 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;
  - the building is connected to a low carbon energy plant supplied and installed by the owner, at the owner's sole cost, to provide heating, cooling and domestic hot water heating to the building(s), which energy plant will be designed, constructed and installed on the subject site to the satisfaction of the City and the City's service provider, LIEC;
  - the owner transfers ownership of the low carbon energy plant on the subject site, to the City or as directed by the City, including to the City's DEU service provider, LIEC, at no cost to the City or City's DEU service provider, on terms and conditions satisfactory to the City;
  - iv) prior to depositing a Strata Plan, the owner enters into a Service Provider Agreement for the building with the City and/or the City's DEU service provider, LIEC, on terms and conditions satisfactory to the City; and
  - v) prior to subdivision (including Air Space parcel subdivision and Strata Plan filing), the owner grants or acquires, and registers, all additional Covenants, Statutory Right-of-Way(s) and/or easements necessary for supplying the services to the building and the operation of the low carbon energy plant by the City and/or the City's DEU service provider, LIEC.
- f) If a DEU is not available for connection, and a LCDEU service area bylaw which applies to the site has not been adopted by Council prior to the issuance of the development permit for the subject site, no building inspection permitting occupancy of a building will be granted until:
  - 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; and
  - ii) the owner grants or acquires any additional Statutory Right-of-Way(s) and/or easements necessary for supplying DEU services to the building, registered prior to subdivision (including Air Space parcel subdivision and strata plan filing).
- 24. (Affordable Housing) The City's acceptance of the developer's offer to voluntarily contribute affordable housing, in the form of low-end market rental (LEMR) units, constructed to a turnkey level of finish at the sole cost of the developer, the terms of which voluntary contribution shall include, but will not be limited to, the registration of the City's standard Housing Agreement and Covenant on title to each lot to secure the affordable housing units. The terms of the Housing Agreements and Covenant shall indicate that they apply in perpetuity and provide for, but will not be limited to, the following requirements:
  - 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:

#### AFFORDABLE HOUSING SUMMARY

Unit Type	Af	Project Targets (3)			
	Minimum Unit Sizes	Current LEMR Maximum Rents (1) (2)	Total Maximum Household Income (1) (2)	Unit Mix	# of Units (3)
Bachelor	37 m <sup>2</sup> (400 ft <sup>2</sup> )	\$811	\$34,650 or less	15%	4
1-Bedroom	50 m² (535 ft²)	\$975	\$38,250 or less	33%	9
2-Bedroom	69 m² (741 ft²)	\$1,218	\$46,800 or less	26%	7
3-Bedroom	91 m² (980 ft²)	\$1,480	\$58,050 or less	26%	7
TOTAL		N/A	N/A	100%	27

Denotes 2017 amounts adopted by Council on July 24, 2017.

2. Subject to Council approval, total annual household incomes and maximum monthly rents may be increased annually by the Consumer Price Index.

- 3. 50% of affordable housing units shall meet Richmond Basic Universal Housing (BUH) standards or better.
- c) occupants of the affordable housing units shall enjoy full and unlimited access to and use of all onsite indoor and outdoor amenity spaces provided for the residential development as per OCP, City Centre Area Plan, and Development Permit\* requirements, at no additional charge to the affordable housing tenants (i.e. no monthly rents or other fees shall apply for the casual, shared, or exclusive use of any amenities); and
- d) on-site parking, "Class 1" bike storage, and related electric vehicle (EV) charging stations shall be provided for the use of affordable housing occupants as per the OCP, Zoning Bylaw, and approved Development Permit\* at no additional charge to the affordable housing tenants (i.e. no monthly rents or other fees shall apply for the casual, shared, or exclusive use of the parking spaces, bike storage, EV charging stations, or related facilities by affordable housing tenants).
- 25. (Combined Child Care and Community Facility) The City's acceptance of the owner's offer to voluntarily contribute a child care and community services facility, generally described as an Early Childhood Development Hub (ECD Hub), which may be used by the City as child care, community amenity space, or any other permitted use the City, in its sole discretion, deems appropriate. The broad terms of the contribution shall include:
  - a) design and construction of a complete facility (facility proper, ancillary facilities and outdoor space), including the base building and tenant improvements, all to a turnkey level of finish, on the subject site, by the developer, at the developers cost; and
  - b) transfer of the complete facility (facility proper, ancillary facilities and outdoor space), including the base building and tenant improvements, all at a turnkey level of finish, as an air space parcel, to the City, at no cost to the City, and, the specific terms shall include:
  - c) voluntary contribution of no less than 1,765 m<sup>2</sup> (19,000 ft<sup>2</sup>) of floor area (e.g. area that is considered to be floor area for the purposes of calculating density under the Richmond Zoning Bylaw) to the ECD Hub based on the following density bonusing and supplementary contribution calculation:
    - i)  $377 \text{ m}^2$  (4,058 ft<sup>2</sup>) of floor area, calculated as one percent of the residential floor area, excluding affordable housing floor area (e.g. 0.01 x (39,624 m<sup>2</sup> 1,981 m<sup>2</sup>));
    - ii) 671 m² (7,223 ft²) of floor area, calculated as five percent of the Village Centre Bonus floor area (e.g. 0.05 x 1.0 x 13,425 m²); and
    - iii) a supplementary voluntary contribution of 717 m<sup>2</sup> (7,718 ft<sup>2</sup>) less of floor area, to be used for development of the facility proper including program spaces, private access and internal circulation, structure, walls (internal and external), building systems and building services where these elements are typically included in floor area calculations for the purposes of calculating density under the Richmond Zoning Bylaw and are used exclusively for the ECD Hub facility;
  - d) voluntary contribution of additional indoor area from the development, as required for purposes ancillary to the facility use, including, but not limited to, bicycle storage, parking and loading, waste management, access, circulation and exiting, structure, walls (internal and external), building systems and building services, where such area is typically excluded from floor area calculations for the purposes of calculating density under the Richmond Zoning Bylaw or is not used exclusively by the facility;
  - e) voluntary contribution of outdoor area of approximately 1050 m<sup>2</sup> (11,300 ft<sup>2</sup>), the final size and exact dimensions of which are to be determined through the development permit process, including both open and covered areas, neither of which will be considered to be floor area for the purposes of calculating density under the Richmond Zoning Bylaw;
  - f) location of the facility proper and the outdoor space on Level 3 of the development, generally as shown in the location plan (Schedule 4), along with provision for private access (elevator and stair) to and from No. 3 Road (Level 1) and to and from ancillary facilities such as parking and loading, waste management rooms, service rooms, storage rooms and similar areas (multiple levels);

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- g) design and construction of the complete facility, substantially in accordance with the summary requirements listed below and with reference to the attached "Terms of Reference for the Brighouse Village Early Childhood Development Hub" (Schedule 5) which describes, amongst other things, the facility intent, the facility program, reference standards and guidelines, technical requirements, functional requirements, outline construction requirements, involvement of City staff, its representatives, licensing bodies, operators and others of a similar nature, and occupancy and post-occupancy conditions:
  - i) the facility proper to provide for:
    - i. approximately 836 m<sup>2</sup> (9,000 ft<sup>2</sup>) of child care floor area to house up to four licensed child care programs serving children from birth to 12 years of age; and
    - ii. approximately 650 m<sup>2</sup> (7,000 ft<sup>2</sup>) of floor area to house early childhood development and family services programs;
    - iii. approximately 278 m<sup>2</sup> (3,000 ft<sup>2</sup>) for non-program floor area such as access and circulation, structure, walls and storage space; and
    - iv. use of the facility for other community purposes when not being used for the child care and/or early childhood development and family support programs,
    - all of which may be adjusted with design development during the Development Permit process,
  - ii) the ancillary facilities to provide for:
    - i. bicycle storage, vehicle parking and loading for the use of the facility's clients, visitors, guests and staff, available 365/7/24, located within the parkade except where noted otherwise, generally in an area having direct or close access to the facility's private access system, including access from the street where applicable, clearly signed, including:
      - for the child care and community services uses, 15 Class 1 bicycle spaces;
      - for the child care and community services uses, Class 2 bicycle spaces in accordance with the site-specific bylaw and located close to the ground level entry lobby;
      - for the child care uses, vehicle parking for a minimum of 11 staff vehicles and 9 non-staff vehicles (minimum non-staff space size of 2.65m. x 5.5 m.);
      - for the community services uses, vehicle parking for a minimum of 11 staff vehicles and 10 non-staff vehicles;
      - for after-hours ECD Hub parking (approximately 8 spaces), use of the parking within the shared parking areas of the parkade;
      - handicapped vehicle parking spaces provided consistent with the provisions of the Richmond Zoning Bylaw;
      - loading area space for use by a passenger van or similar-sized delivery van, with associated clear headroom and adjacent loading marshalling area (approximate area 5.0 m. x 11.0 m.);
    - ii. access to and use of the shared loading facilities provided on Level 1 of the parkade for the whole development;
    - iii. a separate and exclusive use waste management room with direct access to the facility's private circulation system and provision for waste management removal in conjunction with the overall development's waste management provider; and
    - iv. services rooms and similar facilities, as required to meet functional, technical and operational requirements of the facility,
  - iii) the outdoor program space to provide for:
    - i. approximately 836 m<sup>2</sup> (9,000 ft<sup>2</sup>) for the child care outdoor areas; and
    - ii. approximately 214 m² (2,300 ft²) for the early childhood development and family services programs outdoor area,

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- or, as determined through the Development Permit process;
- design and construction of the facility to achieve LEED v4 ID + C Commercial Interiors Gold Certification, with a focus on providing for robust monitoring and remote control capabilities of the systems and scheduling that are its responsibility and integration of these controls into-the building automation system through open language BACnet interfaces and, further, reference to the principles outlined in the "City of Richmond Building Equipment," Monitoring, and Integration Requirements" administrative procedure;
- v) design and construction of the facility to provide for separate addressing;
- vi) design and construction of the utility systems to provide for, amongst other things:
  - i. connection to the on-site, low-carbon, central energy plant for the purposes of heating and cooling, along with provision for sub-facilities and sub-metering, to the satisfaction of the City;
  - ii. connection to other building utility systems (e.g. electricity), along with provision for sub-facilities and sub-metering, to the satisfaction of the City; and
  - iii. conduit rough in for installation and connection of the City's fibre optic communications system, by the City or its contractor, noting the required conduit size is 2 inches and the outside end point is to be the City Traffic Junction Box location at the NE corner of Cook and No 3 Road:
- h) project development and procurement of approvals subject to the following benchmarks/timelines:
  - i) prior to issuance of a Development Permit for the development, in whole or in part:
    - i. the facility design (facility proper, ancillary facilities and outdoor space) must be resolved to a level typical of the design development stage of a development project, to the satisfaction of the City;
    - ii. the resulting design must be incorporated into the Development Permit application submission; and
    - iii. a preliminary construction cost estimate for facility proper, ancillary facilities and outdoor space, verified by an independent quantity surveyor that is acceptable to the City, must be provided;
  - ii) prior to issuance of a Building Permit for the development, in whole or in part:
    - i. the facility design (facility proper, ancillary facilities and outdoor space) must be resolved to a level typical of the building permit and issued for construction stages of a development project, to the satisfaction of the City;
    - ii. the resulting design must be incorporated into the building permit application submission; and
    - iii. a final construction cost estimate for facility proper, ancillary facilities and outdoor space, verified by a quantity surveyor, must be provided;
  - iii) prior to occupancy of the development, in whole or in part:
    - i. the constructed facility (facility proper, ancillary facilities and outdoor space) must be granted building inspection permitting occupancy;
    - ii. commissioning of the facility (facility proper and outdoor space) must be completed to the satisfaction of the City;
    - iii. occupancy and post-occupancy information for the facility (facility proper and outdoor space) must be provided, to the satisfaction of the City;
    - iv. as-built drawings and Operation & Maintenance (O&M) manuals in soft and hard copy form of the facility (facility proper and outdoor space) must be provided to the satisfaction of the City; and
    - v. a final construction cost for facility proper, ancillary facilities and outdoor space, verified by an independent quantity surveyor that is acceptable to the City, must be provided,

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unless the constructed facility is otherwise deemed acceptable by the Director, Development; the Director, Engineering; the Manager of Community Social Development; and, the Senior Manager of Real Estate Services, at their sole discretion.

- i) registration of a legal agreement(s), which may include, but may not be limited to, the following:
  - i) a "no build" covenant registered on title restricting Building Permit issuance for the whole development, to be in effect until such time as a "construction agreement" is registered on title with respect to the amenity;
    - Note: This requirement may be waived if a "Construction Agreement" is signed before rezoning adoption.
  - ii) a "construction agreement" setting out requirements with respect to the design, construction, supply, installation, approval, and warranty of the Early Childhood Development Hub and related works to the satisfaction of the City, which agreement may include provisions for a statutory right(s)-of-way and/or rent charge and include the terms set out in these rezoning considerations and the "Terms of Reference for the Brighouse Village Early Childhood Development Hub" as well as standard City facilities policies;
  - an Air Space Parcel (ASP) subdivision agreement to facilitate the future creation of an ASP containing the Early Childhood Development Hub, including the facility proper, ancillary facilities and outdoor spaces, to the extent deemed desirable or practical by the City, together with any easement(s) and/or statutory right(s)-of-way registered on title to secure any remaining facilities located elsewhere in the development and intended for the use of the Early Childhood Development Hub, along with terms for cost sharing between the ASP owner (the City) and the owner(s) of the remaining facilities, all in a form and content satisfactory to the City;
  - iv) a purchase and sale agreement to facilitate the transfer of the Early Childhood Development Hub ASP to the City, which transfer shall not occur until the City has, at its sole discretion, accepted the Early Childhood Development Hub works, which acceptance shall not relieve the developer of any outstanding obligations and which shall include an option to purchase for a consideration;
  - a "no occupancy" covenant for the development, in whole or in part, registered on title, to be in effect until such time as the facility has been completed or otherwise deemed acceptable, at the sole discretion of the City, by the Director, Development; the Director, Engineering; the Manager of Community Social Development; and, the Senior Manager of Real Estate Services, in their sole discretion, and has been transferred to the City free and clear of any encumbrances; and
  - vi) a blanket Statutory Right-of-Way, or alternative legal agreement(s), to the satisfaction of the City, securing public access to and egress from the ECD Hub facility (facility proper, ancillary facilities and outdoor space) and any part of the parking facility allocated for the ECD Hub facility use, across and through the drive aisles and pedestrian pathways forming part of the development and securing City access to the development for the maintenance of the utilities and mechanical systems servicing the ECD Hub facility (including maintenance of the City's fibre optic system), which agreement may be replaced prior to occupancy, to the satisfaction of the City, with a replacement agreement and a surveyed Statutory Right-of-Way(s) plan.
- j) submission of cash or other forms of financial security as follows:
  - i) a cash-in-lieu contribution of \$10,000 to fund the complete installation of the fibre optic service by city contractors within the conduit supplied by the developer (e.g. all costs for Civil work upgrades, connection of developer conduit to city systems, fibre cable/splice enclosure and all installation work) (Account # 1315-40-000-0000-0000-CB00026);
  - ii) a project management fee of \$366,643 [equal to 5% of the preliminary construction cost estimate, using the City's "equivalent to construction value" rate of \$6,997/ sq. m. applied to

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- the density bonus floor area portions of the facility only (e.g.  $377 \text{ m}^2 + 671 \text{ m}^2 = 1,048 \text{ m}^2$ )] to provide for the participation of the City or its representatives in the schematic design, design development, building permit, issued for construction, contract administration and related stages of project development (Account # 1315-40-000-00000-0000-CB00026);
- iii) a Letter of Credit (LOC), in the amount of 100% of construction cost estimate for the complete facility (facility proper, ancillary facilities and outdoor space), as verified by a quantity surveyor, to secure the developer's commitment to design, construct, and transfer the Early Childhood Development Hub to the City, with provision for the return of the subject monies as follows:
  - i. no reduction or release until a minimum of one (1) year after the ECD Hub has received final building inspection permitting occupancy;
  - ii. no reduction or release until Provincial licensing has been achieved;
  - iii. retention of the LOC, or portions thereof, at the sole discretion of the City, to rectify deficiencies;
  - iv. retention of the LOC, or portions thereof, at the sole discretion of the City, to ensure the air space parcel (ASP) is free and clear of builder's liens or other encumbrances; and
  - v. retention of the LOC, or portions thereof, at the sole discretion of the City, to complete the facility, should the developer fail in its contractual obligations.
- 26. *(Community Planning)* The City's acceptance of the owner's offer to voluntarily contribute at least \$161,919.94 (100% of the total floor area calculated using the proposed floor area e.g. 53,794 m2 x \$3.01/m²) towards City Centre community planning (CC-Community Planning and Engineering Account # 3132-10-520-00000-0000).
- 27. (Public Art) The City's acceptance of the owner's offer to voluntarily contribute at least \$404,812.20 (100% non-residential floor area and 100% residential floor area, excluding affordable housing floor area, @ \$4.84 and \$9.15 per square meter, respectively, (e.g. (14,170 m²-1,765 m²) x \$4.84/m²+ (39,663 m²-1,983 m²) x \$9.15/m²) towards public art (15% to Public Art Provision Account # 7500-10-000-90337-0000 and 85% to Account # 7600-80-000-90173-0000).
- 28. (Servicing Agreement) 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:

#### (Engineering)

#### Notes:

a) The Owner/Developer has applied for a servicing agreement at this address (SA 17-769245) to relocate the sanitary sewers currently located within the development site into the roadway in advance of site preparation. This servicing agreement is not related to this rezoning application. As the works included in SA 17-769245 are required to serve the proposed development, and as it is the City's policy to have each application independent, the requirements of SA 17-769245 have been repeated below, marked with an asterix (\*). Should SA 17-769245 not proceed, or if for any reason the scope of SA 17-769245 does not include one of the items below, then these works shall be done through the servicing agreement for this rezoning.

#### Water Works:

- b) Using the OCP Model, there is 823.0 L/s of water available at a 20 psi residual at the No 3 Road frontage, and 407.0 L/s of water available at a 20 psi residual at the Cook Road frontage. Based on your proposed development, your site requires a minimum fire flow of 220 L/s.
- c) Prior to the rezoning staff report being written, the Owner/Developer is required to coordinate with the Richmond Fire Rescue to confirm whether fire protection service is required along the proposed development's Bus Mall and/or lane frontage. If required, install water mains and hydrants to provide fire protection service.
- d) The Owner/Developer is required to:
  - i) Submit Fire Underwriter Survey (FUS) or International Organization for Standardization

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- (ISO) fire flow calculations to confirm 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.
- ii) Review hydrant spacing on all road frontages and install new fire hydrants as required to meet City spacing requirements for commercial land use.
- iii) Provide a right-of-way for the water meter, unless located within the building (i.e. in a mechanical room). Exact right-of-way dimensions to be finalized during the servicing agreement process.
- iv) Obtain approval from Richmond Fire Rescue for all fire hydrant locations, relocations, and removals, as required.
- v) Install a meter for the proposed water service connection.
- vi) Replace the length of AC water main to be disturbed by the proposed sanitary sewer works on the south side of Cook Road. \*
- vii) The developer is required to provide private (developer-owned and -maintained) fire hydrant(s) within the SRW along the Bus Mall frontage of the development site. The fire hydrants shall be served by the onsite water system. The number and locations shall be as approved by Richmond Fire Rescue during the Development Permit and/or Building Permit review.
- e) At Owner/Developer's cost, the City is to:
  - i) Install one new water service connection.
  - ii) Cut and cap all existing water service connections serving the development site, and remove meters.
  - iii) Complete all tie-ins for the proposed works to existing City infrastructure.

#### Storm Sewer Works:

- f) The Owner/Developer is required to:
  - i) Install approximately 50 m. of minimum 200 mm or OCP size lane drainage in the east-west lane, and tie in to the existing storm sewer on Buswell Street via a new manhole.
  - ii) Provide, at no cost to the City, a 1.5 m. x 1.5 m. right-of-way for the proposed storm inspection chamber, if required.
  - iii) Provide a sediment and erosion control plan within the servicing agreement design.
- g) At Owner/Developer's cost, the City is to:
  - i) Cut and cap all existing storm service connections serving the development site and remove inspection chambers.
  - ii) Install one new storm service connection, complete with inspection chamber, to serve the development site. The inspection chamber may be located onsite in a right of way, if required.
  - iii) Complete all tie-ins for the proposed works to existing City infrastructure.

#### Sanitary Sewer Works:

- h) The Owner/Developer is required to:
  - i) Cut, cap, and remove the existing sanitary sewers onsite between manhole SMH775 and manhole SMH772. \*
  - ii) Remove, or fill and abandon per MMCD specifications, the existing sanitary sewer in Cook Road between manhole SMH842 and manhole SMH772, and remove both manholes. \*
  - iii) Fill and abandon, per MMCD specifications, the existing sanitary sewer in the future Bus Mall between manhole SMH775 and manhole SMH776. \*
  - iv) Fill and abandon, per MMCD specifications, the existing sanitary sewer along the south property line of the development site from manhole SMH771 to manhole SMH772. \*
  - v) Install a new 250 mm sanitary sewer in Cook Road from manhole SMH842 to Buswell Street, to tie in to the proposed Capital sanitary sewer in Buswell Street. \*
  - vi) Reconnect all existing sanitary service connections to the new sanitary sewer, and provide

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- stubs for future developments where applicable. \*
- vii) Provide, at no cost to the City, a 1.5 m. x 1.5 m. right-of-way for the proposed sanitary inspection chamber, if required.
- i) At Owner/Developer's cost, the City is to:
  - i) Cut, cap, and remove all existing sanitary connections serving the development site. \*
  - ii) Install one new sanitary service connection off of the proposed sanitary sewer in Cook Road, complete with inspection chamber. The inspection chamber may be located onsite if required.
  - iii) Complete all tie-ins for the proposed works to existing City infrastructure.

#### Frontage Works:

- j) The Owner/Developer is required to:
  - i) Coordinate with BC Hydro, Telus and other private communication service providers:
    - i. To pre-duct for future hydro, telephone and cable utilities along all road frontages.
    - ii. Before relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
    - iii. To locate/relocate all above ground utility cabinets and kiosks required to-service the proposed development, and all above ground utility cabinets and kiosks located along the development's frontages, within the developments site (see list below for examples). Please note that locations of equipment on site may require adjustment of the frontage in plan and in section (typically overhanging structures are not permitted). A functional plan showing conceptual locations for such infrastructure shall be included in the development design review process. 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 on the architectural plans/functional plan, the servicing agreement drawings, and registered prior to Servicing Agreement design approval:
      - BC Hydro PMT 4.0 x 5.0 m
      - BC Hydro LPT 3.5 x 3.5 m
      - Street light kiosk 1.5 x 1.5 m
      - Traffic signal kiosk 2.0 x 1.5 m
      - Traffic signal UPS 1.0 x 1.0 m
      - Shaw cable kiosk  $-1.0 \times 1.0 \text{ m}$
      - Telus FDH cabinet 1.1 x 1.0 m.
  - ii) Provide street lighting along all road frontages according to the following:
    - i. No 3 Road (east side of street)
      - Pole colour: Grey
      - Roadway lighting: N/A (No change to existing lighting in centre median)
      - Traffic Signals @ No 3 Road & Cook Road: N/A (No change to the existing Type 7 lighting.)
      - Pedestrian lighting: Type 8 (LED)
        - 1. Without off-street bike path: Locate lighting @ back of curb INCLUDING 1 pedestrian luminaire, 1 duplex receptacle, and flower basket holders, but excluding any banner arms or irrigation.
        - 2. With off-street bike path: Locate between sidewalk & bike path INCLUDING 2 pedestrian luminaires set perpendicular to the roadway, flower basket holders, and 1 duplex receptacle, but EXCLUDING any banner arms or irrigation.
    - ii. Cook Street (north side of street)

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- Pole colour: Blue
- Roadway lighting @ back of curb: City Centre Type Roadway/Pedestrian Luminaire Pole (LED) Drawing L12.3 INCLUDING 1 street luminaire, banner arms, and 1 duplex receptacle, but EXCLUDING pedestrian luminaires, flower basket holders and irrigation.
- Pedestrian lighting: Not applicable (i.e. no stand-alone pedestrian poles)
- iii. Bus Mall (south side of mall)
  - Pole colour: Grey
  - Roadway lighting: N/A (Bus Mall/TransLink to install roadway lighting.)
  - Pedestrian lighting: N/A (Bus Mall/TransLink to install pedestrian lighting.)
     HOWEVER, if frontage improvements along the subject site require changes to the pedestrian lighting, it should be made to match the location & type installed along the north side of Bus Mall via Fairborne/SA 12-598011.
- iv. Lane @ east side of site
  - Pole colour: Blue
  - Roadway lighting @ back of curb: City Centre Type Laneway Luminaire Pole (LED)
     Drawing L12.1.

#### General Items:

- k) The Owner/Developer is required to:
  - i) Provide, prior to start of site preparation works or within the first servicing agreement submission, whichever comes first, a pre-load plan and geotechnical assessment of preload, dewatering, and soil preparation impacts on the existing utilities fronting the development site and provide mitigation recommendations.
  - ii) Provide a video inspection of the existing storm sewers along the No 3 Road and Cook Road frontages prior to start of site preparation works or within the first servicing agreement submission, whichever comes first. A follow-up video inspection after site preparation works are complete (i.e. pre-load removal, completion of dewatering, etc.) to assess the condition of the existing utilities is required. Any utilities damaged by the pre-load, de-watering, or other ground preparation shall be replaced at the Owner/Developer's cost.
  - iii) Monitor the settlement at the adjacent utilities and structures during pre-loading, dewatering, and soil preparation works per a geotechnical engineer's recommendations, and report the settlement amounts to the City for approval.
  - iv) 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.

#### (Transportation)

- 1) General Provisions:
  - i) The Owner/Developer is responsible for the design and construction of road widening, behind the curb frontage improvements and traffic signal improvements including but not limited to the items listed in this section.
  - ii) The road widening, behind the curb frontage improvements and traffic signal improvements noted below will be finalized once the final functional road plans are submitted for City review.
  - iii) The back of curb cross-section elements may be adjusted to accommodate functional requirements and/or to establish a more innovative public realm.

- iv) Additional work, typically identified during the detailed design stage of the Servicing Agreement process, may be required.
- v) Above ground hydro/telephone kiosks and other third party equipment must not be placed within any frontage works area including sidewalk, greenway, bike bath and boulevard. A Statutory Right-of-Way(s) on the subject property is to be secured for the placement of this equipment.
- vi) All curb ramps to have tactile surface treatment.
- vii) All road and frontage improvement works are to be completed to the satisfaction of the City before the issuance of occupancy approval(s).

#### Road and Frontage Works:

- m) Cook Road between No. 3 Road and Buswell Street
  - i) Scope of Work Design and construction of the section of Cook Road between No. 3 Road and Buswell Street including the intersection of Cook Road and No. 3Road and Buswell Street. Works to accommodate a five-lane cross-section at the intersections, including the site access, are required. A new traffic signal at the site access is required.
    - i. Road works To be finalized based on functional road plan to the satisfaction of the Director of Transportation: Road widening to accommodate a future 5 lane cross-section with new westbound LT lane at No. 3 Road 3.1m to 3.3m, one 4.25m curb lane, 0.15m top of curb, 3m landscaped boulevard with street trees, 1.8m bike lane, 0.5m buffer strip, 2m s/w. The ultimate road functional design for Cook Road is required to establish the interim works and set the new north curb of Cook Road and interim frontage elements with trees and lighting, etc.
    - ii. Frontage improvement works Construction of road widening with full frontage works including landscaped boulevard, off-road bike lane, sidewalk and landscaped buffer strip as noted above.
    - iii. Road cross-section Details of the road cross-section are described below.
    - iv. Traffic signal Full traffic signal upgrades streetscape elements, including but not limited to decorative pavement surface treatment, bollards and place-making elements, etc. to the No. 3 Road /Cook Road intersection is required. Details of the traffic signal works are described under Section 3.0 (a) below.
    - v. Intersection works at Buswell Street Full traffic signal upgrades and streetscape improvements are to be constructed at this intersection. This includes decorative surface treatment of crosswalks.
    - vi. Site Access/Cook Road ultimate 5-legged cross-section with full traffic signalization is required with streetscape enhancements.
  - ii) <u>Functional Design (road works and behind the curb frontage works)</u> A functional design for this road construction project, prepared to the satisfaction of the City, is required. The criteria of the functional design are as follows for all roads and lanes:
    - i. Horizontal/vertical profiles The alignment is to be centered within the city road right-of-way.
    - ii. Road cross-section The lane configuration shall consist of a five-lane cross-section, with three westbound traffic lanes and a raised intersection.
    - iii. Lane widths:
      - o 3.25 m. wide curb lanes;
      - o 3.3 m. wide for other traffic lanes;
    - iv. Frontage Improvements The permanent new curb and gutter on the north side of the road is to be established. From the curb, the frontage improvements include:
      - o Road widening to establish ultimate cross-section.
        - 0.15 m. wide curb;
        - 2.5 to 3.0 m. wide landscaped boulevard planted boulevard with street trees;

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- 1.8 m. wide off-road bike lane;
- 0.5 to 1.0 m. buffer, strip with lighting, street furniture, landscape and street trees; and
- 2.0 m. wide sidewalk.
- v. Cross-section (ultimate) Five 3.25 m. wide traffic lanes (two eastbound and two westbound through traffic lanes and a left turn lane). The frontage improvements described above are to be maintained.
  - Other features: hard landscape features, street furnishings, and streetlights.
- iii) Functional Design (intersection works interim and ultimate road cross-sections)
  - i. No. 3 Rd/ Cook Road intersection Design and construction of the full intersection and a 30 m. long five-lane cross-section north of the intersection including a 20:1 taper section to connect to the four lane section of Cook Road. In the interim condition, additional signage restricting left-turns from Cook Road to the site may be required for operational reasons. All details on traffic signal design to be included in the servicing agreement.
  - ii. <u>Cook Road /Buswell Street</u> Design and construction of the full intersection to accommodate all directional traffic movements for the interim and ultimate five-lane cross-section.

#### n) No. 3 Road

- i) Scope of Work Frontage works are required behind the new east curb of No. 3 Road
  - i. Road works Design and construction frontage improvements.
  - ii. Frontage improvement works Curb and gutter, landscaped boulevard, bike lane, sidewalk and plaza area to the north.
- ii) <u>Functional Design</u> Functional design drawings (interim and ultimate conditions) for this road construction project, prepared to the satisfaction of the City, are required. The criteria of the functional design are as follows.
  - i. Cross-section (interim) The existing east curb of No. 3 Road can be relocated as the bike lane is to be behind the curb in front of the site. Maintaining a minimum 3.25m curb lane width, the cross-section elements, measuring from the new curb: to include the following which is subject to change based on the outcome of the planning study for the No.3 Road public realm:
    - o From new curb. The dedication required is based on the following frontage cross-section:
    - o From existing curb:
      - 0.15m curb
      - 2.5 to 3.0m planted boulevard with street trees,
      - 2.00m bike lane
      - 1.0 to 1.5 m. buffer strip with lighting, street furniture, landscape and street trees:
      - 3.00m sidewalk
  - ii. Rough in for installation of public art along this frontage.
  - iii. The area beyond the above frontage improvements required for the plaza area at the north end of the site is in addition to the frontage dedication.
  - iv. The NE corner of the Cook Rd./No. 3 Rd. intersection to have bike treatment per Transportation direction.
  - v. At the north end of the bike lane at the No. 3 Rd. /Bus Mall intersection, the bike lane will need to transition on back to on street in advance of the intersection.

#### o) East-West Lane:

i) Scope of Work – Upgrade of the existing east-west lane to City standard as well a new east-west lane (9m) from Buswell Street to the site's eastern parkade access. Additional lane upgrades of the existing lane connecting to Buswell St. are required and the works will be

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determined through the servicing agreement to bring this lane up to City Centre standard as much as possible. Work may include but not be limited to the addition of special surface treatment pavement, lighting, sidewalk and rollover curb. The section of the east-west lane on the subject site is to be designed and constructed to City Centre standard with treatment and details to be designed through the Servicing Agreement. Special treatment and design elements, such as a raised crosswalk with decorative pavement treatment, signage, etc. may be required along the greenway where it intersects the lane. The Servicing Agreement is to also include the ultimate road functional plan for the east-west lane from Buswell St. to the site access face Buswell Street.

- ii) Functional Design Details on upgrades will be determined through the servicing agreement
  - o From north PL:
    - 0.35m rollover curb
    - Remaining width to existing SPL to have new pavement with streetscape decorative surface treatment and possible rollover curb on south side with improved lighting. A functional lane design is required to determine the upgrades to the lane. The remaining 1.5m of the lane for a 9.0m ultimate dedication will be sought upon redevelopment of the property to the south.

#### p) Bus Mall Frontage:

- i) Scope of Work Frontage works are required behind the future south curb of the Bus Mall (See Servicing Agreement 11-598011. Please note the PMT location as the s/w along the north PL will have to meander around it. Temporary adjustments to the existing fence around the Bus Mall site may be required if the subject property advances prior to the Bus Mall project. If the Bus Mall frontage is not complete at the time of construction, additional works may be required to coordinate an interim condition. The interim works are to be included in the Servicing Agreement, and include but are not limited to lighting, sidewalk edge treatment and fencing
- ii) Functional Design Details on upgrades will be determined through the servicing agreement, but include and are not limited to the following:
  - o From the existing south curb of the Bus Mall set by Servicing Agreement 12-598011:
    - 0.15 curb
    - Minimum 7m hardscaped treed boulevard, as per north side frontage.
- q) North-South Pedestrian Mews: 6.0 m. SRW with a 3 m. min. walkway and landscaping on either side (where Fire requirements permit). Details of design to be developed through the Servicing Agreement, including details on but not limited to surface treatment, bollards, lighting, benches, landscaping, etc.
- r) "<u>Kiss and Ride</u>": A functional plan is required to the satisfaction of the Director of Transportation for the layout of the Kiss and Ride area to identify the scope of works for construction. Through the Servicing Agreement, the design details, for pavement marking, signage, lighting, etc. will be determined. The number of parking spaces in the Kiss and Ride area is to be maximized. The Vista switch and other utilities are preferred to be excluded from this area, if technically feasible.
- s) North-West Corner Statutory Right-of-Way(s) PROP: Servicing Agreement to include design of interim works for this area as part of Bus Mall plaza in the case that the subject development advances prior to the Bus Mall Servicing Agreement.

#### Traffic Signal/Communication Network Works:

- t) <u>General Provisions</u> Beyond what is specifically identified, the Owner/Developer is also responsible for the design and construction of any of the following elements at a traffic signal device and/or communications network.
  - i) Modify, relocate and/or replace traffic signal poles/bases, conduits, junction boxes, street light fixtures, cable and conductors.

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- ii) Modify, relocate and/or replace traffic signal equipment such as controller cabinet/base, UPS (Uninterrupted Power Supply) and service panel.
- iii) Modify vehicle/pedestrian detection and vehicle phasing including left turn arrows.
- iv) Modify, relocate and /or replace communications conduit, cable and junction boxes.

#### u) Site Access/Cook Road Intersection:

- i) Scope of Work A new signalized intersection is required to City standard. Truck wheel paths are required demonstrating lane width requirements for access and egress movements.
- ii) Functional Design The Owner/Developer is responsible for the design and construction of this traffic signal. Works shall include, but not limited to the installation of conduits, junction boxes, City centre type blue traffic pole and bases, traffic signal heads, illuminated LED street name signs, video detection/traffic cameras, Accessible Pedestrian Signals (APS), UPS (Uninterrupted Power Supply) base and traffic controller cabinet, all components and base. New communications conduit, fibre cable is also required to tie in this traffic signal with City owned communication network. A full set of traffic signal design drawings will be required. The Owner/Developer may have to assign a Statutory Right-of-Way(s) for the placement of some of this equipment (to be identified through the Servicing Agreement phase of the project).
- v) Existing Traffic Signal at No. 3 Road/Cook Road (modification works):
  - i) Scope of Work Additional streetscape elements including decorative crosswalk treatment and architectural bollards at corners. traffic signal upgrades, special intersection treatment or operation as determined through the servicing agreement. Additional works are described in *Traffic Signals* section below.
  - ii) Functional Design The Owner/Developer will be responsible for all costs related to the modification of this traffic signal operation. Works shall include but not limited to new City centre type traffic poles on all corners, as well as light poles, pole bases, video detection/traffic cameras, UPS system and cabinet, new controller cabinet/controller, illuminated LED street name signs and APS and left-turn arrows for southbound and eastbound traffic. A full set of traffic signal modification design drawings will be required. The Owner/Developer may have to assign a Statutory Right-of-Way(s) for some of this equipment (to be identified through the Servicing Agreement phase of the project).
- w) Existing Traffic Signal at Cook Road/Buswell Street (modification works):
  - i) Scope of Work traffic signal upgrades are required for illuminated street name signs and streetscape treatments.
  - ii) Functional Design The Owner/Developer will be responsible for all costs related to the modification of this traffic signal for road widening and frontage works. Works shall include but not be limited to City Centre type blue traffic poles, pole bases, video detection/traffic cameras, UPS system, new controller cabinet/controller, illuminated street name signs and APS. A full set of traffic signal modification design drawings will be required. The Owner/Developer may have to assign a Statutory Right-of-Way(s) for some of this equipment (to be identified through the Servicing Agreement phase of the project).
- x) Provision of a Letter of Credit to secure the completion of the works in an amount determined by the Director of Engineering and Director of Transportation.
- y) Registration of the Servicing Agreement on title.
- 29. *(Development Permit)* 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, as necessary, to address:
    - i) form and character objectives noted in the associated Report to Planning Committee;
    - ii) Council directions arising out of Public Hearing;
    - iii) pertinent comments of the Advisory Design Panel;
    - iv) form and character objectives described in the OCP and CCAP Development Permit

- Guidelines;
- v) technical resolution of building services, private utilities, public utilities, fire access, parking and loading and waste management including provision of final utility, fire access, loading, waste management and signage and wayfinding plans; and
- vi) technical resolution of the landscape plans including:
  - i. the protection, installation and/or maintenance (including automatic irrigation) of retained and/or new landscape; and
  - ii. the protection, installation and/or maintenance (including automatic irrigation) of retained and/or new trees:
- vii) provision of twenty-six (26) replacement trees on site;
- 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) prepared, stamped and sealed by qualified professionals 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 requirements;
  - iv) stamped and sealed floor area calculation overlays;
  - v) site access locations;
  - vi) horizontal and vertical clearance dimensions for all vehicular circulation, including heights of doors, gateways and other passages;
  - vii) the required shared non-residential parking and residential visitor parking spaces;
  - viii) the required shared loading spaces;
  - ix) the required EV-charging vehicle parking spaces;
  - x) the required car-share parking spaces;
  - xi) the required end-of-trip facilities, including their location, number, size, type and use;
  - xii) the required bicycle maintenance facilities;
  - xiii) identification and wayfinding marking and /or signage for all bicycle, vehicle and truck spaces and associated facilities, with particular attention to ECD Hub staff and visitor needs;
  - xiv) the location of all above ground utility equipment required to be on site including that needed for street lighting and traffic signals as well as that need for third parties;
  - xv) the location of areas reserved for DEU equipment and/or connection facilities and a notation regarding the need for DEU pre-ducting, as applicable in the case of the final DEU strategy;
  - xvi) the required affordable housing units, including their size and location;
  - xvii) the required aging in place, basic universal, accessible, adaptable and/or convertible dwelling units, as noted below, including notation of their associated design features:

Type	Affordable	Market	Intent	Standard
Aging in Place	13	330	- support mobility and usability	Per OCP
Adaptable + Basic Universal Housing (1)	14	206	- renovation potential for wheelchair plus added floor area for manoeuvering	Per BCBC and RZB
Barrier Free (2)	-	-	- move in with wheelchair	Per BCDH
Total Units	27	536		

<sup>\*</sup> Includes Aging-in-Place

xviii) the required ECD Hub facility including plans of indoor and outdoor facilities;

xix) an accessibility checklist and identification of specific recommended measures to be incorporated into the Building Permit plans, where relevant;

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<sup>\*\*</sup> Includes Aging-in-Place, Adaptable and Basic Universal Housing

- a CPTED checklist and identification of specific recommended measures to be incorporated into the Building Permit plans, where relevant;
- xxi) a LEED checklist for the overall development prepared by a LEED AP to achieve LEED v4 NC Silver equivalency and identification of specific measures to be incorporated into the Building Permit plans to be incorporated into the Building Permit plans, where relevant;
- xxii) a LEED checklist for the ECD Hub prepared by a LEED AP to achieve LEED v4 ID+C Gold Certification and identification of specific measures to be incorporated into the Building Permit plans to be incorporated into the Building Permit plans, where relevant;
- an Acoustic and Mechanical Report with recommendations prepared by a 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 various noise covenants:
- an Arborist Contract entered into between the applicant and a Certified Arborist for supervision of any 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.
- the required common indoor, common outdoor and private outdoor amenity areas including their location, size and use;
- the location, plans, detailing and specifications of the vertical clearance for the loading area, including the access/egress movement to/from Cook Road and Buswell St.to confirm truck loading movements are satisfied;
- the location, plans, detailing and specifications for landscaping, including but not limited to required replacement trees and irrigation for private and common open space; and
- the location and dimensions of on- and off-site any tree protection fencing illustrated on the Tree Retention/Management Plan provided with the application.
- c) Submission of a letter of credit for landscaping, including required replacement trees, based on 100% of the cost estimate provided by the Landscape Architect, including installation costs, plus a 10% contingency cost.

#### **Building Permit Notes:**

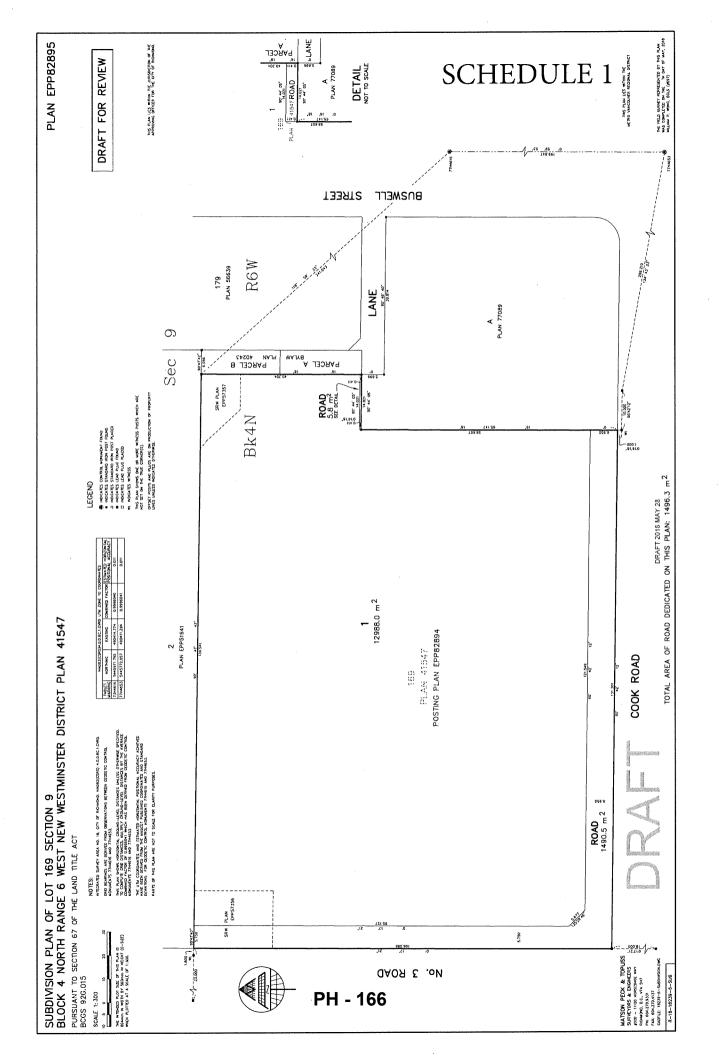
- 1. Prior to Building Permit issuance the approved Development Permit and associated conditions, as well as any additional items referenced in "Schedule B: Assurance of Professional Design and Commitment for Field Review", shall be incorporated into the Building Permit plans (drawings and documents) prior to Building Permit issuance.
- 2. Prior to Building Permit issuance, the applicant is to submit a detailed <u>Construction Parking and Traffic Management Plan</u> to the Transportation Division for approval. The Management Plan shall identify (for each development phase): construction vehicle access, emergency vehicle access, parking facilities for construction workers, staging areas for construction vehicles, areas for deliveries and loading, and application for any lane closures. The Plan will require the use of proper construction traffic control procedures and certified personnel as per Traffic Control Manual for works on roadways (Ministry of Transportation and Infrastructure) and MMCD Traffic Regulation Section 01570.
- 3. Prior to Building Permit issuance the developer must obtain a <u>Building Permit for construction hoarding</u>. 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.
- 4. Prior to Building Permit issuance the developer must obtain and provide to the City TransLink concurrence, in writing, regarding adequate completion or otherwise successful resolution of the AID process.

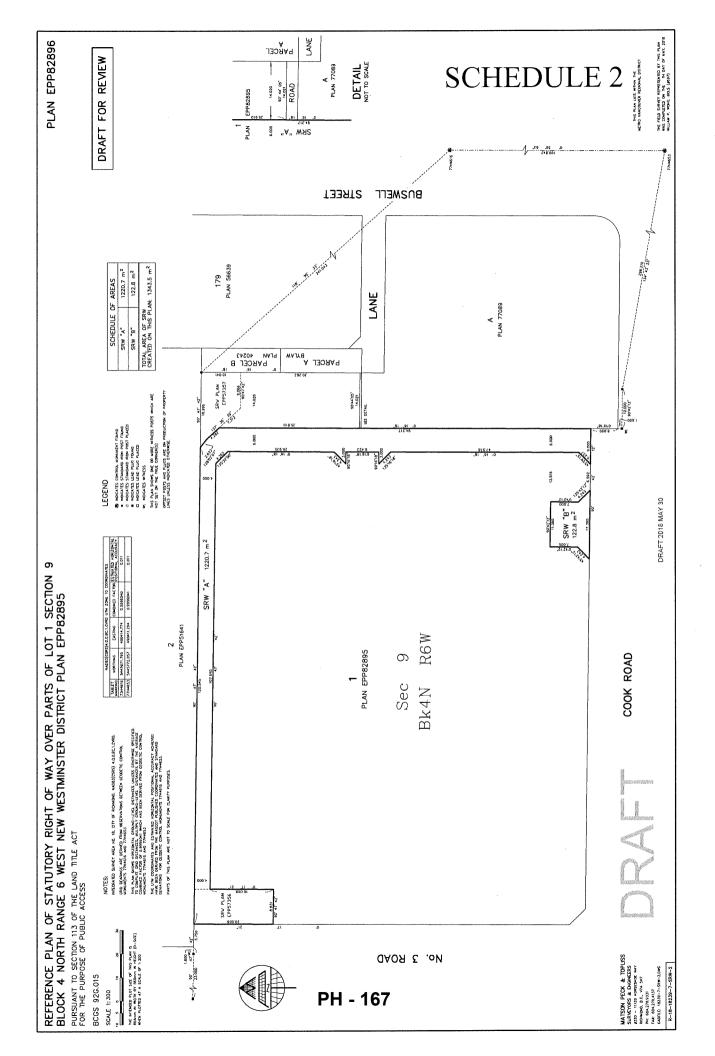
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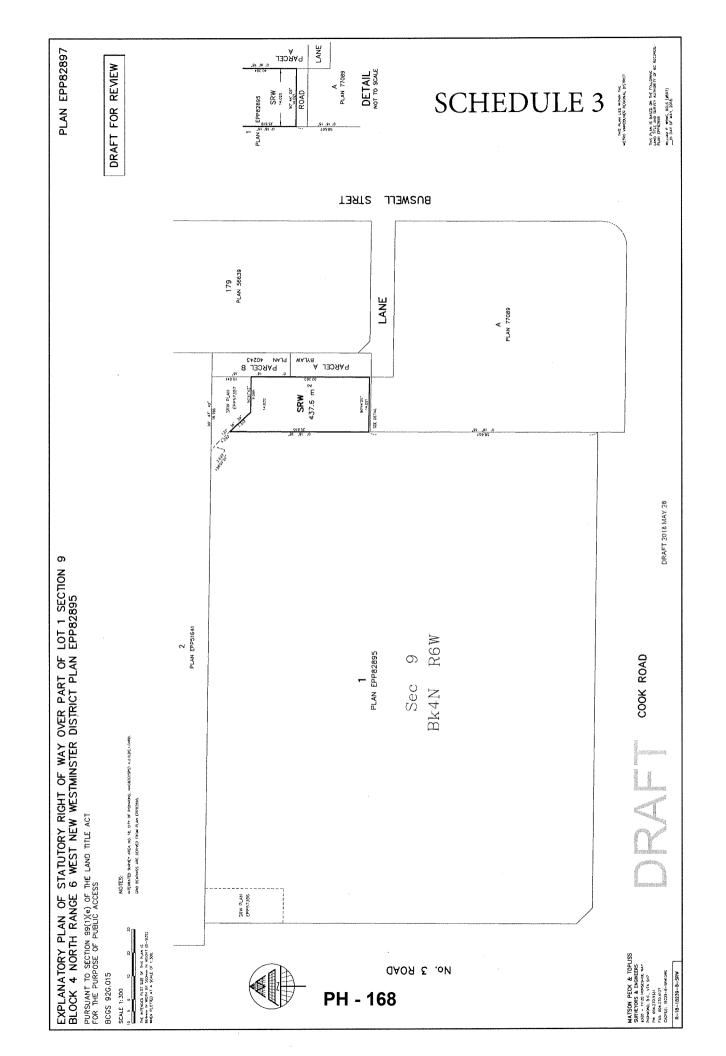
#### General Notes:

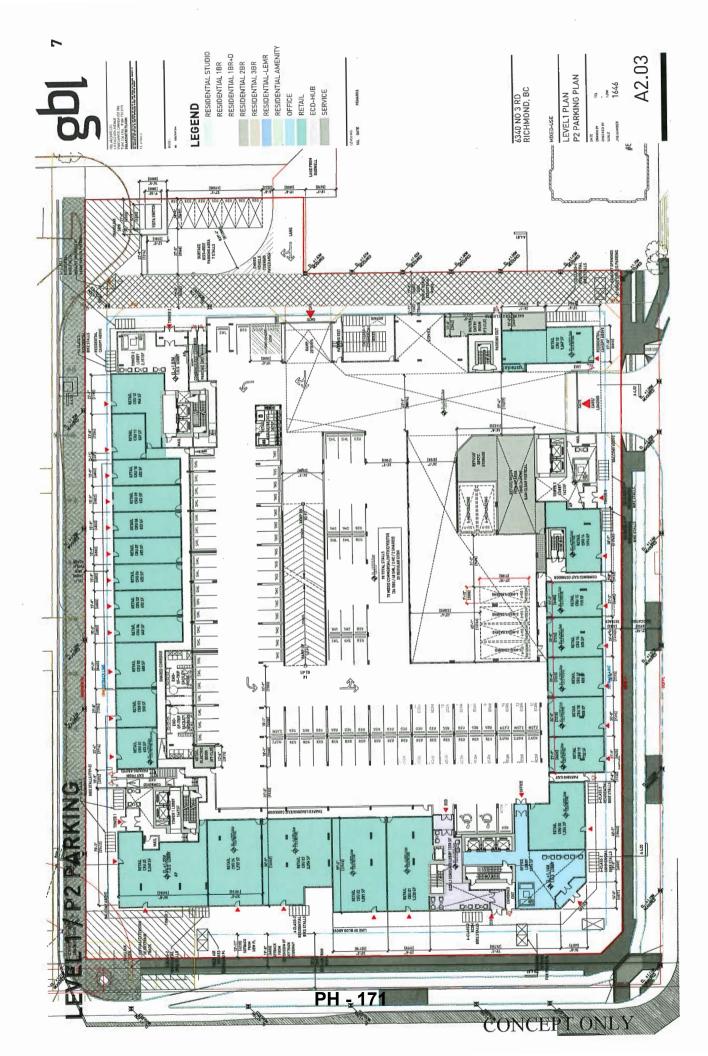
- 1. Some of the foregoing items (\*) may require a separate application.
- 2. Where the Director of Development deems it appropriate, legal agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.
- 3. All agreements 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.
- 4. 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.
- 5. 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, dewatering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
- 6. 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 be retained.

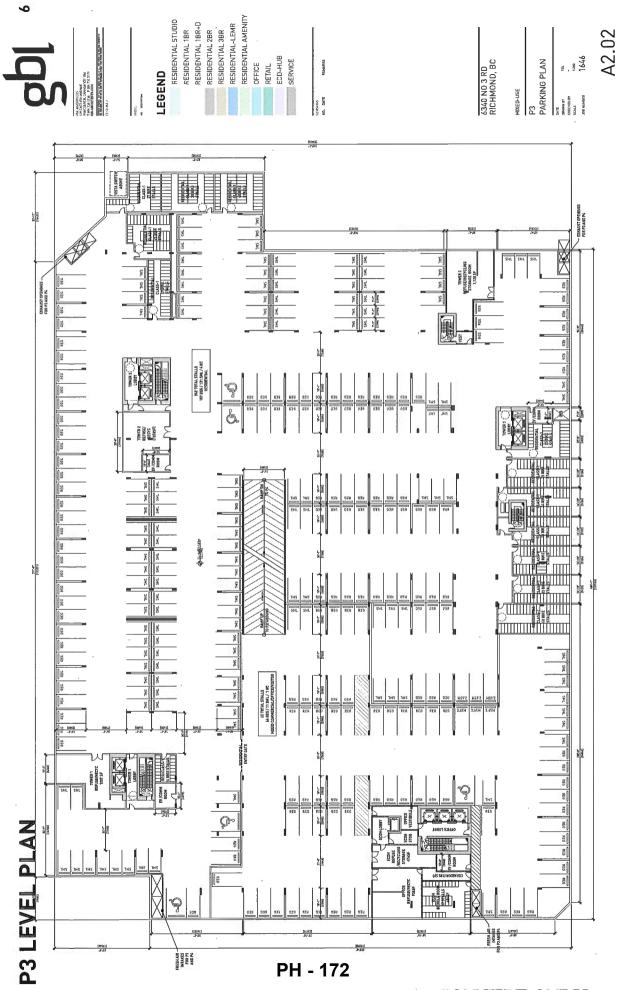
Signed	Date















# TERMS OF REFERENCE FOR THE BRIGHOUSE VILLAGE EARLY CHILDHOOD DEVELOPMENT HUB

6340 No. 3 Road

May 30, 2018



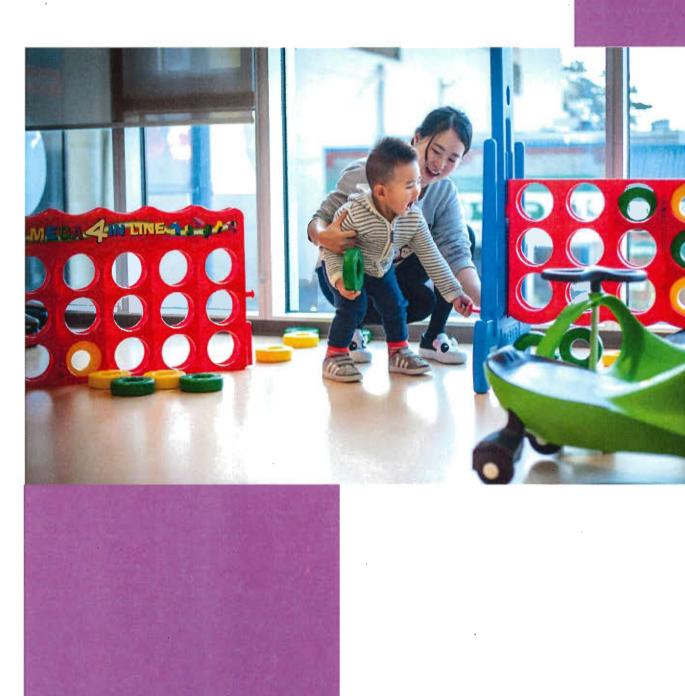
Prepared by: HDR | CEI Architecture Associates, Inc. 500 - 1500 West Georgia Street Vancouver, BC V6G 2Z6 604.687.1898



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APPENDICES





## "Children are not things to be molded, but people to be unfolded."

- Jess Lair



### **OVERVIEW**

#### 1. PREFACE

The City of Richmond Early Childhood Development Hub is an air space parcel within the Keltic Brighouse Village development. **The Early Childhood Development Hub Facility Program document contains:** 

- A summary description of the project including drawings provided by GBL Architects to illustrate the location, preliminary shape and relationship of the air space parcel to the development as a whole;
- A description of the City's expectations, standards and requirements that the facility and outdoor areas must meet;
- A summary of the recommended program areas for each programmatic function (building service areas will be determined by Keltic's design and engineering consultants, in conformance with City of Richmond City owned facility standards);
- Information for designing play areas for children
- Background, reference, and resource material to inform and aid the design of the facility and outdoor playground areas;
- Definitions of key terms

The Preliminary Early Childhood
Development Hub Facility Program
document is to be read in conjunction
with the City of Richmond's <u>City</u>
<u>Owned Child Care Facility Policies</u>
<u>and Guidelines December 2016</u>; and

Vancouver Coastal Health's <u>Design</u> <u>Resource for Child Care Facilities.</u>

In addition to the functional requirements outlined in the facility program document, the facility must meet applicable bylaws, building codes, government acts and health regulations. These include but are not limited to the City Of Richmond's Bylaws, the Government of British Columbia's Building Regulation, Community Care and Assisted Living Act, Child Care Licensing Regulation, Occupational Health and Safety Regulation (Worksafe BC), and the Community Care Facilities Director of Licensing Standards of Practice Safe Play Space.

Related to the child care programs, a provincial child care license from Vancouver Coastal Health (VCH) will need to be obtained by the Council approved operator for the facility. The licensing criteria for the operator extends beyond what is required for City issuance of a final inspection card permitting occupancy of the premises. VCH will only issue a child care license once municipal and fire approval have been granted. They will inspect the facility to ensure that all furnishings, equipment and supplies are on-site to deliver the intended child care programs and that the spaces provided meet the minimum requirements of the BC Child Care Licensing Regulation.

The standards and expectations of Richmond for City owned facilities and the requirements set out in the facility program may exceed those set out in the BC Child Care Licensing Regulation.

The ECD Hub is a parcel of a large Multi-use complex and will become a municipal facility for the City of Richmond. As with any of the city owned facilities, the Hub will be bound to achieve LEED Gold Certification; since the developer is not seeking certification for the whole project it was agreed that the ECD Hub should achieve LEED Gold CI for Commercial Interiors certification. LEED score card for the ECD Hub should be provide with the Rezoning application showing credits being sought. The LEED score card should be updated as project is defined and submitted with other project phase like Development Building Permit applications for review by City staff. Failure to certify the project may result in monetary penalty...

All the project drawings, plans, sections, and elevations have been provided and prepared by GBL Architects and are included for reference only. It is recognized that the size and shape of the air space parcel is subject to change as a result of the design process.

#### 2. DEFINITIONS

#### Air space parcel:

#### Part 9 - Land Title Act

**Definitions:** a volumetric parcel, whether or not occupied in whole or in part by a building or other structure, shown as such in an air space parcel plan.

#### Air Space Plan - Section 14 Land Title Act

- 144 (1) An air space plan must:
- (a) have its side boundary limits consist of vertical or inclined surfaces conforming to or lying within the boundaries of the single parcel referred to in section 143 (1) (b),
- (b) have as its upper and lower limit a horizontal or inclined plane or arc of a circle, or combination of them,
- (c) have a title, identifying the single parcel on the plan referred to in section 143 (1) (b) and indicating that the plan is a subdivision of the whole or part of that parcel,
- (d) have noted on it the geodetic elevation of one corner of the ground surface of the single parcel referred to in section 143 (1) (b) and the geodetic elevation of every corner or angle of the air space parcel,
- (e) include
  - (i) a plot to scale of the single parcel referred to in section 143 (1) (b), and
  - (ii) a 3 dimensional paraline drawing of the air space parcel contained between the planes or arcs and, if the surfaces of the air space parcel are both horizontal and vertical the plan must so state, otherwise all boundaries of the air space parcel must be fully dimensioned for length and direction, and
- (f) contain a book of reference that
  - (i) allots a parcel letter or number to each air space parcel by reference to the lettered or numbered corners of it as shown on the plan, or as otherwise designated by a rule made under section 385 (5), and
  - (ii) states the cubic contents of each air space parcel.

#### For the purpose of these guidelines, the following definitions apply:

Early Childhood Development (ECD) Hub: a facility that is designed for an operator to provide at least two types of licensed child care programs along with space for child and family development services or as a multi-agency service centre offering at least two types of licensed child care programs with child development and

family strengthening services

**F.A.R. Area:** the total area of space allocations as set out and defined in the legal agreement and

zoning bylaw.

Gross Area: the total area of the air space parcel including building services, walls, and circulation per

the Land Title Act Part 9.



### **OVERVIEW**

**Net Area:** the area intended for the purpose/activity of the space not including walls or structure

in interior spaces; In the exterior the net area does not include landscape areas, exterior

walls, structure and functional circulation

**Net Usable Area:** the area intended for the purpose/activity of the space not including walls and circulation,

e.g in front of millwork (refers only to interior spaces)

Total Net Usable Area: the sum of all Net Usable Area

**Total Net Area:** the sum of all the Net Areas

**Licensed Child Care Definitions** 

**Infant:** a child under 18 months of age

**Toddler:** a child between 18 and 36 months of age

**Preschooler:** a child between 30 months of age and school age

**School Age:** a child who attends school, including kindergarten between the ages of 5 and 12

**Group:** a group of children having its own room or rooms which are fully furnished, equipped and

licensed for child care. The groups are further defined as:

Infant/Toddler - consists of a maximum 12 children under 30 months of age

3 to 5 Group - consists of a maximum 25 children at least 30 months of age at the date of

entry and have not yet entered grade one

Preschool - consists of a maximum of 20 children 30 months to school age

School Age - consists of a maximum of 24 children if a preschool child or child in grade one

is present

School Age - consists of a maximum 30 children if no preschool child or child in grade one

is present

**Facility:** a building or portion of a building which houses one or more groups

**Child Care Program:** a full-day program that operates Monday through Friday typically

between 7:00a.m. and 6:00p.m.

**Child Development** programs that support children's social, emotional, physical, and intellectual development

**Programs:** e.g. drop in play, story time, drop in child-focused health services

Convertible Community: multi-purpose space that can be used on evenings and weekends to host meetings, events,

**Space:** and other types of programs that meet community needs

**Family Development** full and part-day family resource and drop-in programs, parenting programs, and wellness

**Programs:** programs.

**Preschool Program:** a part day program for children that provides either morning or afternoon sessions

anywhere between 2 up to a maximum of 4 hours each session

**School Age Program:** a part day program offered before and/or after school. Full day programs may be offered

when school is not in session

**Operator:** the person, or entity, selected by the City of Richmond that manages and operates

the Facility

**Child Care License:** refer to British Columbia's Community Care and Assisted Living Act and Child Care

Licensing Regulation

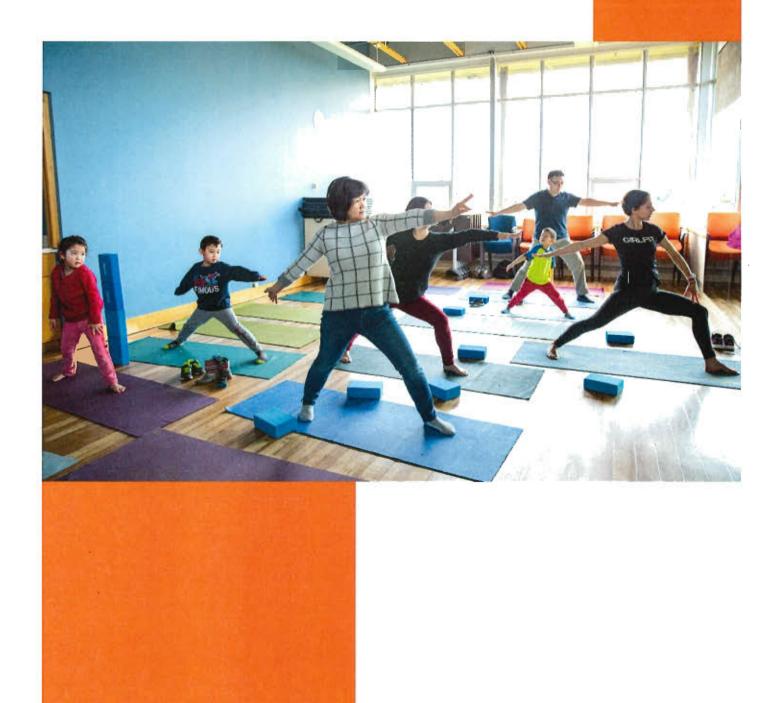
#### Licensed child care statute and regulation references:

Community Care and Assisted Living Act

Child Care Licensing Regulation

# **OVERVIEW**







### 1. INTRODUCTION

The City of Richmond is committed to the delivery of accessible, affordable and quality child care facilities and to providing these in service hubs particularly in the City Centre, to promote the health and wellbeing of children and families, to help foster overall economic stability and to support growth in Richmond.

Creating high quality, accessible, early childhood development hubs with child care spaces is a Council priority. To deliver the much-needed facilities the City is working with the business community, senior levels of government and the non-profit sector to realize these facilities with new child care spaces and wrap around services for families. Council has directed that new facilities are to be designed and constructed to provide healthy, secure and inspiring environments for children while also addressing the needs of early educators, parents and caregivers.

The Keltic Brighouse Village project is a mixed-use development. As part of the development the developer will deliver the construction an Early Childhood Development Hub to the City of Richmond.

The Early Childhood Development Hub air space parcel occupies areas on the first and second level for access lobbies and on the third floor where most of the program spaces are located. The Hub is accessed from the street and the parking garage thru lobbies where dedicated stair and elevator are located.

The range and variety of programs and services offered at the ECD Hub are intended to serve the community in many ways and will include:

- A licensed combined Group Care Under 36 Months program with 12 spaces for children between the ages of birth to 36 months.
- 2. A licensed Group Care 30 Months to School Age program with twenty-five spaces for children between the age of 30 months to school age (5 years).
- A licensed Preschool Care program with twenty spaces for no more than four hours of care for children between the ages of 30 months to school age.
- A licensed School Age Care program with 30 spaces for children up to 12 years old providing no preschool child or child in Grade 1 is present.
- Child and family development programs serving a various ages.

The Hub may operate seven days a week. The child care component will at a minimum operate five days a week from 7:30am to 6:00pm. Child and Family Development programs may be offered during the day, evenings and on weekends. The Hub will deliver a variety of services to families. Administrative staff, licensed full-time and part-time early childhood educators, program and other support staff, will deliver the services. Families will come in search of information, attend programs; child care parents will come and go when

they drop off and pick up their child, or children; and, community service specialist consultants and personnel will also visit from time to time.

A child will, on average, spend many more hours awake in a child care centre than they will spend in their home. The detail design of the indoor and outdoor environments is important. In addition to ensuring the safety of the children the following core principles will guide their design:

- community/urban design connectivity
- sensitive and thoughtfully detailed connected indoor and outdoor
- play-based learning places
- the fostering of the spectrum of early childhood development
- variety of experiences, noninstitutional in feel and spirit
- efficient functional spaces for the caregivers
- flexibility and adaptability
- best practices in the development of child care facilities
- best practices for sustainable development
- accessible and universal design
- resiliency
- durability
- differentiation between each program

### 2. KELTIC BRIGHOUSE VILLAGE

Keltic Canada Development (KCD) is proposing to develop a mixeduse project at the village centre of Brighouse Village, as per the City Centre Area Plan. The project is located at 6340 No 3 Road and faces No 3 Road to the west, Cook Road to the south, a new pedestrian mews to the east and a new Bus Mall to the north. The commercial and residential components of the project are designed to achieve Step 2 of the BC Energy Step Code, incorporating 70% renewable energy and allowing for a future tie-in to the Lulu Island Energy Company (LIEC) district energy system.

KCD is proposing the mixed-use 15-storey podium-four tower development to be comprised of:

- Early Childhood Development Hub,
- 543 market residential units,
- 27 non-market low-end of market rental (LEMR) units,
- Shared indoor and outdoor amenity spaces,
- 10 levels of office space,
- Commercial/Retail Units (CRU) along the Bus Mall, No 3 and Cook Roads at grade,
- 2 levels of underground and 2 levels of above-ground parking,

The Early Childhood Development Hub is proposed to be located on the third floor of an office building fronting No. 3 Road in an air space parcel connected to the street and parking levels by a dedicated elevator and stairway. The facility will have dedicated vehicle parking and loading areas plus bicycle parking. The child and family development programs and up to four licensed child care programs will be provided on Level 3.

#### 3. CITY OF RICHMOND EARLY CHILDHOOD DEVELOPMENT HUB

#### Goals

- a. To provide one stop shop service center for families providing them with supports such as licensed child care, early childhood development, family strengthening, and wellness programs. The facility is intended to help enhance children's readiness for school, help families connect with each other and community services.
- Is envisioned to serve as a meeting place. It will also assist economic development by supporting working families.
- To provide a welcoming space for children and families.

# Qualitative Aspects of ECD Hub in Brighouse Village

- a. Visitors to the ECD Hub should have a positive entry experience to the facility from both the street and parking levels (e.g. safe; following the best practices from CPTED Crime Prevention Through Environmental Design and spacious) allowing for movement of people and strollers in opposite directions at peak times.
- b. As some of the services could be directed to families whose children require extra supports, some thought needs to be given to the location of loading zones or near-by parking stalls for the disabled.

- The arrival at Level 3 via a dedicated commercial elevator or communicating stair should be welcoming and provide space for client to sit and mingle.
- d. The Child and Family Development component of the Hub will have office spaces, meeting rooms and large multipurpose room which will include storage room for equipment and a dividing acoustic wall for programming. A commercial kitchen and large outdoor patio will be located in the vicinity of the multipurpose rooms. Storage and other support spaces should be located at the back of the house. An area for parent stroller storage is needed and will be located near the entrance.



- e. The arrival at Level 3 via a dedicated commercial sized elevator with the option of using an staircase should be welcoming and provide space for people to sit. The Child and Family Development component of the Hub should have multi-purpose rooms, a commercial kitchen and an outdoor patio area. Storage and other support spaces should be back of house. Parent stroller storage near the entrance should be considered as well.
- f. Each Child Care Program will be separate and secured spaces. The Child Care Program will include space for Infant / Toddlers; 3-5 age group; Preschoolers and School age group. The activity spaces for each program should have a contiguous relationship to the outdoor play areas. The idea is for children to be able to flow from the indoor activity to their dedicated outdoor play area yet be easily supervised as they play. Some support spaces may be shared (e.g. kitchen, washroom).
- g. The recommended number and size of program spaces, support spaces and other spaces are noted in this document in Section 4 Technical Requirements. The developer's consultants should also refer to the City of Richmond Child Care Design Guidelines, January 2016 and the City of Richmond Policies and Guidelines for the Development of City

- -owned Child Care Facilities, December 2016 and licensing information referenced in the Appendices.
- Circulation corridors within the facility should not separate children's indoor spaces from their access to the outside. Aim to avoid long corridors.
- i. A dedicated elevator will be required. It should be of sufficient capacity to handle tripple, or quad strollers, with high ceiling to accommodate moving furniture and equipment as well as landscape supplies to the gardens on Level 3.
- j. A dedicated garbage/recycling room is required, close to the garbage collection point. Ensure that there is an accessible path to it.
- k. Parking and loading needs to be in a convenient location for pick-up and drop off of children, as close as possible to the elevator. Some staff parking spots are required for staff who will open and close the facility. See the COR Parking Bylaw. City of Richmond parking requirements can be found in the Richmond Zoning Bylaw 8500, Part A Procedures and Regulations: Section 7 -parking and Loading-see 7.7.2.3.General Parking Requirement -Child Care.

# Anticipated Number of Children, Staff and Clients

- 1. Child Care Centre Space
- up to 87 Children
- ages: birth-12 years old
- up to 15 staff
- Early Child and Family Development Program Space
- up to 15 staff (FT and PT)
- up to 100 clients dropping in for services, of those 50 may be children

The ECD Hub will need to comply with Municipal and Provincial regulations. In particular, the licensed child care programs must meet the Child Care Licensing Regulation.

### **Site Context**





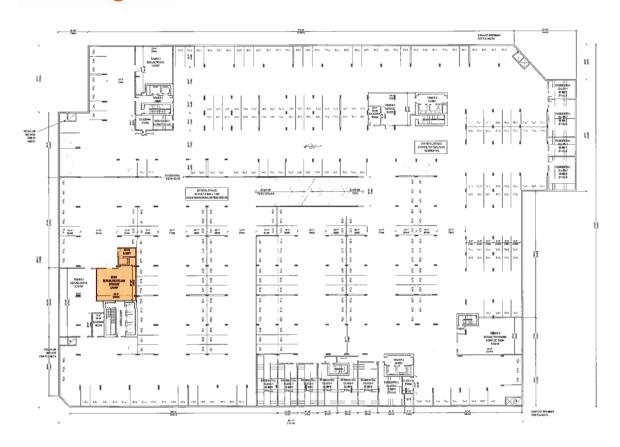


### **Context Plan**





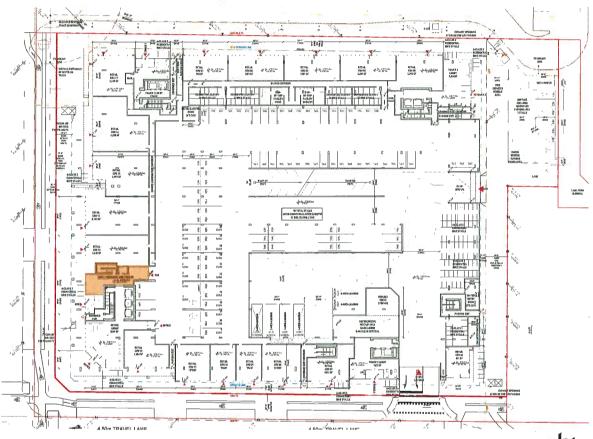
# P3 Parking Plan





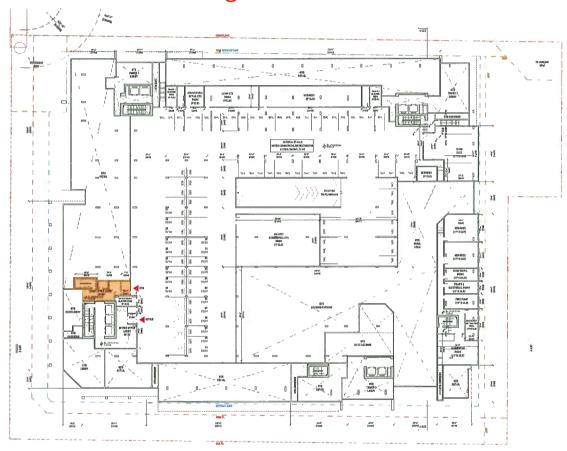


### Level 1 Plan - P2 Parking Plan



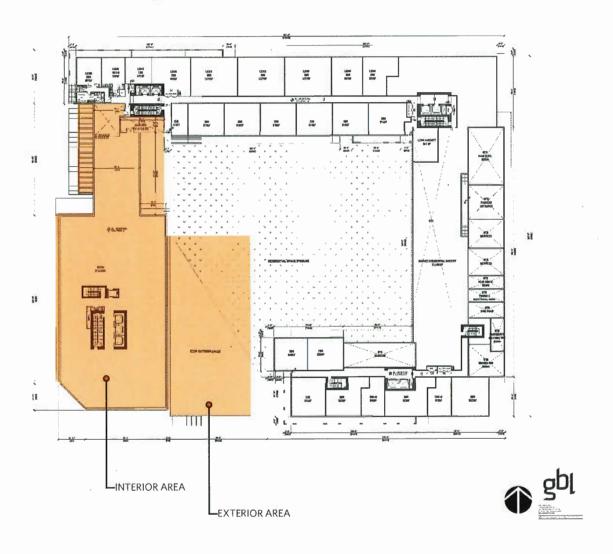


## Level 2 Plan - P1 Parking Plan

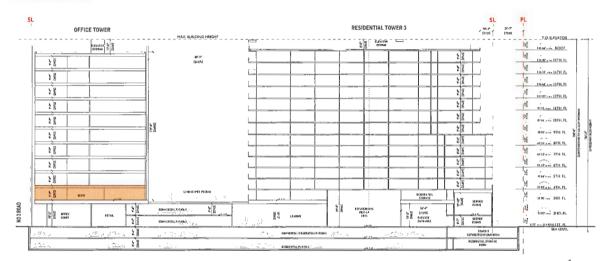




## **Level 3 - Early Childhood Development Hub**



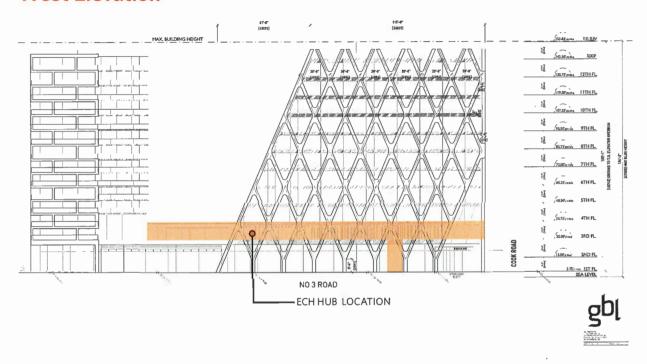
### **Section**







### **West Elevation**



### **3D View**



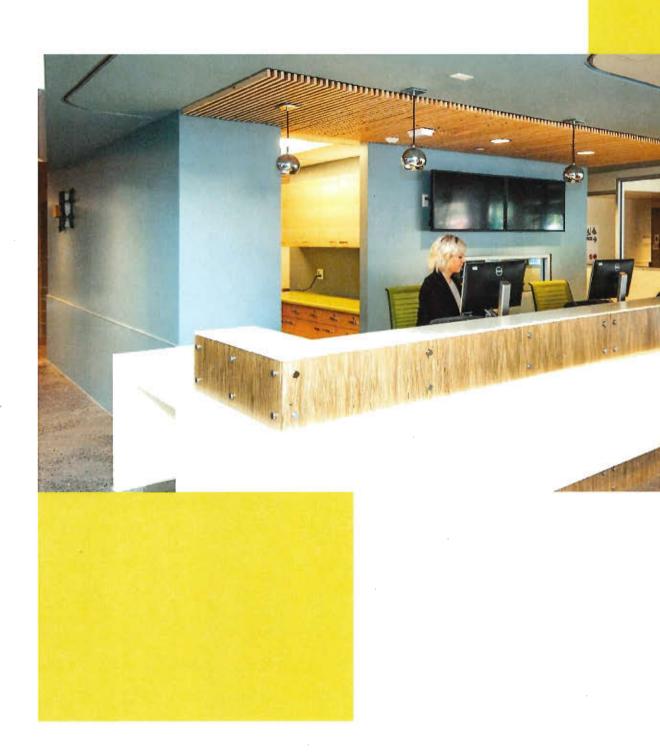


### **Outdoor Podium Level Daycare - Preliminary Concept**





<sup>\*</sup>Technical guidelines for the ECD hub outdoor space are currently under preparation and will inform design development of the landscape plan.



"The essence of our effort, to see that every child has a chance, must be to assure each an equal opportunity, not to become equal, but to become different - to realize whatever unique potential of body, mind, and spirit he or she possesses."

-John Fischer





# **FACILITY REQUIREMENTS**

### **BRIGHOUSE VILLAGE EARLY CHILDHOOD DEVELOPMENT HUB**

#### 1. Intent

The Early Childhood
Development Hub facility must:

- a. Have a total floor area of 1,765 m² (19,000 ft²) comprised of the T6 Child Care bonus, the Village Centre Bonus (VCB) and an additional Voluntary Development Supplement to the satisfaction of the City;
- b. Provide space for up to four licensed child care programs serving children from birth to 12 years old (e.g.12 spaces of Group Care Under 36 Months, 25 spaces of Group Care 30 Months to School Age, 20 spaces of Preschool and 30 spaces of School Age Care);
- Provide space for early childhood development and family support programs that include multipurpose rooms that can be convertible for community use in the evenings and on weekends;
- d. Satisfy the minimum recommended sizes for the child care component of the facility as per the City of Richmond Child Care Design Guidelines (or the applicable City policy in effect at the time the facility is to be developed);
- e. Ensure that the child care spaces

- are designed to be licensable by the Vancouver Coastal Health Community Care Facilities Licensing and/or other relevant licensing policies and/or bodies at the time of the facility's construction and in accordance with applicable Provincial Child Care Regulation and BC Community Care and Assisted Living Act;
- f. On an ongoing basis, be both functioning and fully operational, to the satisfaction of the City (see "Performance" under Development Processes/ Considerations);
- g. Provide functional space to meet the City Centre Area Plan objectives for non-residential uses such as a community hub for early childhood development where a continuum of services can be provided; and
- h. Be designed, developed and operated within the spirit of the City's Child Care Development Policy (#4017) which states that:
- The City of Richmond acknowledges that quality and affordable child care is an essential service in the community for residents, employers, and employees.

#### 2. Development Processes/ Considerations

# a. City staff, City representative/Operator involvement:

- The indoor floor plan and the outside play area for the child care facility and for the associated early childhood development and family support area should be developed in collaboration with the City, its representatives (e.g. consulting architect, etc.), and if available at the time of design development, the Council approved non-profit operator.
- To ensure the facility is satisfactory for licensable child care programs, and well designed for early childhood development and family support programs plus convertible community use space resulting, the City, its representative and the operator, if approved, should have input into:
- Space needs and design;
- Operation and function of the facility;
- Fittings and finishes;
- Mechanical, Electrical and other equipment; and
- Related considerations
- b. Child Care Licensing Officer
   involvement The application
   of the Provincial Child Care
   Regulation can vary based on
   the local Child Care Licensing
   Officer's interpretation of
   programs' needs; it is therefore
   essential that the Licensing

Officer be involved with the design and development of the facility from the outset (the City will involve VCH representatives in the review of the design from rezoning through to building occupancy).

- c. Performance As a condition of Development Permit, to ensure the facility will, on an ongoing basis, be both functioning and operational to the satisfaction of the City, the developer will be required, in consultation with the City, its representatives (e.g. architectural and other consultants), the operator, and other affected parties, to define a standard of performance, and the measures necessary to safeguard that those standards will be achievable (e.g., responsibility for maintenance).
- d. Sustainability The ECD Hub is to meet LEED Gold v 4 fir ID+C Commercial Interiors.
- 3. Facility Description
- a. **General Considerations** As noted above (see Intent), the facility must satisfy all City of Richmond, licensing, and other applicable policies, guidelines, and bylaws as they apply at the time of development.

#### For reference purposes

Early Childhood

Development Hub:

- Indoor 19,000 ft² (1,766 m²)
- Outdoor 11,300 ft² (1051 m²)
   maximum to be comprised of:

#### **Child Care Programs**

The minimum net floor area and outdoor play area recommended for the child care component to allow for up to 87 children of various ages (infants to 12 years of age), exclusive of space peripheral to the primary function of the facility, such as parking, elevators and stairs, etc.:

- Indoor floor area 7,835 ft<sup>2</sup> (728.2 m<sup>2</sup>)
- Outdoor area 9,000 ft<sup>2</sup> (836 m<sup>2</sup>)

# **Early Childhood Development** and Family Support Programs

The minimum net floor area and outdoor area recommended for multi-purpose rooms, a commercial kitchen, offices, public washrooms, staff washroom, staff break room and reception area is:

- Indoor floor area 7, 050 ft<sup>2</sup> (655 m<sup>2</sup>)
- Outdoor area 2,300 ft² (213.8m²)

#### Internal Walls, Circulation, and Service Areas

It is recommended that there be a space allowance for internal walls, circulation, and service areas such as a mechanical room, electrical room, data/comzmunications room, and a dedicated garbage recycling room:

 Internal walls, circulation, lobbies, and service areas – 4,093 ft<sup>2</sup> (380 m<sup>2</sup>) It is important to note that the above sizes are subject to change based on a number of factors, including policy developments, changes in licensing requirements or the design guidelines, community needs, advice of the operator, and/or other considerations.

- b. Access Safe, secure, and convenient access for children, staff, and parents is key to the viability of an ECD Hub. As the facility will be located above the ground floor, special attention will be required to how the facility is accessed (e.g., by foot, by car, in an emergency), the distance travelled, convenience, and related considerations. Where determined necessary, the City may require that the facility is equipped with special features designed to address the challenges of locating a child care facility in a high-density, mixeduse development including, but not limited to:
- A dedicated, over-sized elevator capable of accommodating triple child strollers, large groups of people, and landscape materials (to be transported to the roof deck play area);
- Parking and loading features required with respect to the ECD Hub entirely on-site and shall include, but may not be limited to, the following:
- For the child care and community services uses, 15 Class 1 bicycle spaces;
- ii. For the child care and community services uses, Class 2 bicycle



# **FACILITY REQUIREMENTS**

spaces in accordance with the site-specific bylaw and located close to the ground level entry lobby;

- For the child care uses, vehicle parking for a minimum of 11 staff vehicles and 9 non-staff vehicles (minimum non-staff space size of 2.65m. x 5.5 m.);
- iv. For the community services uses, vehicle parking for a minimum of 11 staff vehicles and 10 non-staff vehicles:
- v. For after-hours ECD Hub parking (approximately 8 spaces), use of the parking within the shared parking areas of the parkade;
- vi. Handicapped vehicle parking spaces provided consistent with the provisions of the Richmond Zoning Bylaw
- vii. Loading area space for use by a passenger van or similar-sized delivery van, with associated clear headroom and adjacent loading marshalling area (approximate area 5.0 m. x 11.0 m.) and
- Legal agreements are registered on title to secure adequate access in favour of the ECD Hub for shared use of on-site SU-9 loading spaces, to the satisfaction of the City, as determined via the Development Permit\* design, review, and approval processes;
- A dedicated garbage room in

close proximity to the garbage collection area equipped with a mop sink, hose bib and floor drain; and

 Private/secured entry from the fronting public street and private/ secured entry from the parkade.

#### c. Outdoor Space

The outdoor play space for the child care programs must be:

- Provided with covered and open play areas;
- Fully equipped with play structures and other apparatus that meet the requirements of Licensing authorities and are to the satisfaction of the City of Richmond and its approved operator;
- Include outdoor storage for children's play equipment and gardening tools, etc.;
- Landscaped with a combination of hard and soft play surfaces, together with appropriate fencing and access (taking into account the challenges of locating a facility on a rooftop) to provide for a wide variety of activities including, but not limited to, the use of wheeled toys, ball play, and gardening;
- Situated with good access to sunlight for at least three hours per day at winter solstice, two

hours of which should occur during typical playtimes 9:30 a.m. to 11: 30 a.m. or 1:30 p.m. to 4:00 p.m.

- Located where it is protected Atraffic, transit, construction) and ensures good air quality (e.g., protect from vehicle exhaust, restaurant and other ventilation exhausts, noxious fumes);
- Situated where it is immediately adjacent to and directly accessible (visually and physically) to the indoor child care space;
- Safe and secure from interference by strangers and others;
- Situated to avoid conflict with nearby uses (e.g., residential);
   and
- If multiple age groups of children are to be accommodated within the space, demised with fencing and be tailored to meet the various developmental needs of the ages of children being served.

The outdoor space for the early childhood development and family support plus convertible community use space must be:

- Situated so it is contiguous with the multi-purpose rooms;
- Have access to good sunlight;
- Be fully landscaped with planted areas and hardscape areas;



- Include some sun protection; and
- Outdoor storage for gardening tools, etc.

#### d. Noise Mitigation

Special measures should be incorporated to minimize ambient noise levels both indoors and outdoors (e.g., incorporating a roof over part of the outdoor play space to help create an area of reduced aircraft noise, ensuring no mechanical equipment that generates noise, vibration or noxious fumes is placed directly on or above the child care program spaces or in the outdoor play areas).

- e. Height Above Grade The facility is not to be located above the fourth floor of the project, except where this is determined to be to the satisfaction of the City.
- f. Natural light & ventilation The facility's indoor spaces (with the exception of washrooms, storage, and service areas) must have operable, exterior windows offering attractive views (near or far) and reasonable privacy/overlook, as determined through Richmond's standard development review process.
- g. The facility should have an active visual presence from the street,
   e.g., support spaces should
   be placed away from the front

windows on No. 3 Road and spaces such as a multi-purpose room, lounge and reception should be visible.

#### 4. Level of Finish

The ECD Hub must be turnkey and ready for immediate occupancy upon completion (with the exception of loose furnishings, toys, and related items). This includes, but is not limited to, the following requirements:

- Finished floors installed (e.g. vinyl and/or carpet);
- Walls and ceiling painted and wall protection installed;
- Window coverings installed (curtains or blinds);
- A commercial kitchen with fire suppression and servery kitchens fully fitted out, including major appliances (e.g., stove/ovens, refrigerators, microwaves) and cabinets;
- Washrooms fully fitted out, including sinks, toilets, and cabinets;
- Wired for cablevision, internet, phone, and security;
- Non-movable indoor millwork, including kitchen cabinets, cubbies, parent sign-in counters, etc.;
- All outdoor landscaping, including all permanently mounted play equipment and furnishings and an irrigation system;

- Operable, exterior windows; and
- Noise attenuation to the satisfaction of the City.

#### 5. Tenure

Parcel: Air space parcel

Ownership: Developer transfers ownership to the City

#### 6. Legal

As a condition of completing the pending rezoning, legal documents will be required to secure the ECD Hub facility contribution, including a "nodevelopment" covenant, a Letter of Credit, and/or other measures as determined to the satisfaction of the City.



# **FACILITY REQUIREMENTS**









# **FACILITY REQUIREMENTS**

### **LEED CERTIFICATION CONTENT:**

- 1. Summary Prepaired for by Integral Group (email)
- 2. Preliminary LEED Score Card



May 24, 2018

Planning and Development Services City of Richmond

Re: ECDH - Summary of Proposed Sustainability Measures

The applicant and design team are committed to incorporating green building principles into the design and long term operations of the proposed ECDH fit out of the 6340 No. 3 Road. The project will be registered with the Canada Green Building Council's LEED v4 rating system for Interior Design and Construction (ID+C) rating system and will utilize a 60+ point strategy to be equal to a Gold level of design. The following list, along with a LEED checklist, highlights prominent sustainable features which will achieve a preliminary 60 points.

The development will support a Gold level of performance for the ECDH through the following strategies.

#### Sustainable Sites

The development's design densifies the existing site to maximize land usage. The site is located within a short walking distance (50 m) of No. 3 Road and the good variety of amenities at the Richmond Center. This location also provides optimum connectivity to pedestrian, bicycle and public transit options. The No. 3 Road roads offer access to the Canada line, 301, and 340 encouraging building occupants to utilize alternative transportation opportunities, reducing dependence on single occupancy vehicles. The location along transit corridors combined with secured storage for bicycles and electric vehicle charging within the proposed building affords a distinct advantage for carless commuters.

#### Water Use Efficiency

The project will address water management through two design approaches. Firstly, water conservation through low flow plumbing fixtures, the project will be targeting a 35% reduction in the use of potable water through selection of plumbing fixtures.

The fixture flows proposed for the targeted 35% reduction include the following:

- 4.2/ 3 LPF Dual Flush Water Closet
- 1.3 LPM Lavatory (Non-metering)
- 5.7 LPM Kitchen Faucet
- 5.7 LPM Shower

#### **Energy Performance**

The project's goal is to satisfy as many of the prescriptive energy performance criteria as possible. This will be done through a combined effort by both the design team and the daycare provider to identify and implement the necessary measures. At an early stage of design the following measures are proposed to save energy in the ECDH space.

<u>HVAC Systems and Zoning</u>- The space will be designed to identify and provide thermal comfort control to each anticipated thermal zone in the space. This will ensure the thermal comfort can be met for each space type without having to waste energy also conditions other spaces which may not need the same space conditioning.

Interior Lighting Power- The space will be designed to utilize lighting which can demonstrate a minimum reduction of 25% from the ASHRAE 90.1-2010 baseline values.

<u>Interior Lighting Controls</u>- The space will include daylight responsive controls at the perimeter to reduce electrical lighting power when the daylighting is sufficient for the space. The lighting controls will also be fitted with occupancy sensors to ensure spaces not in use will have the lighting turned off to avoid energy waste.

Integral Group | Suite 180 - 200 Granville Street, Vancouver, BC V6C 1S4 +1.604.687.1800 | Integralgroup.com

Equipment and Appliances- The spaces appliances (fridges, dishwashers, etc.) and applicable IT equipment (computers, printers, AV equipment, etc.) will be selected to be EnergyStar certified to ensure they are the most energy efficient equipment available on the market.

In addition to high performance system design, the development will introduce an energy metering scheme for the space to be used in the performance based commissioning of the space to make sure all systems are operation according the performance assumptions targeted for the project.

#### **Building Materials**

Construction waste management will be an integral part of the building process, firstly through source minimization, smart product selection, packaging and transport. Recycled content and regionally sourced materials will be preferred through the selection process, focusing on steel, concrete and glass components, reducing the impact of extracting of virgin resources. These materials retain their high value in the recycling chain and so once the service life of the proposed building comes to an end, re-use and integration into new building materials is a viable option. Furthermore, waste generated on site during construction will be addressed through a comprehensive waste management plan, detailing recycling facilities and documenting the diversion of standard debris from landfill.

To reduce the impacts of the materials used in the fit out of the ECDH, products with Environmental Product Declarations will be used to help disclose and inform the selection of the most environmentally products possible. This will extend beyond the construction of the space and include the selection of the furniture and fittings in the space. The fit out will also be encouraged to consider flexibility and adaptive design to minimize the increased use of materials should the space undergo renovation years after occupancy.

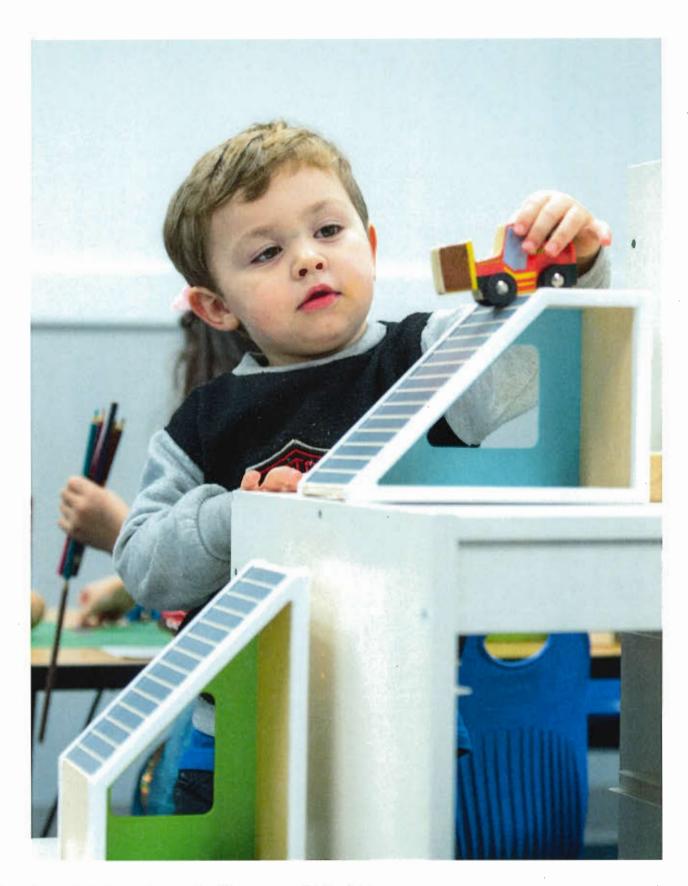
#### Indoor Environment

Outdoor air ventilation will be implemented, adhering to ASHRAE 62.1-2007 to reduce occupant exposure to indoor pollutants by ventilating with outdoor air. Airflow supplied to the space will be monitored to ensure ongoing compliance with the ASHRAE 62.1-2010 ventilation requirements. In densely occupied spaces CO2 monitoring will be provided to alert occupants when CO2 concentrations become too high.

To further improve the indoor air quality of the building, interior finishes and coatings will be specially selected to limit the quantities of harmful volatile organic compounds (VOCs) which would be off-gassed after installation.

Lighting design and views will be optimized in the proposed fit-out of the space.

The above noted strategies support a holistic approach to addressing the requirements of the City of Richmond's sustainability requirements for the ECDH space. Implementing these strategies through design and construction will produce an intelligently designed project capable of delivering enhanced building performance while also improving indoor environmental quality for occupants. A LEED checklist is included with the application for review.







# **LEED v4 for ID+C: Commercial Interiors** 6340 No. 3 Road ECDH- Preliminary LEED Checklist

Credit	Integrative Process	2
0 40 1 2254	on and Transportation	4 b
	on and Transportation	18
	LEED for Neighborhood Development Location	
	Surrounding Density and Diverse Uses	8
	Access to Quality Transit	7
	Bicycle Facilities	1
2 Credit	Reduced Parking Footprint	2
2 4 Water	Efficiency .	12
Priereq	Indoor Water Use Reduction	Required
2 4 Credit	Indoor Water Use Reduction	12
8 12 Energy	and Atmosphere	38
	Fundamental Commissioning and Verification	Required
	Minimum Energy Performance	Required
	Fundamental Refrigerant Management	Required
	Enhanced Commissioning	5
	Optimize Energy Performance	25
	Advanced Energy Metering	2
	Renewable Energy Production	3
	Enhanced Refrigerant Management	1
	Green Power and Carbon Offsets	2
Z Chaon	Gledi Fower and Calbui Onsets	2
	als and Resources .	13
-	Storage and Collection of Recyclables	Required
	Construction and Demolition Waste Management Planning	Required
	Long-Term Commitment	1
3 Credit	Interiors Life-Cycle Impact Reduction	4
1 Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
1 Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1 Credit	Building Product Disclosure and Optimization - Material Ingredients	2
Credit	Construction and Demolition Waste Management	2
8 7 1 Indeed	Environmental Quality	17
Pencel.	Minimum Indoor Air Quality Performance	Required
Y Preside	Environmental Tobacco Smoke Control	Required
1 1 Credit	Enhanced Indoor Air Quality Strategies	2
	Low-Emitting Materials	3
	Construction Indoor Air Quality Management Plan	1
2 Creadit	Indoor Air Quality Assessment Thermal Comfort	2
1 Creadit		1
1 1 Creadit	Interior Lighting	2
3 Creadit	Daylight	3
1 Creadit	Quality Views	1
1 Creadit	Acoustic Performance	2
6 0 0 Innov	ation	6
5 Credit	Innovation	5
1 Credit	LEED Accredited Professional	1
3 1 0 Regio	onal Priority	4
1 Credit	Indoor Water Use Reduction (6 points)	1
1 Credit	Enhanced Commi ssioning (5 points)	1
1 Credit	Optimized Energy Use (10 points)	1
1 Credit	Surrounding Dens ity and Diverse Uses (5 points)	1
61 30 35 TOTA	LS Possible Points:	110

# **TECHNICAL REQUIREMENTS**





#### 1. NET ACTIVITY AREA SUMMARY

	3	Min. Net Activity Floor Area to be prov				
Number	Activity	SQ. FT	SQ. M			
P1.1	Vertical Circulation/floor					
P1.1.1	Elevator					
	Garbage and Recycling	886	82.3			
	Loading Bay					
	Visitor Car Parking					
200	Visitor Bicycle Parking - Class 2					
	Building Services					
	Mechanical	\$2-110 t				
- 1	Electrical					
	I/T- Data and Security	1 30				
	Secure Staff Parking	1				
	Secure Bicycle Parking - Class 1		4: CH - C-			
	Vestibule to Parking Garage (non-FAR)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	NET TOTAL	886	82.3			
	CHILD & FAMILY DEVELOPMENT PROGRAM HUB (CFDH)					
	LEVEL 1 - STREET & PARKING ENTRANCE (P2)		the second secon			
1.1	Parking Vestibule Entrance (non FAR)					
1.2	Public Street Vestibule Entrance	80	7.4			
1.3	Public Lobby from Street & Parking	500	46.5			
1.4	Interconnecting Stair	160	14.4			
1.5	Elevator	75	6.9			
	SUB-TOTAL	740	68.8			
	LEVEL 2 - PARKING ENTRANCE LEVEL (P1)					
2.1	Vestibule to Parking (non-FAR)					
2.2	Public Lobby from Parking	440	40.9			
2.3	Interconnecting Stair	0	0			
2.4	Elevator	0	0			
	SUB-TOTAL	440	40.9			
	LEVEL 3 - ECD HUB					
3.1	Lobby	300	27.9			
3.2	Reception	200	. 18.6			
3.3	Interconnecting Stair	0	0.0			
3.4	Elevator	0	0.0			
3.5	Office -1	120	11.2			

Number	Activity	Min. Net Activity Floor Area to be provide			
vuiliber	Activity	SQ. FT	SQ. M		
3.6	Shared Office - 2	200	18.6		
3.7	Shared Office - 3	200	18.6		
3.8	Break Out Rooms 2 @ 50	100	9.3		
3.9	Copier and Mail/Paper Storage	90	8.4		
3.10	Meeting Room 1	400	37.2		
3.11	Meeting Room 2	120	11.2		
3.12	Male public washroom (at CFDH Lobby)	100	9.3		
3.13	Female Public Washroom (at CFDH Lobby)	210	19.5		
3.14	Multi-Purpose and Family Activity Room	2,500	232.3		
3.15	Commercial kitchen *	400	37.2		
3.16	Multi Purpose Program storage	160	14.9		
3.17	Storage	100	9.3		
3.18	Staff Room	140	13.0		
3.19	Staff Washroom - Single Occupancy with Shower	110	10.2		
3.20	Staff Washroom - Single Occupancy	40	3.7		
3.21	Men's Washroom (North)	100	9.3		
3.22	Women's Washroom (North)	170	15.8		
3.23	Public Accessible Washroom	40	3.7		
3.24	Janitor	70.0	6.5		
	LEVEL 1 - NET TOTAL	740	68.8		
	LEVEL 2 - NET TOTAL	440	40.9		
	LEVEL 3 INDOOR (CFDH component) - NET TOTAL	5,870	545.5		
	TOTAL ECD Child and Family Development Area	7,050	655		
	FAMILY DEVELOPMENT/COMMUNITY OUTDOOR AREA				
	Outdoor Storage				
	Outdoor Terrace and Gardens	2300	213.8		
	Covered **		7		
	Outdoor				
	NET TOTAL	2300	213.8		
	LICENSED CHILD CARE PROGRAMS AND ADMINISTRATION PUBL				
3.30	Lobby	400	37.2		
3.31	Parent Stroller Storage	70	6.5		
3.32	Parent Meeting	80	7.4		
3.33	CC Office	105	9.8		
3.34	Electrical	100	9.3		
1	Program Stroller Storage	100	9.3		
3.35		45	4.2		
3.36	Accessible Washroom				
	Shower Shared with CFD	0	0.0		
3.37	Janitor & Laundry	75	7.0		

 $<sup>^{\</sup>star}$  Technical requirements for the commercial kitchen are under development and will inform the design development of this space.

<sup>\*\*</sup> Technical guidelines for the ECD hub outdoor space are currently under preparation and will inform design development of the landscape plan.



Number	Activity		Floor Area to be prov		
	Was a second	SQ. FT	SQ. M		
3.38	Staff Washroom	30	2.8		
3.39	Staff Room	120	11.2		
	NET TOTAL	1125	104.6		
3.5	LICENSED INFANT/TODDLER CHILD CARE PROGRAM				
3.51	Cubby and Parent Sign In	152	14.1		
3.52	Main Activity Room				
3.52.1	Open Play Area	215	20.0		
3.52.2	Table/Art Area	215	20.0		
3.52.3	Quiet area	101	9.4		
3.53	Small Nap Room	100	9.3		
3.54	Large Nap Room	180	16.7		
3.55	Large Nap Room Storage	50	4.6		
3.56	Shared Kitchen (with 3-5 programl)	100	9.3		
3.57	Children's Washroom	80	7.4		
3.58	General Storage	86	8.0		
3.59	Staff Office	100	9.3		
	Staff Counter & Storage	32	3.0		
	NET TOTAL INDOOR	1,411	131.1		
	INFANT/TODDLER OUTDOOR PLAYGROUND				
	Outdoor Storage	. 86	8.0		
	Covered Play	323	30		
	Open Area	646	60		
	NET TOTAL OUTDOOR	1,055	98		
3.6	LICENSED 3-5 CARE PROGRAM		200		
3.61	Cubby and Parent Sign In	172	16.0		
3.62	Main Activity Room		2.00-a		
3.62.1	Open Play Area	549	51.0		
3.62.2	Quiet Room	100	9.3		
3.62.3	Table/Art Area	360	33.5		
3.63	Gross Motor/ Nap Room	360	33.5		
3.64	Gross Motor/Nap Room Storage	50	4.6		
3.65	Children's Washroom	118	11.0		
3.66	General Storage	100	9.3		
3.67	Staff Office	100	9.3		
3.68	Shared Kitchen (with I/T Program)	100	9.3		
	Staff Counter & Storage	32	3.0		
	NET TOTAL INDOOR	2,041	189.7		
	3-5 GROUP OUTDOOR PLAYGROUND				
	Outdoor Storage	100	9.3		

Number	Activity	Min. Net Activity Floor Area to be provide				
	A THE STATE OF THE STATE OF	SQ. FT	SQ. M			
	Covered Play	628	58.4			
	Open Area	1,256	116.7			
	NET TOTAL OUTDOOR	1,984	184.4			
3.7	LICENSED PRESCHOOL CARE PROGRAM					
3.71	Cubby and Parent Sign In	142	13.2			
3.72	Main Activity Room					
3.72.1	Open Play area	490	45.5			
3.72.2	Quiet Room	100	9.3			
3.72.3	Table/Art Area	210	19.5			
3.73	General Storage	100	9.3			
3.74	Children's Washroom	97	9.0			
3.75	Shared Kitchen (with School Age Program)	100	9.3			
3.76	Staff Office	100	9.3			
	Staff Counter & Storage	32	3.0			
	NET TOTAL INDOOR 1,371 127.4					
	PRESCHOOL CARE OUTDOOR AREA					
	Storage	86	8.0			
	Covered Play	506	47.0			
	Open Area	1,001	93.0			
	NET TOTAL OUTDOOR	1,593	148			
	LICENSED SCHOOL AGE CARE PROGRAMS					
A 7 #7.	Main Activity Room	1195	111.1			
7017C 2	Cubby and Parent Sign In	202	18.8			
	Washrooms	150	13.9			
	General Storage	100	9.3			
	7 10	100	9.3			
	Staff Office					
	Shared Kitchen (with Preschool Program)	108	10.0			
	Staff Counter & Storage	32	3.0			
	NET TOTAL INDOOR	1,887	175.4			
	SCHOOL AGE PLAYGROUND					
	Storage	86	8.0			
	Covered Play	753	70			
	Open Area	1,507	140			
	NET TOTAL OUTDOOR	2,346	218			
	CHILD CARE LEVEL BUILDING SERVICES & CIRCULATION					
-	Elevator	T.B.D.				
	Interconnecting Stair	T.B.D.				
	Building Services	T.B.D.				
70						
14.45	Mechanical	T.B.D.				



Number	Activity	Min. Net Activity Floor Area to be provide	
	Activity	SQ. FT	SQ. M
	I/T- Data and Security	T.B.D.	
	Corridors/Horizontal Circulation	T.B.D.	
THE DAY	TOTAL	T.B.D.	A SECTION OF THE PARTY OF THE P
	SUMMARY OF INTERIOR NET CHILD CARE PROGRAM AREAS	CHEST VALUE	
	Total Net Public and Support Activities	1,125	104.6
200	Total Net Interior Infant Toddler Program Activity Area	1,411	131.1
	Total Net interior 3-5 Program Activity Area	2,041	189.7
	Total Net Interior Preschool Activity Area	1,371	127.4
	Total Net Interior School Age Children	1,887	175.4
	TOTAL	7,835	728.2
L TEN	SUMMARY OF OUTDOOR PODIUM ROOF TOP AREAS		
70560	Total I/T Outdoor Play	1,055	98.0
	Total 3-5 Group Outdoor Play	1,984	184.4
	Total Preschool Outdoor Play	1,593	148.0
	Total School Age Outdoor play	2,346	218.0
	Outdoor Deck- East of MP Rooms	1,500	139.4
	Outdoor Deck- west of MP Rooms (Family Dev. Space)	800	74.3
	Common Play Area/ Community Garden	2,022	187.9
	TOTAL OUTDOOR AREA	11,300	1051
	SUMMARY OF ECD HUB INTERIOR PRIMARY FUNCTION MINIMUM	NET AREAS	
1st level	Child Care & CFDH Entrance	740	68.8
2nd level	Child Care & CFDH Entrance	440	40.9
3rd level	CFDH Program (3rd Floor)	5,870	545.5
	Child Care Programs	7,835	728.2
	TOTAL INDOOR AREA	14,885	1,383
	gross up factor of 27.5% for circulation and services (does not include identified lobby spaces)	4,093	380
	TOTAL INDOOR AREA (including gross up)	18,978	1,764



#### 2. ACTIVITY AREA DESCRIPTIONS

Number	Activity	Programmatic Notes and Requirements
5 15	NON-FAR AREAS IN PARKING ON LEVEL 1	- PARKING AND FACILITY SUPPORT SPACES
P1.1	Vertical Circulation/floor	
P1.1.1	Elevator	<ul> <li>Key Function: Access to ECD Hub from Parking and between floors (refer to Appendices)</li> <li>Locate so that there is visual connection to ECD Hub lobbies on each level</li> <li>Elevator to be easily accessible from the loading area to facilitate delivery of items for routine maintenance such as sand and engineered wood chips</li> <li>Elevator to be able to accommodate freight for the purposes of maintaining the play areas (for example: to move heavy loads for sand replacement and top-up) – recommended minimum capacity for 4000lbs</li> <li>The elevator lobby should not open directly into any secure child care space</li> <li>Cab size and layout to accommodate three, 3-position parent strollers and/or the Program's quad stroller – Sizes of strollers vary, but as a guideline, use 1.9m (75") long, by 0.6m (24") wide, by 1m (40") high. Ensure circulation space from entrance to elevator accommodates the turning radius of the stroller</li> <li>Ability to schedule door activation, fob control, times</li> <li>Security camera</li> <li>Hardy wall protection (strollers and playground material delivery will use the elevator)</li> </ul>
	Garbage and Recycling	<ul> <li>Key Function: Close to garbage and recycling collection point</li> <li>Provide a safe and accessible route from the elevato, no impediments such as columns or parking spaces in front of door or access route.</li> <li>Requires Mop sink, floor drain and hose bib</li> <li>Requires ventilation to remove odours</li> <li>Double solid core doors with heavy duty hardware, hold open, kick plates and door edge protection</li> <li>Occupancy sensor</li> <li>Hardy wall protection up to 42" high for walls that are not cast-in-place concrete or blook</li> </ul>
	Loading Bay	
	Visitor Car Parking	9 for Daycare + 8 for ECDH visitors = 17
	Visitor Bicycle Parking - Class 2	
	Building Services	2000 P
	Mechanical	
	Electrical	·
4	I/T- Data and Security	
	Secure Staff Parking	11 for Daycare program staff + 21 for ECDH program staff = 32
	Secure Bicycle Parking - Class 1	72 - 12 - 122
	Vestibule to Parking Garage (non-FAR)	

Number	Activity	Programmatic Notes and Requirements	
	CHILD & FAMILY DEVELOPMENT PROGRAM HUB (CFDH)		
	LEVEL 1 - STREET & PARKING ENTRANCE (P2)		
1.1	Parking Vestibule Entrance (non FAR)	- Function: Entry to ECD Hub from visitor parking  • Independently secured and accessed from this area with FOB or Video enter phone  • Security camera  • FOB / Video enter phone	
1.2	Public Street Vestibule Entrance	Function: Inform, direct to activity spaces Function: Access point for public, parents, staff and other community members, delivery and courier personnel. Independently secured and accessed from this area with FOB or Video enter phone Security camera FOB / Video enter phone Walk-off mat ( min. 6' by with of doors with child safe recessed grille)	
1.3	Public Lobby from Street & Parking	Function: Inform, direct to activity spaces Accessible from street and parking to stairs and elevators for staff and child care families only with FOB and entry phone before and after hours. Open to public during Child and family Development program hours All Family Development functions secure during non-operational times from Entry Lobby Adjacencies to stairs and elevator Mail box Seating area Wall mounted LCD screen for program info (power /data req'd) Program pamphlets board	
1.4	Interconnecting Stair	stairs to meet current Building Code requirements locate stairs near the building entrance; be visual from building exterior and allow for natural daylight within the space make stairs wide enough to accommodate travel in both directions stair risers to be 7" (178mm) maximum with treads to be 11" minimum (280mm) in order to be more comfortable for children provide handrails set at 2 different heights; upper handrail to meet current building code; lower handrail at maximum 28" high (710mm) with a vertical clearance between upper and lower handrail of 9" (230mm) provide slip resistant floor finishes	
1.5	Elevator	Key Function: Access to ECD Hub from Parking and between floors (refer to Appendices) Locate so that there is visual connection to ECD Hub lobbies on each level Elevator to be easily accessible from the loading area to facilitate delivery of items for routine maintenance such as sand and engineered wood chips Elevator to be able to accommodate freight for the purposes of maintaining the play areas (for example: to move heavy loads for sand replacement and top-up) – recommended minimum capacity for 4000lbs  The elevator lobby should not open directly into any secure child care space Cab size and layout to accommodate three, 3-position parent strollers and/or the Program's quad stroller – Sizes of strollers vary, but as a guideline, use 1.9m (75") long, by 0.6m (24") wide, by 1m (40") high. Ensure circulation space from entrance to elevator accommodates the turning radius of the stroller Ability to schedule door activation, fob control, times Security camera Hardy wall protection (strollers and playground material delivery will use the elevator)	



Number	Activity	Programmatic Notes and Requirements	
	LEVEL 2 - PARKING ENTRANCE LEVEL (P1)		
2.1	Vestibule to Parking (non-FAR)	Function: Entry to ECD Hub from visitor parking Independently secured and accessed from this area with FOB or Video enter phone Security camera FOB / Video enter phone	
2.2	Public Lobby from Parking	Function: Inform, direct to activity spaces     Access from parking to stairs and elevators for staff and child care families only with FOB and video enter phone before and after hours. Open to public during Child and family Development program hours     All Family Development functions secure during non-operational times from Entry Lobby     Adjacencies to stairs and elevator	
2.3	Interconnecting Stair	stairs to meet current Building Code requirements     locate stairs near the building entrance; be visual from building exterior and allow for natural daylight within the space     make stairs wide enough to accommodate travel in both directions     stair risers to be 7" (178mm) maximum with treads to be 11" minimum (280mm) in order to be more comfortable for children     provide handrails set at 2 different heights; upper handrail to meet current building code; lower handrail at maximum 28" high (710mm) with a vertical clearance between upper and lower handrail of 9" (230mm)     provide slip resistant floor finishes	
2.4	Elevator	Key Function: Access to ECD Hub from Parking and between floors (refer to Appendices)     Locate so that there is visual connection to ECD Hub lobbies on each level Elevator to be easily accessible from the loading area to facilitate delivery of items for routine maintenance such as sand and engineered wood chips Elevator to be able to accommodate freight for the purposes of maintaining the play areas (for example: to move heavy loads for sand replacement and top-up) – recommended minimum capacity for 4000lbs     The elevator lobby should not open directly into any secure child care space     Cab size and layout to accommodate three, 3-position parent strollers and/or the Program's quad stroller – Sizes of strollers vary, but as a guideline, use 1.9m (75") long, by 0.6m (24") wide, by 1m (40") high. Ensure circulation space from entrance to elevator accommodates the turning radius of the stroller     Ability to schedule door activation, fob control, times     Security camera     Hardy wall protection (strollers and playground material delivery will use the elevator)	

Number	Activity	Programmatic Notes and Requirements
	LEVEL 3 - ECD HUB	
3.1	Lobby	- Function: Inform, direct to activity spaces  - Arrival from stairs and elevators for staff and child care families before, during and after hours.  - Adjacencies to stairs, elevator, reception, stroller storage  - Community Notice board  - Program pamphlet board  - Security camera
3.2	Reception	Function: Reception, security Adjacencies: Lobby, office, and meeting rooms Reception desk with upstand and storage cabinets under Grommets in counter Outlets for equipment Video monitor and phone Phone Data
3.3	Interconnecting Stair	stairs to meet current Building Code requirements     locate stairs near the building entrance; be visual from building exterior and allow for natural daylight within the space     make stairs wide enough to accommodate travel in both directions     stair risers to be 7" (178mm) maximum with treads to be 11" minimum (280mm) in order to be more comfortable for children     provide handrails set at 2 different heights; upper handrail to meet current building code; lower handrail at maximum 28" high (710mm) with a vertical clearance between upper and lower handrail of 9" (230mm)     provide slip resistant floor finishes
3.4	Elevator	Key Function: Access to ECD Hub from Parking and between floors (refer to Appendices)     Locate so that there is visual connection to ECD Hub lobbies on each level     Elevator to be easily accessible from the loading area to facilitate delivery of items for routine maintenance such as sand and engineered wood chips     Elevator to be able to accommodate freight for the purposes of maintaining the play areas (for example: to move heavy loads for sand replacement and top-up) – recommended minimum capacity for 4000lbs     The elevator lobby should not open directly into any secure child care space     Cab size and layout to accommodate three, 3-position parent strollers and/or the Program's quad stroller – Sizes of strollers vary, but as a guideline, use 1.9m (75") long, by 0.6m (24") wide, by 1m (40") high. Ensure circulation space from entrance to elevator accommodates the turning radius of the stroller     Ability to schedule door activation, fob control, times     Security camera     Hardy wall protection (strollers and playground material delivery will use the elevator)
3.5	Office -1	Private room Window blinds electrical outlets per code 1 telephone 1 data outlet Independent lighting control Locked with access card reader
3.6	Shared Office - 2	Window blinds  e 2 — electrical outlets per person minimum  e 1 — telephone jack per person  e 1 — data outlet per person  Floor data and electrical outlets to allow for open space office layout  Independent lighting control  Locked with access card reader



Number	Activity	Programmatic Notes and Requirements
3.7	Shared Office - 3	Window blinds  1 – electrical outlets per person minimum  1 – telephone jack per person  1 – data outlet per person  Floor data and electrical outlets to allow for open space office layout  Independent lighting control  Locked with access card reader
3.8	Break Out Rooms 2 @ 50	Function: Small meeting space for 1-2 people Visual connection to circulation 1 electrical outlets per room 1 telephone jack per person Window blinds
3.9	Copier and Mail/Paper Storage	electrical outlets per code     1 telephone     1 data outlet     6' long counter, 36" high with upper and lower storage. All counters to have electrical outlets above counter     Task lighting under shelving over work counters     Independent lighting control     Bulletin board
3.10	Meeting Room 1	Function: Small and large meetings, flexible meeting space     Adjacencies: Reception, Street Entry Lobby     Primary Users: Staff, External consultants, Agencies, Community     Independent lighting control     1 Data outlet     1 telephone outlet     Acoustic separation STC 50     Visual connection and blinds for sun control and/or privacy to street and Hub
3.11	Meeting Room 2	Function: Small and large meetings, flexible meeting space     Adjacencies: Reception, Street Entry Lobby     Primary Users: Staff, External consultants, Agencies, Community     Independent lighting control     1 Data outlet     1 telephone outlet     Acoustic separation STC 50     Visual connection and blinds for sun control and/or privacy to street and Hub

Number	Activity	Programmatic Notes and Requirements
3.12	Male public washroom (at CFDH Lobby)	Function: Child and Adult Washroom Location visual connection from Activity Room Drop down stainless steel diaper changing table that supports static loads up to 200 lbs. complete with child protection straps Interior floor drain to be provided. Floor drain to have a pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind an access panel. Tank type toilet with locked tank with lids, sealed to floor. Provide low-flow, gravity standard, and dual flush. Toilets to meet a Maximum Performance (MaP) Test of 500g or better. Flush Valves to be Sloan Dual Flush or approved equal. Sink with lever handles, tempered water set to 38-40 degrees Celsius prior to Occupancy Sink counter at 32" AFF Toilet accessories: Wall recessed paper towel dispenser/disposal, large roll toilet paper dispenser, mirror above counter, soap dispenser Door locks to be inaccessible to 3-5 year olds (56" AFF) and able to be unlocked from corridor To keep in line with industry facility programming, it would be acceptable to group male and female washrooms to create non-gender washrooms provided that: Toilet stalls are enclosed from floor to underside of the ceiling Virinal stalls, if provided, are identified with appropriate signage Number sink or faucets, if communal sink is proposed, meet the building code requirements
3.13	Female Public Washroom (at CFDH Lobby)	<ul> <li>Function: Child and Adult Washroom</li> <li>Location visual connection from Activity Room</li> <li>Drop down stainless steel diaper changing table that supports static loads up to 200 lbs. complete with child protection straps</li> <li>Interior floor drain to be provided. Floor drain to have a pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind an access panel.</li> <li>Tank type toilet with locked tank with lids, sealed to floor. Provide low-flow, gravity standard, and dual flush. Toilets to meet a Maximum Performance (MaP) Test of 500g or better. Flush Valves to be Sloan Dual Flush or approved equal.</li> <li>Sink with lever handles, tempered water set to 38-40 degrees Celsius prior to Occupancy</li> <li>Sink counter at 32" AFF</li> <li>Toilet accessories: Wall recessed paper towel dispenser/disposal, large roll toilet paper dispenser, mirror above counter, soap dispenser</li> <li>Door locks to be inaccessible to 3-5 year olds (56" AFF) and able to be unlocked from corridor</li> <li>To keep in line with industry facility programming, it would be acceptable to group male and female washrooms to create non-gender washrooms provided that:</li> <li>Toilet stalls are enclosed from floor to underside of the ceiling</li> <li>Urinal stalls, if provided, are identified with appropriate signage</li> <li>Number sink or faucets, if communal sink is proposed, meet the building code requirements</li> </ul>



Number	Activity	Programmatic Notes and Requirements
3.14	Multi-Purpose and Family Activity Room	Function: Activity space for a variety of programmed and non-programmed play areas and range of activities for young children with parents Good visual connection to outdoors Adjacencies: Commercial kitchen, public washroom Primary users: Parents with children Accustic moveable wall to divide the room in two activity rooms 1 activity room to have; Art Sink Area with; 10" deep stainless steel art sink with floor mounted sediment trap Zurn Z1180 Solids Interceptor or pre-approved alternate Tempered water set to 38-40 degrees Celsius prior to occupancy Minimum 8' long counter with cabinets above and below, lighting under upper cabinets Acoustics: provide appropriate acoustic surface treatment for interior finishes: Ceiling to meet NRC (noise reduction coefficient) = 0.70 or better, or room design shall meet an equivalent acoustical performance Ceilings are not to exceed 3m (10'0"); should a deviation to this be accepted, additional acoustic treatment is required Doors into Activity Room be glazed in such a way to see in and out of the room, and to see children playing on either side of the door Independent lighting control, Zone lighting, Multi-level switching TV cable Telephone Child proof electrical outlets with childproof and shatterproof faceplates and tamper resistant receptacles Wall protection to 30" AFF Window blinds with manual or electrical control

Number	Activity	Programmatic Notes and Requirements
3.15	Commercial kitchen *	Rey Functions: The kitchen will be used for hot meals and cooking for family events and teaching as part of the Child and Family Development Program.  Adjacencies: Multi-Purpose Room To be accessible from Multipurpose Room and main circulation Space to include pantry Adjustable wire shelving Broom closet with shelving for cleaning supplies Locked with access card reader Kitchen to have ability to close off one or both sides with rolling acoustic closure Work Island W hand sink, coved corners for ease of cleaning LED under cabinet counter lighting to light work surfaces Cabinets to be 1'-6" Max. above countertop (2) Commercial fridges, min. 21 cu.ft. per fridge, energy star rated with environmentally friendly R290 hydro carbon refrigeration, bottom mount compressor Commercial freezers, min. 21 cu.ft., energy star rated with environmentally friendly R290 hydro carbon refrigeration, bottom mount compressor Energy Star rated 26: Wide 4 burner electric stove top with controls on countertop Self Cleaning Wall Ovens (1 to be a convection oven) Dishwasher: Energy Star rated commercial style dishwasher, high temperature, cold water supply only with energy recovery, high temperature sanitizing with built-in booster, stainless steel interior, backflow preventer valve & corrosion resistant pump Commercial 100-200 watt, 2 cu.ft. microwaves, on microwave shelf w/ closed ends Energy Star rated 21 cu.ft. frost free fridge with freezer on bottom (no icemaker) Exhaust hood to meet NFPA 96 standard, seismically braced Stainless steel 2 compartment sink (10" deep), coved corners for ease of cleaning, faucet ledge, commercial grade faucet, high temperature water between 46°C and 48°C Stainless Steel hand sink, coved corner for ease of cleaning, faucet ledge, commercial grade faucet, high temperature water between 46°C and 48°C Provision for garbage/recycling/compost containers incl. 100 sf pantry
3.16	Multi Purpose Program storage	Function: program storage and extra tables and chairs Adjacency: meeting rooms 6' long x 3 x 15" deep shelving to be located above full table and chair dollies Occupancy sensor Program Storage Occupancy sensor Step ladder storage Door to open out Locked with access card reader
3.17	Storage	Function: program storage and extra tables and chairs Adjacency: meeting rooms 6' long x 3 x 15" deep shelving to be located above full table and chair dollies Occupancy sensor Program Storage Occupancy sensor Step ladder storage Door to open out Locked with access card reader

<sup>\*</sup> The list of commercial kitchen equipment will be provided with the technical requirements for this space.



Number	Activity	Programmatic Notes and Requirements
3.18	Staff Room	Key Functions: Staff work room, storage, etc.  12'-0"+ long counter (3-drawer lateral files to fit under) and closed upper cabinet, LED lighting under cabinet  Kitchenette, Dining & Sitting Areas  Provision for garbage/recycling/compost containers  Kitchenette to Include:  Stainless Steel Sink, 10" Deep, coved corners for ease of cleaning, complete with faucet ledge, high temperature water between 46°C and 48°C Minimum 6'-0" long counter with cabinets below and above with under counter LED lighting  Commerical 110 watt min., 2 cu ft. microwave, on microwave shelf with closed sides  Coffee Maker w/ hot water spigot  Energy Star rated fridge 17 cu. Ft. frost free with freezer compartment  Dishwasher: Energy Star rated commercial style dishwasher, high temperature, cold water supply only with energy recovery, high temperature sanitizing with built-in booster, stainless steel interior, backflow preventer valve & corrosion resistant pump  Bulletin Board
3.19	Staff Washroom - Single Occupancy with Shower	Data Outlets (2 required) Telephone Appliance outlets above counter for toaster, kettle, blender, etc. 10 half lockers Function: non-gender staff washroom with shower for Daycare and CFD staff Adjacency: CFD Staff Room Bench 3 coat hooks Counter with mirror Locked with access card reader
3.20	Staff Washroom - Single Occupancy	non-gender single occupancy     Locked with access card reader     Interior floor drain to be provided. Floor drain to have pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind an access panel     Cabinet for personal storage; fixtures and accessories as required

Number	Activity	Programmatic Notes and Requirements
3.21	Men's Washroom (North)	<ul> <li>Function: Child and Adult Washroom</li> <li>Location visual connection from Activity Room</li> <li>Drop down stainless steel diaper changing table that supports static loads up to 200 lbs. complete with child protection straps</li> <li>Interior floor drain to be provided. Floor drain to have a pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind an access panel.</li> <li>Tank type toilet with locked tank with lids, sealed to floor. Provide low-flow, gravity standard, and dual flush. Toilets to meet a Maximum Performance (MaP) Test of 500g or better. Flush Valves to be Sloan Dual Flush or approved equal.</li> <li>Sink with lever handles, tempered water set to 38-40 degrees Celsius prior to Occupancy</li> <li>Sink counter at 32" AFF</li> <li>Toilet accessories: Wall recessed paper towel dispenser/disposal, large roll toilet paper dispenser, mirror above counter, soap dispenser</li> <li>Door locks to be inaccessible to 3-5 year olds (56" AFF) and able to be unlocked from corridor</li> <li>To keep in line with industry facility programming, it would be acceptable to group male and female washrooms to create non-gender washrooms provided that:</li> <li>Toilet stalls are enclosed from floor to underside of the ceiling</li> <li>Urinal stalls, if provided, are identified with appropriate signage</li> <li>Number sink or faucets, if communal sink is proposed, meet the building code requirements</li> </ul>
3.22	Women's Washroom (North)	Function: Child and Adult Washroom Location visual connection from Activity Room Drop down stainless steel diaper changing table that supports static loads up to 200 lbs. complete with child protection straps Interior floor drain to be provided. Floor drain to have a pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind an access panel. Tank type toilet with locked tank with lids, sealed to floor. Provide low-flow, gravity standard, and dual flush. Toilets to meet a Maximum Performance (MaP) Test of 500g or better. Flush Valves to be Sloan Dual Flush or approved equal. Sink with lever handles, tempered water set to 38-40 degrees Celsius prior to Occupancy Sink counter at 32" AFF Toilet accessories: Wall recessed paper towel dispenser/disposal, large roll toilet paper dispenser, mirror above counter, soap dispenser Door locks to be inaccessible to 3-5 year olds (56" AFF) and able to be unlocked from corridor  To keep in line with industry facility programming, it would be acceptable to group male and female washrooms to create non-gender washrooms provided that: Toilet stalls are enclosed from floor to underside of the ceiling Urinal stalls, if provided, are identified with appropriate signage Number sink or faucets, if communal sink is proposed, meet the building code requirements



Number	Activity	Programmatic Notes and Requirements
3.23	Public Accessible Washroom	<ul> <li>Function: Child and Adult Washroom</li> <li>Location visual connection from Activity Room</li> <li>Drop down stainless steel diaper changing table that supports static loads up to 200 lbs. complete with child protection straps</li> <li>Interior floor drain to be provided. Floor drain to have a pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind an access panel.</li> <li>Tank type toilet with locked tank with lids, sealed to floor. Provide low-flow, gravity standard, and dual flush. Toilets to meet a Maximum Performance (MaP) Test of 500g or better. Flush Valves to be Sloan Dual Flush or approved equal.</li> <li>Sink with lever handles, tempered water set to 38-40 degrees Celsius prior to Occupancy</li> <li>Sink counter at 32" AFF</li> <li>Toilet accessories: Wall recessed paper towel dispenser/disposal, large roll toilet paper dispenser, mirror above counter, soap dispenser</li> <li>Door locks to be inaccessible to 3-5 year olds (56" AFF) and able to be unlocked from corridor</li> </ul>
3.24	Janitor	Key function: Child care program laundry and janitorial storage Adjacencies: infant/toddler program; accessible from public area by other programs  1 - large capacity stacking washer 1 - large capacity stacking, loading, dryer 3' folding counter open below with cabinets above Minimum 3' sink counter with upper and lower cabinets 10" deep large single stainless sink complete with faucet ledge, high Temperature water and gooseneck faucet with paddle handles Floor mounted mop sink complete with approved backflow preventer valve, high temperature water Interior floor drain to be provided. Floor drain to have pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind an access panel Wall mounted hooks for mops Storage area for storing buckets, mops, brooms, vacuum, ladder Shelving for supplies for cleaning, paper products, light bulbs, etc. Wall protection around mop sink
	FAMILY DEVELOPMENT/COMMUNITY OUTDOOR	AREA
	Outdoor Storage	Vented waterproof storage for outdoor play equipment Shelving Occupancy sensors
	Outdoor Terrace and Gardens	
	Covered **	Covered play to be within range of 553 to 655 sf of total outdoor area Frost proof hose bib Close proximity to teh Multipurpose room and commercial Kitchen - activities will spill out into this area during summer and offers covered play opportunities in inclement and hot weather Landscape lighting on light level sensor that can be turned off in evenings when playground is not in use Provide electrical or gas BBQ connection

 $<sup>^{\</sup>star\star}$  Technical guidelines for the ECD hub outdoor space are currently under preparation and will inform design development of the landscape plan.



Number	Activity	Programmatic Notes and Requirements
	Outdoor	<ul> <li>Outdoor play areas to be effectively acoustically buffered from any noise from traffic, mechanical equipment or other disruptive noises to achieve a maximum sound pressure level of 55 dB(A) 24 hour equivalent sound level</li> <li>8' high perimeter glazing at building roof edges</li> <li>Lighting on light level sensor</li> <li>Refer to Roof Landscape and Irrigation Guidelines in City of Richmond's: City Owned Child Care Facility Policies and Guidelines December 2016</li> </ul>
	LICENSED CHILD CARE PROGRAMS AND AD-	(Based on 6,484 sf net for primary activity areas)
	MINISTRATION PUBLIC AND SHARED SUPPORT FUNCTIONS	The child care program is located on Level 3 of the development. All points of entry in and out of Daycare program to be secure.
3.30	Lobby	<ul> <li>Function: central access to child care programs; acts as informal gathering, waiting and conversation</li> <li>Accessible only by FOB / video phone from elevator lobby and only during child care program.</li> <li>Adjacencies: Parent Room, child care office, washroom, parent stroller storage</li> <li>Security camera</li> </ul>
3.31	Parent Stroller Storage	Function: Open area to store 15-20 strollers     Adjacencies: Multi-Purpose Children and Family Room; Accessible to all programs     Wall protection     Locked with access card reader
3.32	Parent Meeting	Function: meetings with parents, consultants  d' counter with storage cabinets below  Tack board  locking with card reader access
- 3.33	CC Office	6' counter desk height with pedestal and upper cabinets     Bulletin board B1
3.34	Electrical	
3.35	Program Stroller Storage	<ul> <li>Function: to store 2 oversize strollers (triple 58" L x 21" W and quads 57" L x 33" W) required to take children on outings</li> <li>Adjacency: Lobby, infant / toddler care program</li> <li>3 wall mounted 15" deep shelves mounted 42" above floor x 8' long</li> <li>wall protection 42" high</li> <li>locking with card reader access</li> </ul>
3.36	Accessible Washroom	H/C with a fold down change table located closer to the Preschool/School Age Program
	Shower Shared with CFD	Bench     3 coat hooks     Counter with mirror



Number	Activity	Programmatic Notes and Requirements
3.37	Janitor & Laundry	Key function: Housekeeping of child care program, laundry, and janitorial storage     Adjacencies: infant/toddler program; accessible from public area by other programs; office; staff room     1 - large capacity stacking washer     3' folding counter open below with cabinets above     Minimum 3' sink counter with upper and lower cabinets     10" deep large single stainless sink complete with faucet ledge, high     Temperature water and gooseneck faucet with paddle handles     Floor mounted mop sink complete with approved backflow preventer valve, high temperature water     Interior floor drain to be provided. Floor drain to have pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind an access panel     Wall mounted hooks for mops     Storage area for storing buckets, mops, brooms, vacuum, ladder     Shelving for supplies for cleaning, paper products, light bulbs, etc.     Wall protection around mop sink     Locked with access card reader
3.38	Staff Washroom	Interior floor drain to be provided. Floor drain to have pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind an access panel     Cabinet for personal storage; fixtures and accessories as required
3.39	Staff Room	Key Functions: Staff work room, storage, etc.     12'-0"+ long counter (3-drawer lateral files to fit under) and closed upper cabinet, LED lighting under cabinet     Kitchenette, Dining & Sitting Areas     Provision for garbage/recycling/compost containers      Kitchenette to Include:     Stainless Steel Sink, 10" Deep, coved corners for ease of cleaning, complete with faucet ledge, high temperature water between 46°C and 48°C     Minimum 6'-0" long counter with cabinets below and above with under counter LED lighting     Commerical 110 watt min., 2 cu ft. microwave, on microwave shelf with closed sides     Coffee Maker w/ hot water spigot     Energy Star rated fridge 17 cu. Ft. frost free with freezer compartment     Dishwasher: Energy Star rated commercial style dishwasher, high temperature, cold water supply only with energy recovery, high temperature sanitizing with built-in booster, stainless steel interior, backflow preventer valve & corrosion resistant pump     Bulletin Board     Data Outlets (2 required)     Telephone     Appliance outlets above counter for toaster, kettle, blender, etc.     10 half lockers

Number	Activity	Programmatic Notes and Requirements
3.5	LICENSED INFANT/TODDLER CHILD CARE PROGRAM	<ul> <li>Program area licensed for 12 children age under 36 months</li> <li>All points of entry in and out of the program to be secure</li> <li>Exterior noise, such as traffic, mechanical equipment or other disruptive noises is to be controlled by appropriate acoustical design of the exterior partitions to meet the allowable noise level for residential living, dining, and recreation rooms as defined in the local zoning by-law</li> <li>Under no circumstances is the exterior noise to exceed a sound pressure level of 45 dB(A) 24 hour equivalent sound level in the interior of the Facility in all spaces occupied by children</li> <li>Interior noise within a child care group is to be controlled with appropriate acoustic surface treatment for interior finishes:</li> <li>75% of ceiling area shall be T-bar ceiling with NRC (noise reduction coefficient)= 0.70 or better, or</li> <li>Alternately the room design shall meet an equivalent acoustical performance</li> <li>Ceilings are not to exceed 3m (10'0"); should a deviation to this be accepted, additional acoustic treatment is required</li> <li>All millwork corners to be minimum 1/8" radius</li> <li>12 Licensed spaces (area based on based on 3.7m2 x 12 x 10.76 =</li> <li>(Based on 75 SF x kids = 900 SF)</li> </ul>
3.51	Cubby and Parent Sign In	<ul> <li>Key Functions: Storage of children's outdoor clothing, personal supplies, extra clothing, Parent sign in and information/communications</li> <li>Adjacencies and visual connection: Lobby, Activity Room, Children's Washroom, Outdoor Play</li> <li>14 cubbies and storage units for each cubby</li> <li>Teacher coat and shoe storage for 3 teachers</li> <li>Parent Sign counter and storage cabinet</li> <li>Bulletin board at Parent Sign In</li> </ul>
3.52	Main Activity Room	Key Function: The interior program play and eating space Adjacencies: cubby, staff communication, kitchen, children's washroom/Staff communication and storage to be near cubby area to allow staff to monitor entry and activity room Includes: Table area, open play area, quiet areas, staff communication, art sink, and art material cabinets Layout of space to accommodate play centres and ancillary functions, visual connection, adjacencies, etc. Look for opportunity to have views between programs to quiet or activity rooms Doors into activity room be glazed in such a way to see in and out of the room, and to see children playing on either side of the door Independent lighting control, zone lighting, multi-level switching TV Cable Telephone Child proof electrical outlets with childproof and shatterproof faceplates and tamper resistant receptacles Thermostat control for each zone Wall protection to 30" AFF Bulletin board at staff communication and storage Window blinds
3.52.1	Open Play Area	
3.52.2	Table/Art Area	Table area (min. 20sm/215SW), art sink, and supply storage  10" deep stainless steel art sink with floor mounted sediment trap Zurn Z1180 Solids Interceptor or pre-approved alternate  Tempered water set to 38-40 deg C. Prior to occupancy  Min. 8' long counter with cabinets above and below, lighting under upper cabinets
3.52.3	Quiet area	<ul> <li>Includes 35sf for Staff Communications and</li> <li>48sf for bottle Warming station with large capacity fridge, counter with stainless steel sink, upper and lower cabinets and microwave</li> <li>Wall Protection to 36" AFF</li> </ul>



Number	Activity	Programmatic Notes and Requirements
3.53	Small Nap Room	Key functions: Nap room for infants and younger toddlers and may be used for other activities if no infants in program Locate away from kitchen, washroom, mechanical equipment, and cubbies Adjacencies: nap room storage Allow 24" between cribs ( 4 cribs in total) Music shelf @ 42" AFF with electrical outlet at 48" AFF Wall scones – dimmable Door to have window at visual connection at adult height, black out blind on door to be located on activity room side No unswitched lights such as security lighting Multi-level switching to be located outside of the room Carbon dioxide monitor Thermostat control Wall protection @ 42" Minimum Sun and blackout window blinds
3.54	Large Nap Room	Key functions: Nap and gross motor play Adjacencies: Main activity room Locate away from kitchen, washroom, cubbies, and mechanical equipment Allow 24" between cots (8 mats in total) Music shelf @ 42" AFF with electrical outlet at 48" AFF Wall scones – dimmable Door to have window at visual connection at adult height, black out blind on door to be located on activity room side No unswitched lights such as security lighting Multi-level switching to be located outside of the room Carbon dioxide monitor Thermostat control Wall protection @ 42" Minimum Sun and blackout window blinds
3.55	Large Nap Room Storage	Key Function: Storage of 1- cot carrier, gross motor play equipment and children's personal nap belongings     Adjustable three rows 15" deep shelves on one wall to start at 30" at one wall AFF (gross motor play equipment stored)     Occupancy sensor     connect with double doors to Activity Room
3.56	Shared Kitchen (with 3-5 programl)	<ul> <li>Open to Activity Room with good visual connection</li> <li>Gate Access from Activity Room</li> <li>Provision for Garbage/Recycling Bin &amp; Compost Containers</li> <li>Two Compartment Stainless Steel Sink c/w faucet ledge, coved corners for ease of cleaning, commercial grade faucet, high temperature water between 46°C and 48°C</li> <li>Minimum 6'-0" Long Counter with cabinets below and above, LED lighting under upper cabinets, cabinets to be 1'-6" Max. above countertop</li> <li>3'-0" Long low counter section for children at 24" A.F.F.</li> <li>Commercial 1000-1200 watt min. 2 cu f.t microwave on microwave shelf with closed sides</li> <li>Energy Star fridge –freezer frost free</li> <li>Dishwasher: Energy Star rated commercial style dishwasher, high temperature, cold water supply only with energy recovery, high temperature sanitizing with built-in booster, stainless steel interior, backflow preventer valve &amp; corrosion resistant pump</li> </ul>

Number	Activity	Programmatic Notes and Requirements
3.57	Children's Washroom	Adjacencies: Visual connection to activity room, kitchen, doors to covered play Gate between children's washroom and activity room Room for two potties (NIC) Stacked Washer and Dryer Exhaust so no smells enter activity rooms — exhaust fan to be below 45 decibels Interior floor drain to be provided. Floor drain to have a pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind access panel Z-round bowl tank type toilets, 15" high, closed front seats, locked tank with lids, sealed to floor. Provide low-flow, gravity standard, and duel flush. Toilets to meet a max performance (MaP) test of 500g or better. Flush values to be Sloan Duel Flush or approved equal C-children's sink with lever handles, tempered water set to 38-40deg. Coprior to occupancy. Install sinks as close to front of counter as possible Children's sink counter at 18" AFF Wall cabinet for paper storage C-15" deep x 14' minimum shelving for each child's diaper and personal baskets for paper storage Toilet accessories: 1 — paper towel dispenser at accessible height, large roll toilet paper dispenser at each toilet, mirror above counter Toothbrush holder (14 toothbrushes) Change table with: Moveable stairs for children to access Room for laundry hamper and diaper pail No exposed luminaire shining directly onto prone child Single compartment sink complete with a faucet ledge, minimum 300mm (12") deep, with swing tap (gooseneck preferred), paddle handles, and spray attachment Paper towel dispenser
3.58	General Storage	Shelving     Wall Protection to 36" AFF     Locked with access card reader
3.59	Staff Office	<ul> <li>Key function: Staff work area and Infant Toddler Activity Room observation</li> <li>Adjacencies: Main Activity Room</li> <li>one way vision glass from Staff Office into Activity Room</li> <li>Work counter with pedestal under and shelf over with lighting under for one person</li> <li>Bulletin board between shelf and work counter</li> </ul>
	Staff Counter & Storage	<ul> <li>Adjacency: staff office</li> <li>Counter with lockable storage below and whiteboard above</li> </ul>



Number	Activity	Programmatic Notes and Requirements
	INFANT/TODDLER OUTDOOR PLAYGROUND	
	Outdoor Storage	Verited waterproof storage for outdoor play equipment 3 x 15" deep x 6' long metal shelving arm bike Occupancy sensors
	Covered Play	<ul> <li>Directly accessed from Main Activity Area - indoor activities will spill out into this area during summer and offers covered play opportunities in inclement and hot weather</li> <li>Frost proof hose bib</li> <li>Landscape lighting on light level sensor that can be turned off in evenings when playground is not in use</li> <li>Inter-program gates to be equipped with child-proof latches.</li> <li>All gates to be self-closing</li> <li>Covered play to be within range of 600 to 620 sf. of total outdoor area</li> </ul>
	Open Area	provide a good range of play opportunities for each child care program Outdoor play areas to be effectively acoustically buffered from any noise from traffic, mechanical equipment or other disruptive noises to achieve a maximum sound pressure level of 55 dB(A) 24 hour equivalent sound level 30" fence with child proof latched gate between Infant Toddler and adjacent playgrounds Exposure to sunlight for at least three hours per day at the winter solstice, two hours of which occur between 9:30-11:30am or 1:30-4:00pm 8' high perimeter glazing at building roof edges Frost proof hose bib Lighting on light level sensor Refer to Roof Landscape and Irrigation Guidelines in City of Richmond's: City Owned Child Care Facility Policies and Guidelines December 2016 Inter-program gates to be equipped with child-proof latches. Include seating for supervisors Sand play structure to be located away from building All gates to be self-closing Provide shade for each sand play area (either with trellis structure, or with trees) Ensure edible planters are raised Provide a preliminary plant palette, typical cross sections (noting minimum soil depths) and preliminary details/sketches for major elements/structures with the DP submission Include a Cruiser Rail

Number	Activity	Programmatic Notes and Requirements
3.6	LICENSED 3-5 CARE PROGRAM	Licensed for 25 spaces for children 30 months to school age Adjacencies: Cubby, Staff Communication, Kitchen, Children's Washroom. Staff Communication and Storage to be near Cubby area to allow staff to monitor entrance and Activity Room The Preschool/School Age Activity Room may extend into the 3-5 Group Activity Program on weekends and evenings Could share Kitchen with Infant/Toddler program. All points of entry in and out of the program to be secure Exterior noise, such as traffic, mechanical equipment or other disruptive noises is to be controlled by appropriate acoustical design of the exterior partitions to meet the allowable noise level for residential living, dining, and recreation rooms as defined in the local zoning by-law Under no circumstances is the exterior noise to exceed a sound pressure level of 45 dB(A) 24 hour equivalent sound level in the interior of the Facility in all spaces occupied by children Interior noise within a child care group is to be controlled with appropriate acoustic surface treatment for interior finishes: 75% of ceiling area shall be T-bar ceiling with NRC (noise reduction coefficient)= 0.70 or better, or Alternately the room design shall meet an equivalent acoustical performance Ceilings are not to exceed 3m (10'0"); should a deviation to this be accepted, additional acoustic treatment is required All millwork corners to be minimum 1/8" radius
3.61	Cubby and Parent Sign In	Key Functions: Storage of children's outdoor clothing, personal supplies, extra clothing, Parent sign in and information/communications     Adjacencies and visual connection: Lobby, Activity Room, Children's Washroom, Outdoor Play     27 cubbies and storage units for each cubby     Teacher coat and shoe storage for 4 teachers     Parent Sign counter and storage cabinet     Bulletin board at Parent Sign In     Whiteboard
3.62	Main Activity Room	Key Function: The interior program play and eating space Adjacencies: cubby, staff communication, kitchen, children's washroom/ Staff communication and storage to be near cubby area to allow staff to monitor entry and activity room Includes: Table area, open play area, quiet areas, staff communication, art sink, and art material cabinets Layout of space to accommodate play centres and ancillary functions, visual connection, adjacencies, etc. Look for opportunity to have views between programs to quiet or activity rooms Doors into activity room be glazed in such a way to see in and out of the room, and to see children playing on either side of the door Independent lighting control, zone lighting, multi-level switching TV Cable Telephone Child proof electrical outlets with childproof and shatterproof faceplates and tamper resistant receptacles Thermo stat control for each one Wall protection to 30" AFF Bulletin board at staff communication and storage Window blinds
3.62.1	Open Play Area	
3.62.2	Quiet Room	Includes 35sf for Staff Communications and     48sf for bottle Warming station with large capacity fridge, counter with stainless steel sink, upper and lower cabinets and microwave     Wall Protection to 36" AFF



Number	Activity	Programmatic Notes and Requirements
3.62.3	Table/Art Area	Table area (min. 20sm/215SW), art sink, and supply storage 10" deep stainless steel art sink with floor mounted sediment trap Zurn Z1180 Solids Interceptor or pre-approved alternate Tempered water set to 38-40 deg C. Prior to occupancy Min. 8' long counter with cabinets above and below, lighting under upper cabinets
3.63	Gross Motor/ Nap Room	Key Functions: Nap and gross motor play     Adjacencies: Main Activity Room, nap room storage     Locate away from Kitchen, Washroom and Cubbies, mechanical equipment     Allow 24" between cots     Music Shelf@ 42" AFF with electrical outlet at 48" AFF     Wall sconces- dimmable     Door to have window at visual connection at adult height, black out blind on door to be located on Activity Room side     No un-switched lights such as security lighting     Multi- level switching to be located outside room a Carbon dioxide monitor     Thermostat control     Wall protection @ 42" minimum     Window blinds
3.64	Gross Motor/Nap Room Storage	Wall protection
3.65	Children's Washroom	<ul> <li>Adjacencies: Visual connection to activity room, kitchen, doors to covered play</li> <li>Gate required between children's washroom and activity room</li> <li>Room for two potties (NIC)</li> <li>Exhaust so no smells enter activity rooms — exhaust fan to be below 45 decibels</li> <li>Floor drain to be provided. Floor drain to have a pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind access panel</li> <li>3-round bowl tank type toilets, 15" high, closed front seats, locked tank with lids, sealed to floor. Provide low-flow, gravity standard, and duel flush. Toilets to meet a max performance (MaP) test of 500g or better. Flush values to be Sloan Dual Flush or approved equal</li> <li>3- Children's sink with lever handles, tempered water set to 38-40deg. C prior to occupancy. Install sinks as close to front of counter as possible</li> <li>Children's sink counter at 18" AFF</li> <li>Wall cabinet for paper storage</li> <li>2-15" deep x 14' minimum shelving for each child's diaper and personal baskets for paper storage</li> <li>Toilet partitions stalls complete with doors</li> <li>Toilet partitions stalls complete with doors</li> <li>Toilet accessories: 1 – paper towel dispenser at accessible height, large roll toilet paper dispenser at each toilet, mirror above counter</li> <li>Toothbrush holder (program children number + 2 extra)</li> <li>Room for laundry hamper and diaper pail</li> <li>No exposed luminaire shining directly onto child eyes</li> <li>Single compartment sink complete with a faucet ledge, minimum 300mm (12") deep, with swing tap (gooseneck preferred), paddle handles, and spray attachment set in counter with lower storage</li> <li>Paper towel dispenser</li> <li>Whiteboard</li> </ul>
3.66	General Storage	<ul> <li>Adjustable three rows 15" deep shelves to start at 30" AFF to allow storage of program rolling storage units on one or two walls only</li> </ul>

Number	Activity	Programmatic Notes and Requirements
3.67	Staff Office	Key function: Staff work area and Group 3-5, Activity Room observation     Adjacencies: Main Activity Room, Infant/Toddler program     Shared with I/T program to be directly accessible by each program     One way vision glass from Staff Office into Activity Room     Work counter with pedestal under and shelf over with lighting under for one person     Bulletin board between shelf and work counter
3.68	Shared Kitchen (with I/T Program)	Open to Activity Room with good visual connection Gate Access from Activity Room Provision for Garbage/Recycling Bin & Compost Containers Two Compartment Stainless Steel Sink c/w faucet ledge, coved corners for ease of cleaning, commercial grade faucet, high temperature water between 46°C and 48°C Minimum 6'-0" Long Counter with cabinets below and above, LED lighting under upper cabinets, cabinets to be 1'-6" Max. above countertop 3'-0" Long low counter section for children at 24" A.F.F. Commercial 1000-1200 watt min. 2 cu f.t microwave on microwave shelf with closed sides Energy Star fridge —freezer frost free Dishwasher: Energy Star rated commercial style dishwasher, high temperature, cold water supply only with energy recovery, high temperature sanitizing with built-in booster, stainless steel interior, backflow preventer valve & corrosion resistant pump
	Staff Counter & Storage	Adjacency: staff office     Counter with lockable storage below and whiteboard above
	3-5 GROUP OUTDOOR PLAYGROUND	Outdoor play areas to be effectively acoustically buffered from any noise from traffic, mechanical equipment or other disruptive noises to achieve a maximum sound pressure level of 55 dB(A) 24 hour equivalent sound level. 3-5 Outdoor Play areas to be interconnected with the Preschool/School Age Outdoor Play to provide expanded play opportunities 30" fence with child proof latched gate between adjacent playgrounds (Based on 75 SF / kid= 1,875 SF)
	Outdoor Storage	Vented waterproof storage for outdoor play equipment     Shelving     Occupancy sensors
	Covered Play	<ul> <li>Directly accessed from Main Activity Area - indoor activities will spill out into this area during summer and offers covered play opportunities in inclement and hot weather</li> <li>Frost proof hose bib</li> <li>Landscape lighting on light level sensor that can be turned off in evenings when playgrounds are not in use</li> <li>Inter-program gates to be equipped with child-proof latches.</li> <li>All gates to be self-closing</li> <li>Covered play to be within range of 630sf - of total outdoor play area</li> </ul>



Number	Activity	Programmatic Notes and Requirements
	Open Area	Outdoor play areas to be effectively acoustically buffered from any noise from traffic, mechanical equipment or other disruptive noises to achieve a maximum sound pressure level of 55 dB(A) 24 hour equivalent sound level provide a good range of play opportunities for each child care program Exposure to sunlight for at least three hours per day at the winter solstice, two hours of which occur between 9:30-11:30am or 1:30-4:00pm 8' high perimeter glazing if at edge of building Frost proof hose bib Lighting on light level sensor Refer to Roof Landscape and Irrigation Guidelines in City of Richmond's City Owned Child care Facility Policies and Guidelines December 2016 Inter-program gates to be equipped with child-proof latches. All gates to be self-closing Include a trike path Include seating for supervisors Sand play structure to be located away from building Provide shade for each sand play area (either with trellis structure, or with trees) Ensure edible planters are raised Provide a preliminary plant palette, typical cross sections (noting minimum soil depths) and preliminary details/sketches for major elements/structures with the DP submission
3.7	LICENSED PRESCHOOL CARE PROGRAM	<ul> <li>Licensed for 20 spaces of Preschool</li> <li>Could share Kitchen with School age care group.</li> <li>All points of entry in and out of the program to be secure</li> <li>(20 Licensed Preschool spaces</li> </ul>
3.71	Cubby and Parent Sign In	Cubby and parent sign in  Key Functions: Storage of children's outdoor clothing, personal supplies, extra clothing, Parent sign in and information/communications  Adjacencies and visual connection: Lobby, Activity Room, Children's Washroom, Outdoor Play  24 cubbies and storage units for each cubby  Teacher coat and shoe storage for 2 teachers  Parent/Children Sign counter and storage cabinet  Bulletin board at Parent Sign In
3.72	Main Activity Room	Key Function: The interior program play and eating space Adjacencies: cubby, staff communication, kitchen, children's washroom/ Staff communication and storage to be near cubby area to allow staff to monitor entry and activity room Includes: Table area, open play area, quiet areas, staff communication, art sink, and art material cabinets Layout of space to accommodate play centres and ancillary functions, visual connection, adjacencies, etc. Look for opportunity to have views between programs to quiet or activity rooms Doors into activity room be glazed in such a way to see in and out of the room, and to see children playing on either side of the door Independent lighting control, zone lighting, multi-level switching TV Cable Telephone Child proof electrical outlets with childproof and shatterproof faceplates and tamper resistant receptacles Thermo stat control for each one Wall protection to 30" AFF Bulletin board at staff communication and storage Window blinds

Number	Activity	Programmatic Notes and Requirements
3.72.1	Open Play area	
3.72.2	Quiet Room	Includes 35sf for Staff Communications and     48sf for bottle Warming station with large capacity fridge, counter with stainless steel sink, upper and lower cabinets and microwave     Wall Protection to 36" AFF
3.72.3	Table/Art Area	Table area (min. 20sm/215SW), art sink, and supply storage 10" deep stainless steel art sink with floor mounted sediment trap Zurn Z1180 Solids Interceptor or pre-approved alternate Tempered water set to 38-40 deg C. Prior to occupancy Min. 8' long counter with cabinets above and below, lighting under upper cabinets
3.73	General Storage	<ul> <li>Adjustable three rows 15" deep, 8' long shelves to start at 36" AFF to allow storage of program rolling storage units on one or two walls only</li> <li>Occupancy sensor</li> <li>Step ladder storage</li> </ul>
3.74	Children's Washroom	<ul> <li>Adjacencies: Visual connection to activity room, kitchen, doors to covered play</li> <li>Gate required between children's washroom and activity room</li> <li>Room for two potties (NIC)</li> <li>Exhaust so no smells enter activity rooms – exhaust fan to be below 45 decibels</li> <li>Floor drain to be provided. Floor drain to have a pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind access panel</li> <li>2-round bowl tank type toilets, 15" high, closed front seats, locked tank with lids, sealed to floor. Provide low-flow, gravity standard, and duel flush. Toilets to meet a max performance (MaP) test of 500g or better. Flush values to be Sloan Dual Flush or approved equal</li> <li>2- Children's sink with lever handles, tempered water set to 38-40deg. C prior to occupancy. Install sinks as close to front of counter as possible</li> <li>Children's sink counter at 18" AFF</li> <li>Wall cabinet for paper storage</li> <li>2-15" deep x 14" minimum shelving for each child's diaper and personal baskets for paper storage</li> <li>Toilet partitions stalls complete with doors</li> <li>Toilet partitions stalls complete with doors</li> <li>Toilet paper dispenser at each toilet, mirror above counter</li> <li>Toothbrush holder (program children number + 2 extra)</li> <li>Room for laundry hamper and diaper pail</li> <li>No exposed luminaire shining directly onto child eyes</li> <li>Single compartment sink complete with a faucet ledge, minimum 300mm (12") deep, with swing tap (gooseneck preferred), paddle handles, and spray attachment set in counter with lower storage</li> <li>Paper towel dispenser</li> <li>Whiteboard</li> </ul>
3.75	Shared Kitchen (with School Age Program)	Open to Activity Room with good visual connection Gate Access from Activity Room Provision for Garbage/Recycling Bin & Compost Containers Two Compartment Stainless Steel Sink c/w faucet ledge, coved corners for ease of cleaning, commercial grade faucet, high temperature water between 46°C and 48°C Minimum 6'-0" Long Counter with cabinets below and above, LED lighting under upper cabinets, cabinets to be 1'-6" Max. above countertop 3'-0" Long low counter section for children at 24" A.F.F. Commercial 1000-1200 watt min. 2 cu f.t microwave on microwave shelf with closed sides Energy Star fridge –freezer frost free Dishwasher: Energy Star rated commercial style dishwasher, high temperature, cold water supply only with energy recovery, high temperature sanitizing with built-in booster, stainless steel interior, backflow preventer valve & corrosion resistant pump



Number	Activity	Programmatic Notes and Requirements
3.76	Staff Office	Key function: Staff work area and Preschool/School Age Activity Room observation     Adjacencies: Main Activity Room     one way vision glass from Staff Office into Activity Room     Work counter with pedestal under and shelf over with lighting under for one person     Bulletin board between shelf and work counter     Locked with access card reader
	Staff Counter & Storage	Adjacency: staff office     Counter with lockable storage below and whiteboard above
	PRESCHOOL CARE OUTDOOR AREA	<b>企业等等的企业企业的国际企业等等</b>
	Storage	Vented waterproof storage for outdoor play equipment Shelving Occupancy sensors could be shared with older kids
	Covered Play	Covered play to be within range of 506 to 603sf of total outdoor play area
	Open Area	<ul> <li>Outdoor play areas to be effectively acoustically buffered from any noise from traffic, mechanical equipment or other disruptive noises to achieve a maximum sound pressure level of 55 dB(A) 24 hour equivalent sound level</li> <li>Preschool/School Age Outdoor Play to be interconnected with the 3-5 Outdoor Play to provide expanded play opportunities</li> <li>be shared so as to not duplicate play opportunities</li> <li>The two areas will be fenced at a height of 30" with gates and latches</li> <li>provide a good range of play opportunities for each child care program</li> <li>Exposure to sunlight for at least three hours per day at the winter solstice, two hours of which occur between 9:30-11:30am or 1:30-4:00pm</li> <li>Frost proof hose bib</li> <li>Lighting on light level sensor</li> <li>Refer to Roof Landscape and Irrigation Guidelines in City of Richmond's City Owned Child care Facility Policies and Guidelines December 2016</li> <li>Inter-program gates to be equipped with child-proof latches.</li> <li>All gates to be self-closing</li> <li>Include seating for supervisors</li> <li>Sand play structure to be located away from building</li> <li>Provide shade for each sand play area (either with trellis structure, or with trees)</li> <li>Ensure edible planters are raised</li> <li>Provide a preliminary plant palette, typical cross sections (noting minimum soil depths) and preliminary details/sketches for major elements/structures with the DP submission</li> </ul>

Number	Activity	Programmatic Notes and Requirements
	LICENSED SCHOOL AGE CARE PROGRAMS	30 Licensed School Age (Area based on 40 SF x 30 kids = 1200 SF
	Main Activity Room	Key Function: The interior program play and eating space Adjacencies: cubby, staff communication, kitchen, children's washroom/ Staff communication and storage to be near cubby area to allow staff to monitor entry and activity room Includes: Table area, open play area, quiet areas, staff communication, art sink, and art material cabinets Layout of space to accommodate play centres and ancillary functions, visual connection, adjacencies, etc. Look for opportunity to have views between programs to quiet or activity rooms Doors into activity room be glazed in such a way to see in and out of the room, and to see children playing on either side of the door Independent lighting control, zone lighting, multi-level switching TV Cable Telephone Child proof electrical outlets with childproof and shatterproof faceplates and tamper resistant receptacles Thermo stat control for each one Wall protection to 30" AFF Bulletin board at staff communication and storage Window blinds Table / Art area (min. 20sm/215 sf), art sink, and supply storage Unidow blinds Table / Art area (min. 20sm/215 sf), art sink, and supply storage Thempered water set to 38-40 deg C. Prior to occupancy Min. 8' long counter with cabinets above and below, lighting under upper cabinets
	Cubby and Parent Sign In	Key Functions: Storage of children's outdoor clothing, personal supplies, extra clothing, Parent sign in and information/communications     Adjacencies and visual connection: Lobby, Activity Room, Children's Washroom, Outdoor Play     34 cubbies and storage units for each cubby     Teacher coat and shoe storage for 3 teachers     Parent Sign counter and storage cabinet     Bulletin board at Parent Sign In
	Washrooms	Three separate toilet rooms provided to facilitate multi age groups and license requirements for 30 children  Key Function: Child and Adult Washroom  Visual connection to Activity Room  Drop down diaper changing table that supports static loads up to 200 lbs. complete with child protection straps in one washroom only  One washroom to meet code requirements for H/C washroom - grab bars located  Interior floor drain to be provided. Floor drain to have a pre-approved trap primer. The trap primer is to be accessible within the same room as the floor drain behind an access panel  Round bowl tank type toilet 15" high, closed front seats, locked tank with lids, sealed to floor. Provide low-flow, gravity standard, and dual flush. Toilets to meet a Maximum Performance (MaP) Test of 500g or better. Flush Valves to be Sloan Dual Flush or approved equal  Sink with lever handles, tempered water set to 38-40deg. C prior to Occupancy  Sink counter at 28" AFF  Toilet accessories: Wall recessed paper towel dispenser/disposal, large roll toilet paper dispenser, mirror above counter, soap dispenser  Door locks to be inaccessible to 3-5 year olds (56" AFF) and able to be unlocked from Activity Room side  Exhaust so no smells enter Activity Room - exhaust fan to be below 45 decibels  One washroom to meet code requirements for H/C accessibility. Grab bar to be mounted at 27" a.f.f.



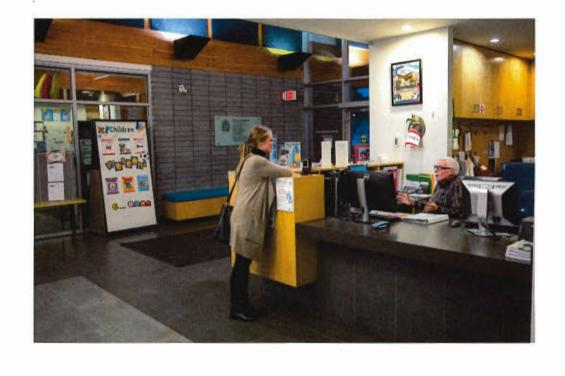
Number	Activity	Programmatic Notes and Requirements
	General Storage	<ul> <li>Adjustable three rows 15" deep, 8' long shelves to start at 36" AFF to allow storage of program rolling storage units on one or two walls only</li> <li>Occupancy sensor</li> <li>Step ladder storage</li> </ul>
	Staff Office	<ul> <li>Key function: Staff work area and School Age Activity Room observation</li> <li>Adjacencies: Main Activity Room</li> <li>one way vision glass from Staff Office into Activity Room</li> <li>Work counter with pedestal under and shelf over with lighting under for one person</li> <li>Bulletin board between shelf and work counter</li> <li>Locked with access card reader</li> </ul>
	Shared Kitchen (with Preschool Program)	<ul> <li>Open to Activity Room with good visual connection</li> <li>Gate Access from Activity Room</li> <li>Provision for Garbage/Recycling Bin &amp; Compost Containers</li> <li>3'-0" Long low counter section for children at 18" A.F.F.</li> <li>Commercial 1100 watt min., 2 cu.ft. microwave on microwave shelf with closed sides</li> <li>Energy Star rated 21 cu.ft. frost free fridge with freezer on bottom (no icemaker)</li> <li>Energy Star rated 4 burner 30" wide electric stove (coil burners), with controls at back, self-cleaning oven cycle</li> <li>Exhaust Hood, Energy Star rated, quiet, high exhaust, seismically braced if required, direct vent to outside</li> <li>Dishwasher: Energy Star rated commercial style dishwasher, high temperature, cold water supply only with energy recovery, high temperature sanitizing with built-in booster, stainless steel interior, backflow preventer valve &amp; corrosion resistant pump</li> <li>Broom Closet and pantry wall cupboard with pull out shelves</li> <li>Stainless Steel Double Sink (min. 10" deep) w/ faucet ledge, coved corners for ease of cleaning, commercial grade faucet, high temperature water between 46°C and 48°C</li> <li>Stainless Steel Hand Sink with faucet ledge, high temperature water between 46°C and 48°C</li> <li>Minimum 6'-0" long counter with cabinets below and LED lighting under cabinets, cabinets to be 1'-6" Max. above countertop</li> </ul>
	Staff Counter & Storage	Adjacency: staff office     Counter with lockable storage below and whiteboard above
	SCHOOL AGE PLAYGROUND	(based on 75 SF x 30 kids = 2,250 SF)
	Storage	Vented waterproof storage for outdoor play equipment Shelving Occupancy sensors could be shared with older kids
	Covered Play	<ul> <li>Directly accessed from Main Activity Area - indoor activities will spill out into this area during summer and offers covered play opportunities in inclement and hot weather</li> <li>Frost proof hose bib</li> <li>Landscape lighting on light level sensor that can be turned off in evenings when playgrounds are not in use</li> <li>Inter-program gates to be equipped with child-proof latches.</li> <li>All gates to be self-closing</li> <li>Covered play to be within range of 506 to 603sf of total outdoor play area</li> </ul>

Number	Activity	Programmatic Notes and Requirements
	Open Area	Outdoor play areas to be effectively acoustically buffered from any noise from traffic, mechanical equipment or other disruptive noises to achieve a maximum sound pressure level of 55 dB(A) 24 hour equivalent sound level provide a good range of play opportunities for each child care program Exposure to sunlight for at least three hours per day at the winter solstice, two hours of which occur between 9:30-11:30am or 1:30-4:00pm 8 high perimeter glazing Frost proof hose bib Lighting on light level sensor Refer to Roof Landscape and Irrigation Guidelines in City of Richmond's City Owned Child care Facility Policies and Guidelines December 2016 Inter-program gates to be equipped with child-proof latches. All gates to be self-closing Include a trike path Include seating for supervisors Sand play structure to be located away from building Provide shade for each sand play area (either with trellis structure, or with trees) Ensure edible planters are raised Provide a preliminary plant palette, typical cross sections (noting minimum soil depths) and preliminary details/sketches for major elements/structures with the DP submission
	CHILD CARE LEVEL BUILDING SERVICES & CIRC	ULATION
	Elevator	Key Function: Access to ECD Hub from Parking and between floors (refer to Appendices) Locate so that there is visual connection to ECD Hub lobbies on each level Elevator to be easily accessible from the loading area to facilitate delivery of items for routine maintenance such as sand and engineered wood chips Elevator to be able to accommodate freight for the purposes of maintaining the play areas (for example: to move heavy loads for sand replacement and top-up) – recommended minimum capacity for 4000lbs The elevator lobby should not open directly into any secure child care space Cab size and layout to accommodate three, 3-position parent strollers and/or the Program's quad stroller – Sizes of strollers vary, but as a guideline, use 1.9m (75") long, by 0.6m (24") wide, by 1m (40") high. Ensure circulation space from entrance to elevator accommodates the turning radius of the stroller Ability to schedule door activation, fob control, times Security camera Hardy wall protection (strollers and playground material delivery will use the elevator)
	Interconnecting Stair	stairs to meet current Building Code requirements locate stairs near the building entrance; be visual from building exterior and allow for natural daylight within the space make stairs wide enough to accommodate travel in both directions stair risers to be 7" (178mm) maximum with treads to be 11" minimum (280mm) in order to be more comfortable for children provide handrails set at 2 different heights; upper handrail to meet current building code; lower handrail at maximum 28" high (710mm) with a vertical clearance between upper and lower handrail of 9" (230mm) provide slip resistant floor finishes
ĺ	Building Services	
	Mechanical	
	Electrical	
	I/T- Data and Security	
	Corridors/Horizontal Circulation	

# 4

# **FUNCTIONAL REQUIREMENTS**









### 1. Outline of Requirements

#### **Designing for Families and Children**

The design of the Early Childhood Development Hub facility will:

- Provide interior and exterior environments designed to support the development of the children and their physical, social and emotional growth
- Provide interior and exterior environments designed to support staff in their work with Richmond families

The Facility Program document sets out specific functional requirements for the City of Richmond's t Early Childhood Development Hub.

The City of Richmond's Citv-Owned Child Care Facility Policies and Guidelines. December 2016 sets out general requirements for City owned child care facilities.

The Vancouver Coastal Health
Design Resource for Child Care
Facilities (September 2016)
contains detail design information
and recommendations for
licensed child care centres that
is not included in either the
Facility Program or Policy and
Guideline documents.

The references listed in sections 2-6 of the Appendices provide additional information to assist and inform the design of the family centred facility.

In addition to addressing the family/ child-centred design

requirements of the Hub the facility will meet:

- a. Applicable codes and bylaws
- b. Current BC Community Care and Assisted Living Act, Child Care Licensing Regulation for a:
- licensed 12 space Group Care Under 36 Months Program
- licensed 25 space Group Care 30 Months to School Age Program
- licensed 20 space
   Preschool program
- •licensed 30 space School Age Program
- c. Local Community Care Facilities Licensing approval of the facility

#### **Building for Durability**

Other design considerations are durability, livability, security, ease of operation and maintenance of the facility. These will also inform the design, specifications and demands of workmanship. The selection of all materials and finishes and details will address the need for minimal maintenance, durability, health and ease of cleaning. Workmanship, material choices and design will together ensure that a ten year life expectancy of interior finishes, millwork, equipment and fixtures. While the quality of the finishing materials and detailing should endure, they also need to fit the context of a child care facility by providing a warm,

comfortable, inviting and childoriented environment that supports the developmental and daily needs of the children and the staff who work there.

The design goal is to provide a facility that has a look and feel that belies its hardiness and institutional character. The choice of materials and detail design of the facility needs to be of a high standard appropriate for such an intensively used facility. Heavyduty commercial or institutional standards should be applied. In some instances such as the dchild care programs quality residential appliances may be acceptable if they meet the City's performance criteria and if warranties are available for the intended use of the appliance.

Rough materials, sharp corners, uneven surfaces, and trip hazards will attract a very high level of scrutiny by Community Care Facilities Licensing once the building is completed. The goal of delivering a facility with licensable child care program spaces hinges on ensuring these issues do not present themselves at the end of construction.

As-built drawings, manuals, warrantees, guarantees and a separate and complete maintenance manual must be provided as part of the project close-out procedure. Refer to Appendix 6.1 for list and City of Richmond's City Owned Child Care Facility Policies and Guidelines, December 2016.



"To every child:

I dream of a world where you can laugh, dance, sing, learn, live in peace, and be happy."

-Malala Yousafzai

## **Equipment & Furnishings List**

	urnishings List	T-1-15-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
Activity Number	- Activity	Typical Equipment & Furnishings by Operator
1.3	Entry Lobby Waiting and Elevator Lobby	• Rug 8' x 12' • Soft seating - 2 groupings of 5-6 people • coffee table
3.2	Reception	• Rug 6' x 8'
3.1	Lobby	Soft seating - 1 grouping of 4 people     Coffee table
3.14	Multi Purpose Children and Family Activity Room	
	Eating	• 1 - 48" x 30" table • 6 - 10" high chairs
	Soft Climbing Area	Playtime island 6' x 6' area Soft tunnel set 6' x 6' area Crawl through tunnel 6' x 1' Soft house 2' x 3' Rainbow arch 37" x 15" x 18" H 2 mats - 5' x 5' 1 - Shelving unit 48" x 15" x 24"
	Dramatic Play	<ul> <li>3 - 4 piece Kitchen Set</li> <li>36" x 12" x 24" H shelving unit</li> <li>Low table 28" x 18" x 14" H</li> <li>2 chairs 6" high</li> <li>Child sofa 34" x 18" x 20"</li> <li>Child armchair 23" x 18" x 20"</li> </ul>
	Anti-Connection (Connection)	• 1-shelving unit 48" x 15" x 24" • 1- Art easel - 25" x 27" x 48" H • 1 - Water table - 27" x 24" x 20" H • 1 - Sand table - 27" x 24" x 20" H • 2 - Tables 48" x 30" • 6 - Chairs @ 8" high
	Puzzles/Manipulatives	• 2 - Shelving units 48" x 15" x 24" H • 2 - 30" x 30" tables • 2 - mats 5' x 5' • 6 - Chairs 8" high
	Blocks/Construction	• 1 - Shelving Unit 48" W x 15" D x 30" H • 1 - Construction Rug 6' x 8' • 1 - Storage shelving unit 30" x 15" D x 24" H

Activity Number	Activity	Typical Equipment & Furnishings by Operator
	Quiet Area	• 1 - Shelving Unit 36" W x 15" D x 24" H • 1 - Bookstand - 30" x 15" x 14" H • 1 - Rug 6' x 8' • 2 -2 Seater sofas • Cosy seating 48" x 18" x 20" H
	Meeting Rooms	
3.1	Meeting Room 1	36 stacking chairs     lecturn     screen     TV
3.11	Meeting Room 2	• 60" x 30" x 29" H table • 4 - stacking chairs
	Storage	• 2 - Table dollies • 2 - Chair dollies
	Administration	
3.5	Office	- 1 - Desk - 1 - Desk chair - 1 - 36" diameter table - 2 - side chairs - 1 3-drawer lateral file
3.6	Shared Office	3 workspaces with desk, chair and partitions     2 3-drawer lateral filing cabinets
3.7	Shared Office	3 workspaces with desk, chair and partitions     2 3-drawer lateral filing cabinets
3.8	Break Out Room	• 1 - 36"dia table • 2 - stacking chairs
3.9	Copier and Mail/Paper/Storage	Floor size copier Area for Shredding and other disposal containers (4' x 2') Postal machine on counter 2 - printers on counter 6 3-drawer lateral filing cabinets under workcounter
3.17	Storage	• 2 - Table dollies • 2 - Chair dollies
3.18	Staff Room	1 - 48" x 30" table     4 - stacking chairs     3 - seater couch     coffee/side tables

Activity Number	Activity	Typical Equipment & Furnishings by Operator
	Public Area and Administration	
3.3	Lobby	• 4 - Club chairs • Area rug
3.32	Parent Meeting Room	• 48" diamter table • 4 - chairs
3.33	Child Care Office	<ul> <li>2 - Office chairs</li> <li>1 - 36" table</li> <li>4 - chairs</li> <li>1 - 4 drawer lateral file cabinet</li> </ul>
3.35	Program Stroller Storage	• 2 - Quad strollers - 75" long x 24" W x 40" high
3.5	Infant Toddler Program	
3.52	Main Activity Area	
332	Eating	<ul> <li>2 - 30" x 48" rectangular</li> <li>2- Transition Chair with transition table (for infants)</li> <li>12 - 10" high Child Chairs</li> </ul>
A	Art/Creative/Sensory	<ul> <li>1-Table - 30" x 48"</li> <li>1 - 24" x 24" x 36" Art drying rack (mobile rack to fit into millwork - dimensions to be confirmed)</li> <li>1 - Storage unit 36" w x 15" d x 24" h</li> <li>1 - Art easel 28" w x 25" d x 47" h</li> </ul>
	Manipulatives	• 1-30" x 36" table • 2-Storage units 48" w x 15" d x 24" h • 2-Activity Mats - 48" square
A	Creative	• 1 - Sand 26.5" w x 24" d • 1 - 1 Water table 26.5" w x 24" d • 1 - Light table 24" x 24" x 20" h
7	Dramatic Play	<ul> <li>1 - Toddler Kitchen set - 3-4 pieces includes stove, sink, fridge</li> <li>1 - Dramatic Play Table - 28" x 20" d x 16" h</li> <li>2 - Dramatic Play Chairs - 8" high</li> <li>1 - Dress up storage to hang dress up clothes 25.25" w x 13.75" d</li> <li>1 - Mirror - shatterproof wall mounted</li> <li>1 - Child's armchair 23" w x 18" d x 20" h</li> <li>1 - Child's sofa 34" w x 18" d x 20" h</li> <li>1 - Storage Unit 48" w x 12" d x 24" high</li> </ul>
3.52.3	Quiet Area/Reading	• 1 - Book Shelf - 20" h x 25" w x 11" d • 1 - Adult 2-seater love seat • 1 - Rug approx 4' x 6'
	Climbing, crawling, motor	<ul> <li>1 - Riser kit - Community playthings (starter kit and rectangle or soft gym climbing equipment needs about a 6' radius)</li> </ul>
123 24	Blocks	• 2 - Storage Unit 48" w x 15" d x 20" h • 1 - Rug 4' x 6'
	Staff Communications & Stora	ge• 1 - Desk chair

Activity Number	Activity	Typical Equipment & Furnishings by Operator
	Other	• 3 - Adult Chairs - 14" high • Notice boards
3.53	(Small) Nap Room 1	4 - Compact Folding Cribs 39.6" long x 26" high x 34.25" wide     Music Player (CD player)
3.54	(Large) Interactive Nap Room 2	12 - Cots 40" long x 22" wide x 7" high, or mats     Music player (CD player)
3.55	Large Nap Room 2 Storage	Cot carrier for 12 cots 52" long x 22" wide x 50" when stacked     Large motor equipment     14 - Child Bins for child nap storage
3.56	Kitchen	Bottle warmer Coffee Maker Blender Electric Griddle Kettle Food processor Hand held blender Hand mixer Toaster Broom and Dustpan
3.57	Children's WC and Diapering	<ul> <li>1 - Laundry hamper with lid</li> <li>1 - Diaper garbage with lid</li> <li>1 - Garbage container (one at side of child sink counter)</li> <li>1 - Change table mat</li> <li>14 - Diaper storage boxes for each child</li> <li>2 - Potties (floor plan to allow potties to be on hand at all times)</li> </ul>
3.59	Staff Office	<ul> <li>1 - Desk chair</li> <li>2 - Visitor chairs</li> <li>3 - Drawer lateral file</li> <li>4 - stacking chairs</li> <li>3 - seater couch</li> <li>coffee/side tables</li> <li>1 - 48" x 30" table</li> </ul>
	Covered Play (Extension of Activity Area)	• Art easel 46" x 22.5" • Sand and Water 35" x 25" w x 17-22" h • Table 24" x 35" x 17" h
3.6	3-5 Group Program Licensed f	or 25 Children
3.62	Main Activity Area	
	Eating	• 1 - Table 60" x 30" • 1 - Table 48" x 30"
	Art/Creative/Sensory	• 1 - Storage Unit 48" w x 15" d x 24" h • 25 - Stacking children's chairs - 12" seat •1 - Art Drying Rack 24" w x 24" d x 43" h • 1 - Paint Easel island 28" w x 25" d x 47" h • 3 - Tables - 30" x 30"
	Sand/Texture	• 1 - 45" x 24" Sand/Texture Table • 1 - Clear Water Table - 35" x 25" x 20" h
	Quiet Area and Reading	• See Quiet Room

Activity Number	Activity	Typical Equipment & Furnishings by Operator
	Dramatic Play	<ul> <li>1 - Dramatic Play 28" diamter table and two chairs</li> <li>1 - Kitchen Set - 4-5 pieces with connecting counter 24" long</li> <li>1 - Children's armchair - 25" w x 20" d x 21" h</li> <li>1 - Children's sofa - 36" w x 20" d x 21" h</li> <li>1 - Rug 6' x 4'</li> <li>1 - Community Playthings Dress up unit, mirror or wardrobe</li> <li>1 - Shelving Unit - 48" w x 30" h x 12" d</li> </ul>
	Manipulative Toys	• 2 - Tables 30" x 30" • 1 - Shelving unit 48" x 30" x 12"
	Blocks	• 1 - Shelving Unit 48" W x 15" D x 30" H • 1 - Construction Rug 6' x 8' • 1 - Storage shelving unit 30" x 15" D x 24" H • 1 - Lego table 32" w x 27" d x 18" h
	Staff Communications & Storage	• 1 - Desk chair
	Other	• 4 - Stacking adult chairs - 16" seat • 6 - Stacking children chairs - 12" seat
3.62.2		<ul> <li>1 - Library Rack 37" w x 14" w x 31.5"</li> <li>1 - Adult sofa - 2 seater love seat</li> <li>1 - Rug 8' x 6'</li> <li>1 - Storage shelving unit - 48" x x 24" d x 24" h</li> </ul>
3.63	Gross Motor/Nap Room	• 25 - Cots 52" long - 22" wide x 7" high or mats • Gross motor activity gym toys
3.65		<ul> <li>1 - Garbage container - free standing beside counter</li> <li>1 - Laundry hamper under counter</li> </ul>
3.64	Gross Motor/Nap Room Storage	<ul> <li>2 - Cot carriers for 25 cots 52" long x 22" wide x 50" when stacked</li> <li>Large gross motor/indoor 'gym' equipment</li> </ul>
3.67	Staff Office	2 - Desk chairs     2 - Visitor chairs     3 - Drawer lateral file
3.38	Shared Kitchen	• 2 - Coffee Maker • 1 - Blender • 2 - Electric Griddles • 1 - Kettle • 1 - Food Processor • 1 - Handheld blender • 1 - Hand Mixer • 2 - Toasters • 1 - Broom and Dustpan
	Covered Play Area (Extension of ਮੀਗਾਂਗਾਂਨਾ ਮਾਦਕ)	• 1 - Art Easel 36" w x 24" h
3.7	Preschool/School Age License	d for 20/30 Children
3.72	Main Activity Area	
	Eating	• 1 - 30" x 30" table • 1 - Table 48" x 30"



Activity Number	Activity	Typical Equipment & Furnishings by Operator
	Art/Creative/Sensory	<ul> <li>1 - Storage Unit 48" w x 15" d x 24" h</li> <li>20 - Stacking children's chairs - 12" seat</li> <li>1 - Art-drying rack 24" w x 24" d x 43" h (mobile unit to fit into millwork)</li> <li>1 - Paint Easel island 28" w x 25" d x 47" h</li> <li>3 - Tables - 30" x 30"</li> </ul>
3.72.2	Quiet Area and Reading	• 1 - Library Rack 37" w x 14" w x 31.5" • 1 - Adult sofa - 2 seater love seat • 1 - Rug 8' x 6' • 1 - Storage shelving unit - 48" x x 12" d x 24" h
	Dramatic Play	1 - Dramatic Play Round table and two chairs 1 - Kitchen Set - 4-5 pieces with connecting counter 24" long 1 - Children's armchair - 25" w x 20" d x 20" h 1 - Children's sofa - 36" x 20" x 21" h 1 - Rug 6' x 4' 1 - Community Playthings Dresup unit, mirror or wardrobe 1 - Shelving Unit - 48" x 24" x 24" h
	Manipulative Toys	• 2 - Table 30" x 30" • 2 - Shelving Unit 48" x 30" 12" • Light table 42" x 24" x 24" h
	Blocks	• 1 - Shelving Unit 48" W x 15" D x 30" H • 1 - Construction Rug 6' x 8' • 1 - Storage shelving unit 30" x 15" D x 24" H • 1 - Lego table 32" w x 27" d x 18" h
	Other	• 2 Stacking adult chairs - 18" seat
	Staff Communications & Storage	• 1 - Desk chair
3.74		• 1 - Desk chair • 1 - 3 Drawer lateral file • 2 - Visitor Chairs
3.73		The School Age program furniture listed below will be moved into Activity Room and the PreSchool Program furniture will be moved into Storage when Storage/Age furniture is in use:  8 - Chairs 14" high  8 - Chairs - 16" high  4 - Folding tables 60" x 30"  3 - Folding tables 48" x 30"  4 - Storage units 48" x 15" x 36" h  3 - Storage units 48" x 12" x 36" h  1 - Outdoor storage unit 39" x 24" x 44" h  1 - Bookshelf 46" x 13" x 26" h  2 - 36" bean bag chairs  4 - cozy seating 18" x 24" x 24" h
	Covered Play (Extension of Activity Area)	• 1 - Art easel 46" x 22.5"
	Air Space Parcel Service Spac	es
	Garbage Area	240 Litre Garbage Containers - 27.5" deep x 24.5" wide x 43.25" high





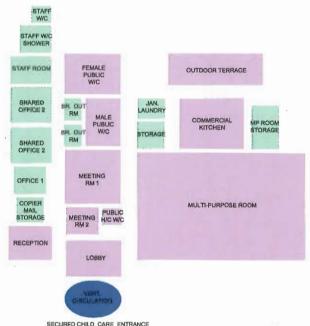


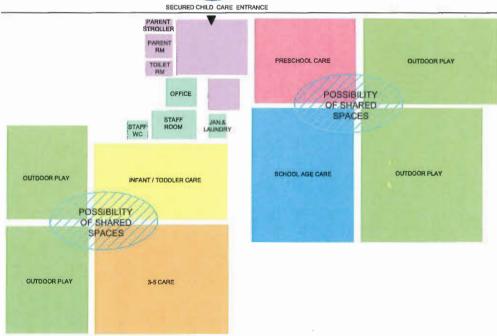




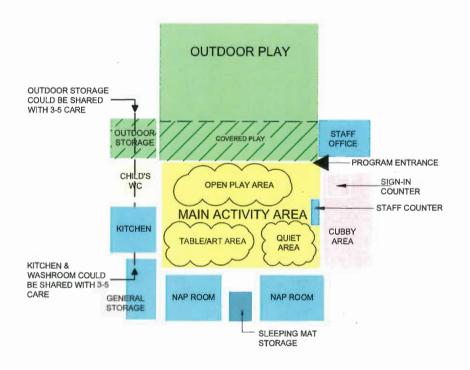


# **Adjacency Diagrams: Overall Program Areas**

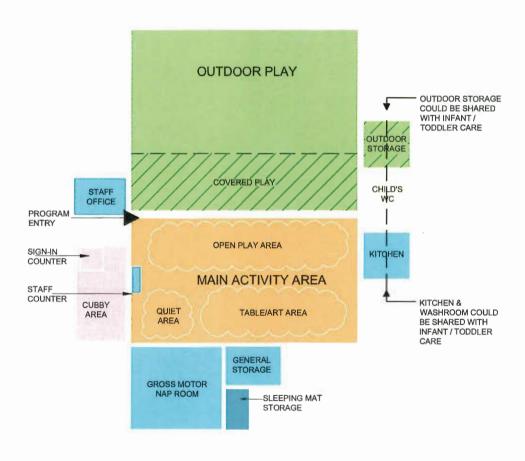




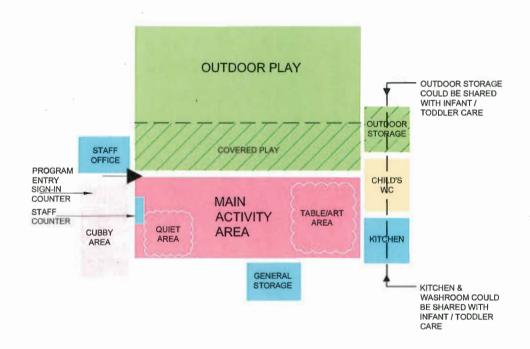
## **Infant/Toddler Care Program**



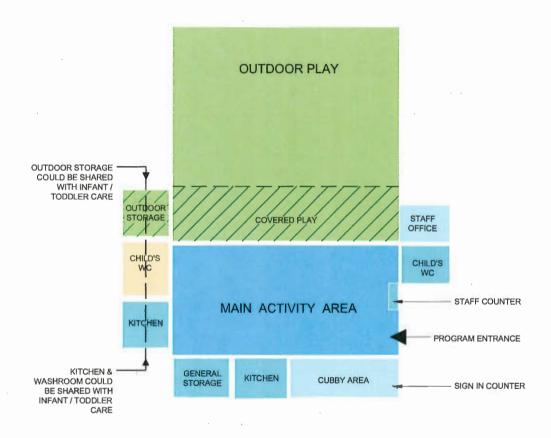
### 3-5 Care Program



## **Preschool Care Program**



## **School Age Care Program**







## **APPENDICES**

### OTHER DESIGN GUIDELINES AND RESOURCES:

- 1. Vancouver Coastal Health Design Resource Guide for Child Care Facilities http://www.vch.ca/Documents/Design-resource-for-Child-care-facilities.pdf
- 2. Director of Licensing Standards of Practice Safe Play Space Space https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/child-day-care/safe\_play\_space.pdf
- 3. City of Richmond Policies and Guidelines for the Development of City-owned Child Care Facilities: https://www.richmond.ca/\_shared/assets/PoliciesandProceduresforCity-ownedchildcarefacilities45413.pdf
- 4. City of Richmond Child Care Design Guidelines: https://www.richmond.ca/\_shared/assets/designguidelines43266.pdf
- 5. City of Richmond Building Equipment, Monitoring, and Integration Requirements

### OTHER USEFUL CHILD CARE DESIGN RESOURCES:

1. Children Height Requirements:

When children are the principal users in a building or facility (e.g., elementary schools), a second set of handrails at an appropriate height can assist them and aid in preventing accidents. A maximum height of 28 inches (710 mm) measured to the top of the gripping surface from the ramp surface or stair nosing is recommended for handrails designed for children. Sufficient vertical clearance between upper and lower handrails, 9 inches (230 mm) minimum, should be provided to help prevent entrapment.

https://inlinedesign.us/handrail-height-requirements-ada





## **APPENDICES**

### 1. PROJECT DOCUMENTATION REQUIREMENTS

As-built drawings, manuals, warrantees, guarantees and a separate and complete maintenance manual must be provided as part of the project close-out procedure. Refer to City of Richmond's City Owned Child Care Facility Policies and Guidelines, December 2016.

In brief the following information will be required and should be part of the project's procurement documentation:

- a. Operations & Maintenance (0 & M) Manuals 2 hard copies, 1 digital copy either usb stick, or downloadable;
- b. As-built Drawings 2 hard copies, 1 digital copy same as above;
- c. Warranties to be included with Operations & Maintenance Manuals;
- d. Asset Labelling all mechanical units, electrical panels require labels, detail to be provided
- e. Spare Materials the following spare materials to be provided, amounts to be confirmed:
  - Carpet Tile
  - Paint
  - Sheet Flooring
  - Protective wall covering

#### 1. DESIGN CONSIDERATIONS CHECKLIST

The following checklist is an extract from the Vancouver Coastal Health Design Resource for Child Care Facilities Appendix V - Page 24-7 and is provided for information. In some instances the VCH Guidelines differ from those of the City of Richmond. The City of Richmond's requirements take precedence.

## GENERAL CONSIDERATIONS INDOORS:

#### **Natural Light**

 all primary indoor activity spaces have a direct source of natural light equal to a minimum of 10% of the wall space

#### Windows

- child-accessible opening windows must be limited to a maximum opening of 4 in. for low-level windows, (i.e. sill less than 18 in. above floor) use tempered or laminated glass where impact with a window may
- if the window opens into a walkway or play area, provide either a sliding window or restrict window swing out to avoid creating a safety hazard outside
- window covering cords must be out of the reach of children
- all opening windows should be screened
- exterior windows should be at a height that children can see out of

#### Lighting

- provide a minimum lighting level of:
- 30 ft. candles (320 lux) in nap rooms, quiet rooms, and infant activity room
- 40 ft. candles (420 lux) in the 3-5, toddler, and school age activity rooms
- 50 ft. candles (540 lux) in the kitchen and washrooms
- each room has its own light switch/ controls provide two banks of lights on separate switches/controls in activity rooms provide dimmers in quiet rooms and gross motor/nap rooms
- diaper-changing areas must have glare shielding for overhead fixtures
- all fixtures to be properly shielded or use shatterproof bulbs

#### Floor Covering

- floor coverings in kitchens, washrooms, laundry, janitorial closets, and art areas must be smooth, non-absorbent, and washable
- other activity areas should have smooth, non-absorbent, and washable flooring
- nap rooms and quiet rooms should be carpeted
- all edges and base boards must be sealed

#### Heat

- where electric or hot water heat is being used, provide an individual thermostat in each activity room and sleep/gross motor room
- ensure the heating system does not limit the functional use of the space
- all baseboard heaters and radiators must be shielded to prevent child access to sharp edges and/or to hot surfaces

#### **Electrical Outlets**

• child-accessible electrical outlets must be childproof

#### Ventilation

- ensure all rooms are adequately ventilated to remove odours, especially from diapering, laundry, maintenance, and washroom areas
- avoid locating air intakes near sources of fumes (e.g. laneways) or dust
   (e.g. ducting low to the ground)

Counters, Ledges, Shelves and Cabinets

- round off all corners and edges
- all tall cabinets (> 4 ft.) must be secured to prevent tipping

## **APPENDICES**

#### **Telephone Jacks**

• provide a minimum of one jack in each activity room, kitchen, and staff office

#### Doors/Gates

- provide piano hinges on all gates
- ensure doors/gates can be secured in the open position
- provide a locking mechanism on all sliding doors in both the open and closed position (to prevent fingers/ toes being pinched)

#### **ACTIVITY AREAS:**

#### **Activity Rooms**

- provide at adult height, a stainless steel art/clean up sink with a riser tap
- provide a minimum of 3 ft. of counter space adjacent to the sink, with cupboards above and below
- a sediment trap is recommended

Gross Motor/Sleep Rooms (3-5 years of age and Toddlers)

- provide enclosed area for mat storage sufficient for licensed capacity (e.g. a sliding door cabinet)
- mats/cots may be stacked for storage
- provide individual storage for blankets and stuffies

- provide storage for extra clean sheets and blankets
- floor area must allow sufficient space between mats so that staff can move/sit comfortably between mats

Infant/Toddler Sleep Rooms

- provide two sleep rooms for infants to accommodate a total of twelve cribs/mats
- allow 2 ft. between each crib/mat. except where adjacent to a wall or partition a provide storage for extra clean sheets and blankets
- provide a baby monitor

#### **SUPPORT AREAS:**

#### Preschool Washrooms (for 25 children — 3-5 years of age)

- provide a diaper and/or soiled clothing change area with readily access water a provide three toilets sealed to the floor
- provide closed front toilet seats
- provide privacy for one toilet (e.g. using a low partition and 1/2 door)
- provide three hand basins, a maximum 2 ft. high with the bowl placed as close to the front of the vanity as possible and with lever faucets

- hand sink's maximum hot water temperature must not exceed 49°C (120°F)
- provide mirrors over the hand basins a provide back splash at all sinks
- provide location for child-accessible soap dispensers
- provide two paper towel dispensers at child height (ensure location and/or type does not pose risk of head injury) or provide alternate child-accessible storage for paper or cloth towels
- provide a toilet roll holder adjacent to each toilet at child height
- provide shelves at adult height for storage of toothbrushes and other supplies (toothbrushes must not touch each other)

NOTE: If adult-sized toilets are used the bowl should be round and a suitable child-sized seat insert available. A 6 in. step should be provided in front of the toilet.

## Infant/Toddler Washrooms (for 12 children — under 3 years of age)

- provide two 10 in. toilets sealed to the floor
- provide closed front toilet seats
- provide a toilet roll holder adjacent to each toilet placed at child height
- provide two hand basins, a maximum of 18 in. high with the bowl placed as close to the front of the vanity as possible and with lever faucets
- provide location for child-accessible soap dispensers
- hand sink's maximum hot water temperature must not exceed 49°C (120°F)
- provide 1 change counter with cove tops, 3 ft. (length) x 2 ft. (width) x 3 ft. (height) NOTE: If only infants are being cared for provide 2 change counters.
- provide one stainless steel sink
- provide 1 ft. deep open shelves 2 ft. above the change counters
- provide a rack above the sink for storage of sanitizers, etc.
- provide a mirror above the hand basin
- provide a back splash at all sinks

- provide a full length, high quality mirror behind the change counter
- provide a paper towel dispenser in the vicinity of the change sink (ensure the location does not pose a risk of injuring a child while being changed or limit the use of the change counter)
- provide enough open space for two potties
- provide shelves for storage of toothbrushes and other suplies (toothbrushes must not touch each other)
- provide steps for children to access the change table
- provide space for diaper buckets

#### Staff Washrooms

- provide a change counter, wide sink, and storage shelf if no other diaper change counter is provided in the centre
- provide a towel and soap dispenser a provide a back splash at the sink

#### **Staff Offices**

- provide storage shelves/cupboards
- provide space for a lockable filing cabinet a place interior windows to ensure maximum visibility of activity space

#### **Staff Rooms**

 provide individual storage for staff belongings

## Janitorial Closets (may be combined with the laundry area)

- ensure adequate space to store mops, brooms, ladder, cleaning chemicals, and personal safety equipment
- place janitorial sink at floor level; equip the sink with an approved backflow preventer valve
- provide storage shelves
- provide an inside releasing-locking mechanism for securing the door

#### **Laundry Areas**

- provide a washer and dryer durable enough for the number of children enrolled and the volume of laundry
- provide an area for folding clothes
- provide separate storage areas for both soiled and clean laundry
- recommend two washers/dryers when capacity exceeds 37 children

#### **Cubbies**

 provide a sufficient number for the licensed capacity and an extra 20% for part-time children

## **APPENDICES**

#### Storage

 provide adequate storage space for supplies and equipment, both inside and outside

#### **Building Security**

- all gates to be equipped with childproof latches
- provide storage for centre strollers and 3 parent strollers, car seats, etc.
- utilize an appropriate entry security system (e.g. bell, buzzer, intercom, etc. which will operate during program hours)
- ensure all fire alarms, building alarms, speakers, etc. can be heard in the outdoor play space

#### Kitchen

- provide at least 100 sq. ft. (9.3 sq. m.) of floor space. When the capacity exceeds 25 children and a kitchen is to be shared, provide an additional 3 sq. ft. per licensed space
- walls and ceiling surfaces to be non-absorbent, smooth, crack-free, and easily washable
- provide a two-compartment sink plus dishwashing machine which operates with a sani-cycle. If the licensed capacity exceeds 25 children, a commercial dishwasher might be more practical.
- provide a paper towel dispenser and a soap dispenser by the two-compartment sink and hand sink
- provide one refrigerator per program that is equipped with a thermometer

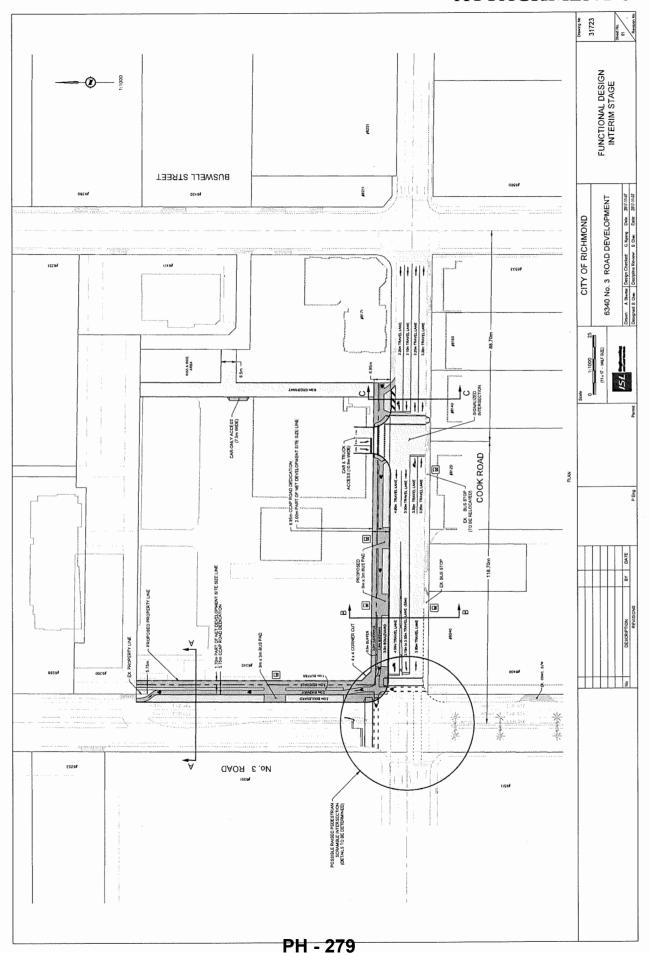
- provide a microwave oven and a domestic stove. A stove canopy exhausting to the outside is required.
- overhead counters should not obstruct views of the activity areas, etc.
- in a multi-program facility, in addition to the main kitchen, provide a small kitchen (approx. 40 sq. ft.) in the infant room to accommodate a full fridge, microwave, and single sink

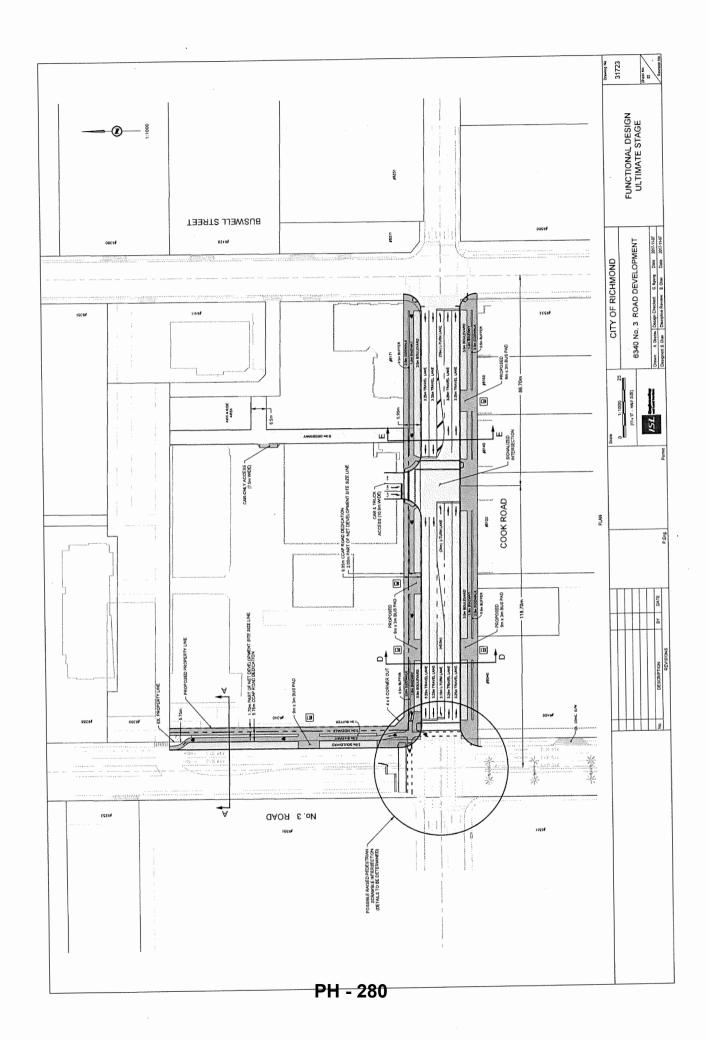
NOTE: If a food permit is required, there may be additional requirements for the kitchen (e.g. additional hand sink, commercial dishwasher, stove hood).

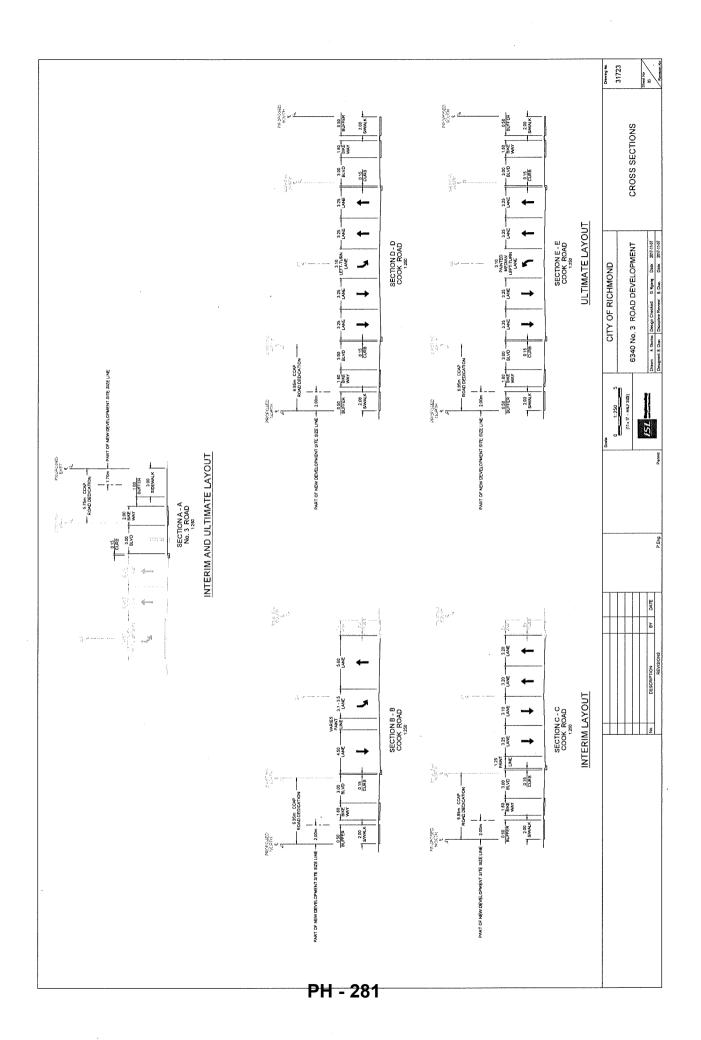


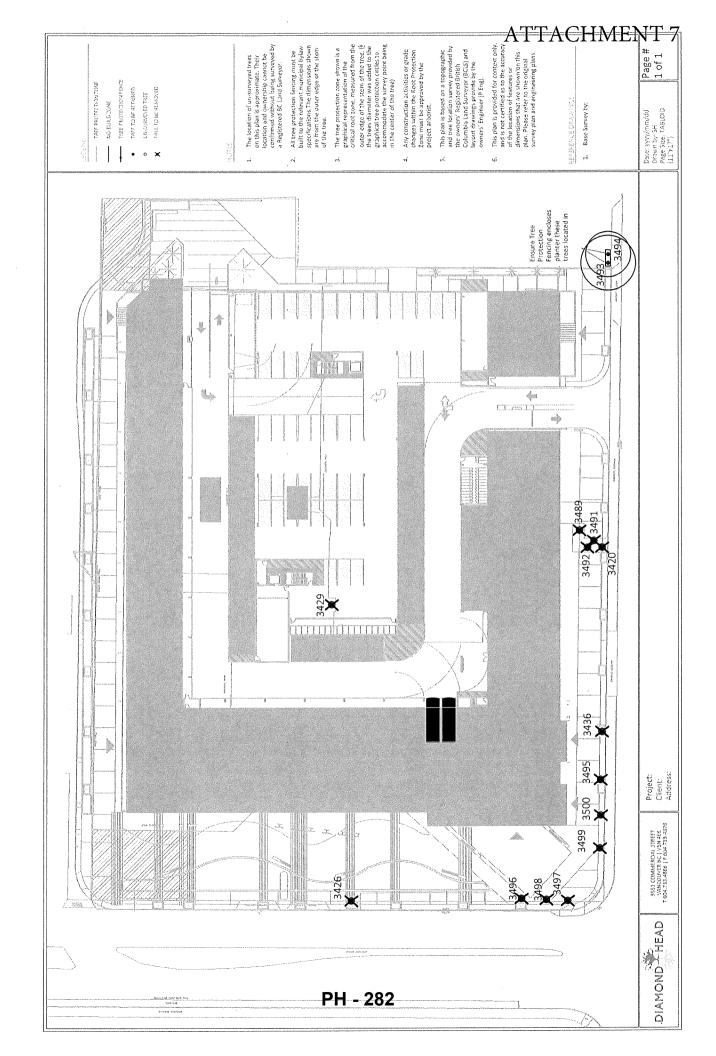
Prepared by: HDR | CEI Architecture Associates, Inc. 500 - 1500 West Georgia Street Vancouver, BC V6G 2Z6 604.687.1898

### ATTACHMENT 6











### Richmond Zoning Bylaw 8500 Amendment Bylaw 9859 (RZ 17-773703) 6340 No. 3 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:
  - "20.37 High Density Mixed Use and ECD Hub (ZMU37) Brighouse Village (City Centre)

#### 20.37.1 Purpose

The **zone** provides for a broad range of **commercial**, **office**, service, institutional, entertainment and residential **uses** typical of the **City Centre**. Additional **density** is provided to achieve, amongst other things, **City** objectives related to the **development** of **affordable housing units**, **office uses** and **community amenities**, including an Early Childhood Development Hub.

#### 20.37.2 Permitted Uses

- amenity space, community
- animal day care
- animal grooming
- broadcasting studio
- child care
- education
- education, commercial
- education, university
- emergency service
- entertainment, spectator
- government service
- health service, minor
- housing, apartment
- library and exhibit
- liquor primary establishment
- manufacturing, custom indoor

- microbrewery, winery and distillery
- neighbourhood public house
- office
- 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
- veterinary service

#### 20.37.3 Secondary Uses

- boarding and lodging
- home business
- home-based business

#### 20.37.4 Additional Uses

district energy utility

#### 20.37.5 Permitted Density

- 1. For the purposes of this **zone**, the calculation of **floor area ratio** is based on a net **development site** area of 13,424.8 sq. m.
- 2. The maximum **floor area ratio** is "2.0" together with an additional:
  - a) "0.1" **floor area ratio** provided that the additional **floor area** is used entirely to accommodate indoor **amenity space.**
- 3. Notwithstanding Section 20.37.5.2, the reference to "2.0" is increased to a higher **floor area ratio** of "4.007" if the **owner**:
  - a) provides 27 **affordable housing units** on the **site** and the combined **habitable space** of the **affordable housing units** is not less than 5% of the total residential **floor area**:
  - b) enters 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:
  - c) uses a minimum of "1.0" of the additional **floor area ratio** for non-residential **uses** only;
  - d) uses a minimum of "0.007" of the additional **floor area ratio** for **child care** and community services **uses** only;
  - e) grants to the City:
    - i) at least 1% of the value of the total residential **floor area ratio** less the value of the **affordable housing unit floor area ratio**, or 377 sq. m., whichever is greater, toward an 1,765 sq. m. "Early Childhood Education Hub" **community amenity space**;
    - ii) at least 0.05 floor area ratio, or 671 sq. m., whichever is greater, toward an 1,765 sq. m. "Early Childhood Education Hub" community amenity space; and
    - iii) no less than 717 sq. m. toward an 1,765 sq. m. "Early Childhood Education Hub" **community amenity space**,

the whole of which shall be designed and constructed to the satisfaction of the **City** and provided to the **City** in the form of an **air space parcel** prior to occupancy of the **development**.

4. Notwithstanding Section 4.5.1, the following items are not included in the calculation of maximum **floor area ratio**:

- a) common mechanical, heating, ventilation, air conditioning, electrical, telephone and similar type service rooms not co-located with an **enclosed parking** area and not intended as **habitable space**;
- b) unenclosed, above grade, covered **open space** provided for the use of **child care** facility outdoor activities, including deep roof overhang and standalone roof areas, to a maximum of 30% of the combined covered and uncovered **open space** area; and
- c) unenclosed, above grade, covered common **open space** provided for the use of **building** tenants and **building** residents outdoor activity, including deep roof overhang and standalone roof areas, to a maximum of 15% of the combined covered and uncovered common **open space** area.

#### 20.37.6 Permitted Lot Coverage

1. The maximum **lot coverage** is 90% for **buildings**.

#### 20.37.7 Yards & Setbacks

- 1. Minimum **setbacks** shall be:
  - a) from a **road**, measured to the **lot line**, 6.0 m., except that a **road setback** may be reduced to:
    - i) 4.0 m., in the case of No. 3 Road, for portions of a **building** above **finished site grade**, as specified in a Development Permit approved by the **City**;
    - ii) 3.0 m., in the case of Cook Road, for portions of a **building** above **finished site grade**, as specified in a Development Permit approved by the **City**: and
    - iii) 0.0 m. for portions of a **building** below **finished site grade**, as specified in a Development Permit approved by the **City**;
  - b) from a **side lot line**, measured to the **lot line**, 5.5 m, except that a **side lot line setback** may be reduced to:
    - i) 4.0 m., for portions of a **building** above **finished site grade**, as specified in a Development Permit approved by the City; and
    - ii) 0.0 m., for portions of a **building** below **finished site grade**, as specified in a Development Permit approved by the City; and
  - c) from a **rear lot line**, measured to the **lot line**, 7.5 m, except that a **rear lot line setback** may be reduced to:
    - i) 6.0 m., for portions of a **building** above **finished site grade**, as specified in a Development Permit approved by the City; and
    - ii) 0.0 m., for portions of a **building** below **finished site grade**, as specified in a Development Permit approved by the City.
- 2. Notwithstanding Section 20.37.7.1, minimum **setbacks** for parts of a **building** directly adjacent to **City** land or land secured for public use via **right-of-way**, measured to a **lot line** or the boundary of the **right-of-way**, shall be:

- a) where a door provides **access**, 1.5 m or the depth of the door swing, whichever is greater.
- 3. Notwithstanding Sections 4.11 and 4.12, projections into setbacks for architectural features, cantilevered roofs, balconies, awnings, sunshades, canopies, privacy screens or similar building elements located 3.0 m or more above finished site grade may be increased, subject to the depth of the associated setback, to a maximum of:
  - a) for **road setbacks**, 2.5 m., as specified in a Development Permit approved by the **City**;
  - b) for **side lot line** and **rear lot line setbacks**, 2.0 m., as specified in a Development Permit approved by the **City**.

#### 20.37.8 Permitted Heights

- 1. The maximum **building height** for **principal buildings** is 47.0 m. geodetic.
- 2. The maximum **building height** for **accessory structures** is 12.0 m.

#### 20.37.9 Subdivision Provisions/Minimum Lot Size

1. The minimum **lot area** is 12,600 sq. m.

#### 20.37.10 Landscaping & Screening

 Landscaping and screening shall be provided according to the provisions of Section 6.0.

#### 20.37.11 On-Site Parking and Loading

- 1. On-site bicycle and **vehicle** parking and loading shall be provided according to the standards set out in Section 7.0.
- 2. Notwithstanding Section 20.37.11.1, the minimum number of required bicycle **parking spaces** shall be:
  - a) for Class 1, for the combined **child care** and community services **uses**, 15 spaces;
  - b) for Class 2, for general retail, convenience retail, restaurant, office, child care, community services and other non-residential uses, calculated as 0.1 spaces per 100.0 sq. m. of floor area; and
  - c) for Class 2, for residential **uses**, calculated as 0.1 spaces per **dwelling unit**.
- 3. Notwithstanding Section 20.37.11.1, the minimum number of **vehicle parking spaces** for the combined **child care** and community services **uses** shall be:

- a) for the child care staff, 11 parking spaces;
- b) for the child care drop-off/pick-up, 9 parking spaces;
- c) for the community services staff, 11 parking spaces; and
- d) for the community services clients, 10 parking spaces.
- 4. Notwithstanding Section 20.37.11.1, the minimum number of **vehicle parking spaces** required for after-hours community use of the ECD Hub facility shall be 8 **parking spaces** and the **parking spaces** may be provided within the shared non-residential/visitor parking area.
- 5. Notwithstanding Section 20.37.11.1, the **vehicle parking spaces** for **child care** pick-up/drop-off shall be no smaller than 2.65 m. wide by 5.5 m. long.
- 6. Notwithstanding Section 20.37.11.1, the minimum number of truck **loading spaces** is:
  - a) no large size truck **loading spaces** for non-residential **uses** and residential **uses**:
  - b) 6.0 medium size truck **loading spaces** shared between all non-residential and residential **uses**; and
  - c) 1.0 small size van **loading space** with associated marshalling area, to be no less than 5.0 m. wide x 11.0 m. long, for the exclusive and shared use of the **child care** and community services **uses**.

#### 20.37.12 Other Regulations

- 1. Signage must comply with the City of Richmond's *Sign Bylaw 5560*, as it applies to **development** in the Downtown Commercial (CDT1) **zone**.
- 2. **Telecommunication antenna** must be located a minimum 20.0 m above the ground (i.e., on a roof of a **building**).
- 3. In addition to the regulations listed above, the General Development Regulations in Section 4.0 and the Specific Use Regulations in Section 5.0 apply."
- 2. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning Bylaw 8500, is amended by repealing the existing zoning designation of the following parcel and by designating it HIGH DENSITY MIXED USE AND ECD HUB (ZMU37) BRIGHOUSE VILLAGE (CITY CENTRE):
  - P.I.D. 000-586-919 LOT 169 SECTION 9 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN 41547

- 3. That the Mayor and Clerk are hereby authorized to execute any documents necessary to discharge "Land Use Contract 062" ("Techram Securities Ltd. Land Use Contract Bylaw No. 3366, 1977" (RD50359)) from the following area:
  - P.I.D. 000-586-919 LOT 169 SECTION 9 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN 41547

4. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9859".

FIRST READING	JUN 1 1 2018	CITY OF RICHMOND
PUBLIC HEARING		APPROVED by
SECOND READING		APPROVED by Director or Solicitor
THIRD READING		_ JA
OTHER CONDITIONS SATISFIED		
ADOPTED		· .
MAYOR	CORPORATE OFFICE	



# **Report to Committee**

To: Planning Committee

Date: June 4, 2018

From: Wayne Craig

Re:

File: RZ 17-765420

Director, Development

Birottor, Bottoropinon

Application by Onni 7811 Alderbridge Holding Corp Inc. for Rezoning at

7811 Alderbridge Way from the "Industrial Retail (IR1)" Zone to the

"Residential/Limited Commercial (RCL2)" Zone

#### Staff Recommendation

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9867, for the rezoning of 7811 Alderbridge Way from the "Industrial Retail (IR1)" zone to the "Residential/Limited Commercial (RCL2)" zone, be introduced and given first reading.

Wayne Craig

Director, Development

(604-247-4625)

WC:sb Att. 7

	REPORT CONCURRE	ENCE
ROUTED TO:	Concurrence	CONCURRENCE OF GENERAL MANAGER
Real Estate Services Affordable Housing Parks Services Engineering Sustainability Transportation	S S S S S	_ De Erreg

#### **Staff Report**

#### Origin

Onni 7811 Alderbridge Holding Corp. Inc. has applied to the City of Richmond for permission to rezone 7811 Alderbridge Way from the "Industrial Retail (IR1)" zone to the "Residential/Limited Commercial (RCL2)" zone (Attachment 1) in order to permit the development of a mixed-use mid-rise residential and limited commercial development on a property in the City Centre's Lansdowne Village.

Key components of the proposal (Attachment 2) include:

- One five-storey mixed-use building; with a ground floor corner commercial retail unit, indoor amenity space, including two guest suites for the residents and five levels of apartments.
- One six-storey residential building with six levels of apartments.
- A common shared one and a half level parking structure that is partially lowered into the site.
- A maximum floor area ratio (FAR) of 2.0 and a maximum height of 25 m.
- A total floor area of approximately 30,741 m<sup>2</sup> (330,895 ft<sup>2</sup>) comprised of approximately:
  - o 280 m<sup>2</sup> (3,014 ft<sup>2</sup>) of commercial space, which would not be permitted to be used for commercial indoor recreation.
  - o 30,461 m<sup>2</sup> (327,882 ft<sup>2</sup>) of residential space.
- Approximately 365 dwelling units, including:
  - o Approximately 343 residential units.

DOM:

- o 22 affordable housing low end market rental residential units.
- LEED Silver equivalent design and connection to the Oval district energy utility (DEU) system.
- Extension of Minoru Boulevard, widening of Alderbridge Way and widening of River Parkway across the site frontages.
- Provision of public rights-of-passage (PROP) statutory rights-of-way (SRW) for a pedestrian linkage along the west edge of the site, and a pedestrian greenway through the middle of site connecting to the proposed Minoru Boulevard extension and connecting to Cedarbridge Way through an existing greenway in the Phase 1 development.

This application includes the proposed sale and acquisition of the City's surplus lane lands along the west edge of the site. Additional information on the land acquisition is contained in the "Financial Impact" section of this Staff Report.

The owner is required to enter into a Servicing Agreement for the design and construction of engineering and transportation infrastructure and frontage improvement works.

#### **Findings of Fact**

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

## **Existing Site and Development**

Existing Site and Development: The subject site is located in Lansdowne Village of the City Centre (Attachment 4) on the north side of Alderbridge Way at Minoru Boulevard. It is comprised of one lot and the abutting surplus City lane along the west edge of the site and currently is developed with two single-storey industrial retail warehouse buildings and surface parking.

Existing Housing Profile: The subject properties were not previously developed with residential uses.

#### **Surrounding Development**

Surrounding development includes:

To the North: Across the proposed River Parkway extension, an existing two-storey industrial business park development on a site owned by the City for future park development and zoned "Industrial Business Park (IB1)".

To the East: Across the proposed Minoru Boulevard extension, an existing industrial retail development on a site zoned "Industrial Retail (IR1)".

To the South: Across Alderbridge Way, is an existing industrial retail development with vehicle repair and child care uses on a site zoned "Industrial Retail (IR1)".

To the West: Phase 1 of the subject RIVA development, consisting of four six-storey residential apartment buildings, is under construction (DP 12-615424) on a site zoned "High Density Low Rise Apartments (RAH2)".

#### **Related Policies & Studies**

#### Official Community Plan/City Centre Area Plan

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

City Centre Area Plan: The City Centre Area Plan (CCAP) Lansdowne Village Specific Land Use Map designates the site as "Urban Centre T5 (25m)" (Attachment 4) and allows for a maximum average net development site density of 2.0 FAR. The proposed rezoning is consistent with this designation. The density is spread across both proposed buildings.

## Other Policies, Strategies & Bylaws

Industrial Land Use History: Due to the previous industrial uses on the subject site, confirmation that the site has achieved approval from the Ministry of Environment and Climate Change Strategy for residential uses is required prior to rezoning approval. As the City will be receiving land dedication for road purposes, a legal agreement and securities may also be required depending on the outcome of the detailed site investigation process and any site remediation works sequence.

Floodplain Management Implementation Strategy: The proposed redevelopment must meet the requirements of the Richmond Flood Plain Designation and Protection Bylaw 8204 for Area "A". Registration of a flood indemnity covenant on Title is required prior to final adoption of the rezoning bylaw.

Aircraft Noise Sensitive Development Policy: The proposed development is located in Area 2 (aircraft noise sensitive uses may be considered) on the OCP Aircraft Noise Sensitive Development Map. The proposed rezoning is consistent with this Policy. Registration of an aircraft noise covenant on Title is required prior to rezoning adoption.

CCAP Noise and Interface Management Policies: The proposed development must address additional OCP noise and interface management policies; specifically ambient noise and commercial noise and other potential impacts of developing within the City Centre.

The proposed commercial unit will be within 30 m of proposed residential uses on the subject lands and phase 1 of the development on the adjacent site to the west. Registration of a noise covenant on Title is required before final adoption of the rezoning bylaw; to ensure any noise emanating from the commercial uses and mechanical equipment does not exceed noise levels allowed in the City's Noise Bylaw.

The development site is surrounded by properties with development potential subject to the City Centre Area Plan. Registration of a legal agreement on Title is required before final adoption of the rezoning bylaw, stipulating that the commercial development is subject to potential impacts due to other development that may be approved within the City Centre, including without limitation, loss of views in any direction, increased shading, increased overlook and reduced privacy, increased ambient noise and increased levels of night-time ambient light, and requiring that the owner provide written notification of this through the disclosure statement to all initial purchasers, and erect signage in the initial sales centre advising purchasers of the potential for these impacts.

#### **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**

#### Proposed Zoning Bylaw Amendment

The proposed commercial and residential uses are permitted by the CCAP. The proposed rezoning is consistent with the Lansdowne Village Specific Land Use Map, Urban Centre T5

(25 m) transect. The standard "Residential/Limited Commercial (RCL2)" zone is proposed for the development. The "Residential/Limited Commercial (RCL2)" zone includes provisions regulating the permitted residential and secondary permitted commercial land uses, maximum 2.0 floor area ratio (FAR) density, maximum 25 m building height, minimum net development site size, siting parameters and parking. Rezoning considerations are provided (Attachment 5).

The proposed ground commercial unit is designed to provide new services for the neighbourhood. Although the "Residential/Limited Commercial (RCL2)" zone allows for commercial indoor recreation use, a registered legal agreement will prohibit commercial indoor recreation use on the subject site as a consideration of rezoning.

#### Infrastructure Improvements

The proposed rezoning will contribute to utility, transportation and park infrastructure improvements as described below. Additional details are provided in the Servicing Agreement section of the rezoning considerations (Attachment 5). Detailed design will take place through the Servicing Agreement process.

#### **Engineering**

City Utilities: The owner is required to enter into a Servicing Agreement for the design and construction of a variety of water, storm water drainage and sanitary sewer frontage works, including:

- Water main servicing across Minoru Boulevard frontage and upgrade across Alderbridge Way frontage.
- Storm sewer servicing across Minoru Boulevard frontage and upgrade across Alderbridge Way frontage.
- Sanitary sewer upgrades across Alderbridge Way and River Parkway frontages.
- Associated utilities statutory rights-of-way (ROW).

14

• Various frontage upgrades, including street lighting, and ditch infill to provide for pedestrian improvements and works transitioning to the east of the subject lands.

Third Party Utilities: Relocation and undergrounding of private utility lines and location of private utility equipment on-site are required.

### Transportation

City Transportation Network: The City Centre Area Plan (CCAP) encourages completion and enhancement of the City street network. The City, as part of its 2018 Capital and Construction Program, will construct an interim roadway of approximately the equivalent of three traffic lanes along the north side of River Parkway from the current westerly limit of this roadway to Cambie Road. To facilitate this project, the proposed rezoning includes contributions of \$216,000.00 towards the interim north edge treatment and \$110,000 towards the new water main installation along the River Parkway frontage of the subject lands.

*River Parkway*: Improvements will include road dedication and widening with ultimate frontage improvements and ultimate five-lane curb-to-curb cross-section across frontage to 30 m beyond the Minoru Boulevard intersection through a required Servicing Agreement. Required works

also include traffic signal and illuminated street name sign intersection improvements at Minoru Boulevard, street trees, off-road bike lane, banner poles, street furnishings and tapered road transition to meet the roadway to the east. The required works will coordinate with the City works, providing the ultimate River Parkway cross-section from property line to the north curb across the River Parkway frontage of the proposed site, and tying back into the interim roadway east of the proposed Minoru Boulevard intersection. The ultimate treatment of the remaining north boulevard will be determined in coordination with City park design in the future.

Alderbridge Way Frontage: Improvements will include road dedication and widening with ultimate frontage improvements and interim four-lane curb-to-curb cross-section across frontage. Works also include interim intersection improvements at Minoru Boulevard. The remaining works will be secured as part of future development.

Minoru Boulevard Frontage: Improvements will include road dedication and extension from River Parkway to Alderbridge Way with ultimate frontage improvements and interim three-lane curb-to-curb cross-section. Works also include an interim retaining wall with safety barrier, additional landscaping and sidewalk width for Parks greenway leading to the future City park along River Parkway. The remaining works will be secured as part of future development.

*Private Roads*: The owner is required to provide public-rights-of-passage (PROP) statutory rights-of-way (ROW) at the north and south ends of the west property line to provide vehicle access to and pedestrian linkage between Alderbridge Way and River Parkway.

Pedestrian Linkages: The owner is required to provide a public-rights-of-passage (PROP) statutory right-of-way (ROW) to extend the mid-block pedestrian greenway from the west edge of the site to Minoru Boulevard and to provide a mid-block pedestrian linkage along the west edge from Alderbridge Way to River Parkway. Both linkages will provide lighted pedestrian paths, landscaping and way finding signage. The east-west greenway will also provide seating opportunities and a children's play area. The detailed design will be the subject of further review as part of the Development Permit process.

Where eligible, Development Cost Charge (DCC) credits will be applied to the required off-site improvements. All other improvements will be funded by the owner. Permanent road and traffic signal works along River Parkway, Alderbridge Way and Minoru Boulevard are eligible for DCC credits. Land dedication along River Parkway and Minoru Boulevard, but not the equivalent area to City's surplus lane acquisition, are eligible for DCC credits. Road works and land dedication DCC credits exclude all temporary works and any area where the frontage works exceed CCAP standard road cross-section. DCC credits will be the subject of further review as part of the Servicing Agreement and Building Permit processes.

Preliminary functional road drawings demonstrating the proposed road improvements have been provided (Attachment 6). Detailed design development will occur through the Servicing Agreement process.

#### **Amenity Contributions**

The CCAP Implementation Strategy includes density bonusing and other measures to support the development of community amenities. The proposed rezoning includes contributions to community amenities as outlined below. Staff note that all contributions are based on rates at the time of writing and will be subject to indexing adjustments, should the rezoning not be adopted within the relevant applicable time periods.

Community Planning: The proposed rezoning is subject to a community planning implementation contribution for future community planning. In accordance with the CCAP Implementation Strategy, a contribution will be secured before rezoning adoption (\$92,686.91 calculated using the proposed maximum floor area [331,024.69 ft<sup>2</sup> x \$0.28 /ft<sup>2</sup>]).

Public Art: The proposed development is subject to the Richmond Public Art Policy. As the project is of a significant size and there are opportunities for locating Public Art on the site, the applicant is proposing to install Public Art in the development through the Public Art Program process. The contribution of installed Public Art will be secured with a legal agreement registered on Title prior to final adoption of the rezoning bylaw. The minimum value of installed Public Art or cash-in-lieu is based on the current contribution rate (\$265,946.46 calculated using the proposed commercial floor area [3,014 ft² x \$0.45 /ft²] and residential floor area [311,283 ft² x \$0.85 /ft²], excluding affordable housing floor area).

Affordable Housing: The CCAP Implementation Strategy, in conjunction with the Affordable Housing Strategy, provides for density bonusing to achieve affordable housing in residential and mixed-use developments. The rezoning application for the proposed development was received prior to July 24, 2017 and is subject to grandfathering of the five percent affordable housing contribution rate. A total of 22 Low End Market Rental Housing (LEMR) units, with a combined floor area of 1,554 m<sup>2</sup> (16,728 ft<sup>2</sup>), are proposed and allocated as follows.

#### AFFORDABLE HOUSING SUMMARY

	Aff	ordable Housing Strategy	Requirements	Project 1	Targets (3)
Unit Type	Minimum Unit Sizes	Current LEMR Maximum Rents (1)(2)	Total Maximum Household Income (1)(2)	Unit Mix	# of Units (3)
1-Bedroom	50 m <sup>2</sup> (535 ft <sup>2</sup> )	\$975	\$38,250 or less	45.5%	10
2-Bedroom	69 m <sup>2</sup> (741 ft <sup>2</sup> )	\$1,218	\$46,800 or less	31.8%	7
3-Bedroom	91 m <sup>2</sup> (980 ft <sup>2</sup> )	\$1,480	\$58,050 or less	22.7%	5
TOTAL	N/A	N/A	N/A	100%	22

- (1) Denotes 2017 amounts adopted by Council on July 24, 2017.
- (2) Subject to Council approval, total annual household incomes and maximum monthly rents may be increased annually by the Consumer Price Index.
- (3) 50% 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 the following terms: tenant access to indoor and outdoor common amenity areas, and, provision of affordable housing parking spaces at no additional charge.

#### Sustainability

District Energy Utility (DEU): The proposed mixed-use development will be designed to utilize energy from the Oval District Energy Utility (DEU). Connection to the City's DEU system will be secured with a legal agreement registered on Title prior to final adoption of the rezoning bylaw.

Sustainability Rating System: The proposed development is expected to achieve Leadership in Energy and Environmental Design (LEED) v4 Silver equivalency. The applicant will provide a sustainability strategy with preliminary checklist for review through the Development Permit process and will incorporate the recommendations into the development and Building Permit drawings, where relevant.

#### Site Access, Parking and Loading

Site Access: Vehicular access will be provided to the proposed north building via a driveway connecting to River Parkway and restricted to right-in/right-out only. Vehicular access will be provided to the proposed south building via a driveway connecting to Alderbridge Way and restricted to right-in/right-out only. Proposed truck access and loading is consistent with the provisions of the Richmond Zoning Bylaw. On-site design will be the subject of further review during the Development Permit process.

Vehicle Parking: Transportation Department staff generally support the parking proposal, which includes a total of 516 parking on-site parking spaces contained in a two level parking structure and will be the subject of further review during the Development Permit process. The proposed parking rate is consistent with the parking provisions of the Richmond Zoning Bylaw (City Centre Zone 2). The rezoning includes registration of a legal agreement requiring that every pair of tandem parking spaces be assigned to the same dwelling unit and prohibiting the assignment of shared visitor/commercial parking spaces.

*Electric Vehicle Charging*: Consistent with Council Policy, effective on April 1, 2018, 100% of the residential parking spaces (excluding visitor spaces) are to be provided with an energized outlet for electrical vehicle charging.

*Truck Loading*: Four medium size loading spaces will be provided for the proposed development, which is consistent with the loading provisions of the Richmond Zoning Bylaw.

Bicycle Parking: The proposed bicycle parking rates are consistent with the bicycle provisions of the Richmond Zoning Bylaw. The detailed design of secure class 1 storage and short-term class 2 bicycle racks will be the subject of further review during the Development Permit process. The rezoning includes registration of a legal agreement prohibiting conversion of bicycle storage area into general storage space.

#### Tree Retention and Replacement

The applicant has submitted a Certified Arborist's Report and Tree Survey (Attachment 7); which identifies on-site and off-site bylaw-sized trees that may be affected by the proposed development.

On-site Trees: There are six existing trees on the subject site (one Weeping Silver Birch and five Douglas Fir trees), which are all considered to be in fair condition, however are all recommended for removal for the following reasons: the Birch tree will be in conflict with the development; and the Douglas Fir trees will be in conflict with required River Parkway road works. There are no adjacent trees on the neighbouring properties.

Off-site Trees: There are three existing trees on the City's River Parkway right-of-way (Cherry, Hawthorn, and Black Cottonwood trees), which are all considered to be in fair condition and will all be in conflict with required River Parkway road works. There are no City street trees in the Alderbridge Way frontage.

The City's Tree Preservation Coordinator has reviewed the on-site trees and supports the Arborist's recommendation to remove the trees. These trees are required to be removed and replaced. Tree replacement will be addressed as part of the required Development Permit and Servicing Agreement processes.

#### **Development Form and Character**

The City Centre Area Plan (CCAP) includes a variety of policies intended to shape development to be liveable, functional and complementary to the surrounding public and private realm. Those policies most applicable to the development concept at the rezoning stage are reviewed below.

Massing Strategy: The massing of the proposed development is generally consistent with the urban design objectives of the CCAP mixed-use mid-rise residential and limited commercial Sub-Area B.2, and is arranged to address the site's configuration, second phase location (abutting the phase one site), urban design opportunities (three road frontages), and combination of uses (residential and limited commercial). There is one five-storey mixed-use building, with a small commercial unit anchoring the corner of Alderbridge Way and Minoru Boulevard. There is also one six-storey residential building fronting Minoru Boulevard and River Parkway. The two buildings are c-shaped around internal west facing courtyards, separated by a mid-block publically-accessible greenway, and sit on top of a common one and a half storey height parking podium.

Adjacencies: The relationship of the proposed development to adjacent public and private properties is assessed with the intent that negative impacts are reduced and positive ones enhanced. The subject site is surrounded on three sides by Alderbridge Way, Minoru Boulevard and River Parkway, which mitigates potential impacts on both the surrounding public realm and surrounding private development. The site also abuts an adjacent site, which is phase one of the same development, with continuing construction underway (DP 12-615424).

Development Permit: Through the required Development Permit Application process, the form and character of the proposed development will be assessed against the expectations of the Development Permit Guidelines, City bylaws and policies. The proposal will be expected to respond to comments arising from Council consideration of the rezoning, as well as, from staff, Advisory Design Panel and Development Permit Panel review. The detailed building and

landscape design will be the subject of further review during the Development Permit review process, including the following features.

- Form and Character: The design will be further detailed to provide massing, height, roofline and façade expression, appropriate grade transition and active street frontages.
- Parking and Loading: The design and draft functional plan, including truck manoeuvring, will be further detailed.
- Pedestrian Linkages: The design of the east-west pedestrian greenway and north-south pedestrian linkage will be further detailed.
- Waste Management: The waste management plan, including storage and collection of garbage, recycling and organic waste will be further detailed.
- Crime Prevention through Environmental Design (CPTED): The City has adopted
  policies intended to minimize opportunities for crime and promote a sense of security. A
  CPTED strategy and plans demonstrating natural access, natural surveillance, defensible
  space and maintenance measures will be reviewed.
- Accessibility: The proposed development will be required to provide good site and building accessibility. Design implementation will be reviewed.
- Sustainability: Integration of sustainability features into the site, building, and landscape design will be reviewed.
- Amenity Space: The design of indoor and outdoor amenity space for the residents will be reviewed. The proposed amenities include the provision of two guest suites, which are to be located adjacent to the other amenity space, are not to include kitchen facilities and will be secured by legal agreement.

#### Financial Impact

To facilitate the sale of surplus City lands (lane) and the subject rezoning application proposal, the applicant proposes to acquire the surplus City lane allowance adjacent to the subject site for consolidation and inclusion in the applicant's development site (Attachment 2). The total approximate area of City lands proposed to be included in the development site is 1,052.5 m<sup>2</sup> (11,329 ft<sup>2</sup>). As identified in the attached rezoning considerations (Attachment 5), the applicant is required to enter into a purchase and sales agreement with the City for the purchase of the lands, which is to be based on the business terms approved by Council. The primary business terms of the purchase and sales agreement, and lane closure bylaw, will be brought forward to Council in a separate report from the Senior Manager, Real Estate Services.

As a result of the proposed development, the City will take ownership of owner contributed assets; such as road works, waterworks, storm sewers, sanitary sewers, street lights, street trees and traffic signals. The anticipated Operating Budget Impact (OBI) for the ongoing maintenance of these assets is estimated to be \$41,926.17. This will be considered as part of the 2020 Operating Budget.

#### Conclusion

The application by Onni 7811 Alderbridge Holding Corp. Inc. to rezone the property at 7811 Alderbridge Way in order to develop a medium-density development with a two building mixed-use development is consistent with City objectives as set out in the Official Community Plan (OCP), City Centre Area Plan (CCAP) and other City policies, strategies and bylaws. The proposed commercial use will activate the street frontages at the corner of Alderbridge Way and Minoru Boulevard and will support future development in Lansdowne Village. The built form of the mid-rise buildings will provide a strong identity for the location, and will provide a transition to the future City Park to the north and future development to the east, and public realm enhancements will improve the pedestrian experience for this emerging pedestrian-oriented mixed-use precinct. The provision of Affordable Housing units, engineering and transportation improvements, along with voluntary contributions for Public Art and community planning, will help to address a variety of community development needs.

It is recommended that Richmond Zoning Bylaw 8500, Amendment Bylaw 9867 be introduced and given First Reading.

Sara Badyal, M. Arch, MCIP, RPP

Swa Budyal

Planner 2

(604-276-4282)

SB:blg

Attachment 1: Location Map and Aerial Photo

Attachment 2: Rezoning Conceptual Development Plans

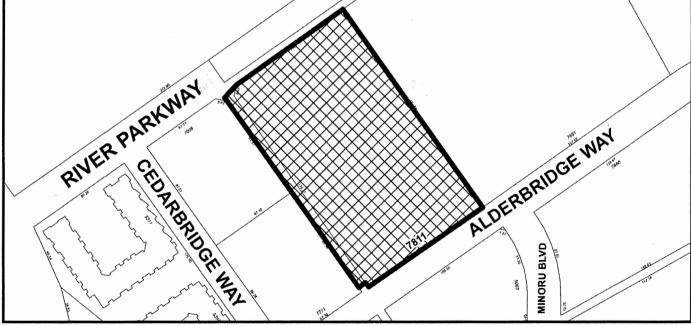
Attachment 3: Development Application Data

Attachment 4: City Centre Lansdowne Village Specific Land Use Map

Attachment 5: Rezoning Considerations Attachment 6: Draft Road Functional Plan Attachment 7: Arborist Report Tree Survey









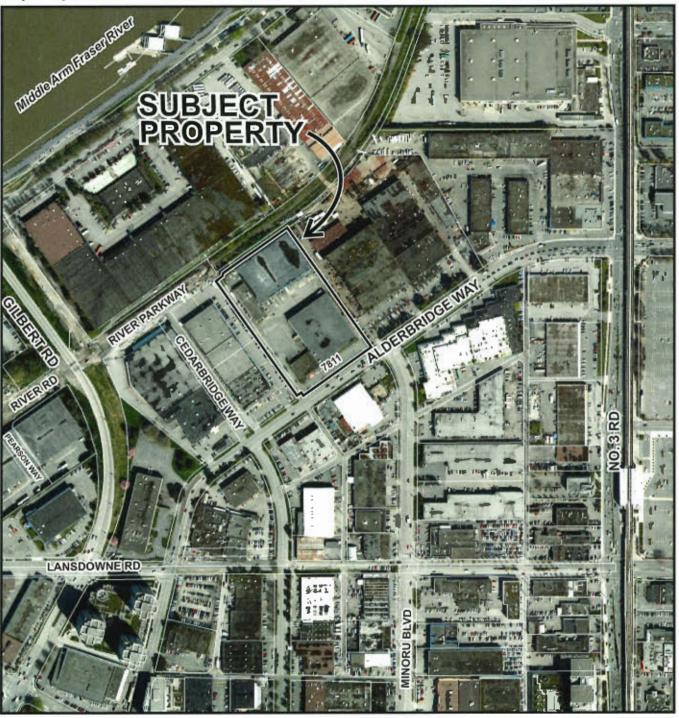
RZ 17-765420

Original Date: 03/14/17

Revision Date: 05/30/18

Note: Dimensions are in METRES







RZ 17-765420

Original Date: 03/15/17

Revision Date: 05/30/18

Note: Dimensions are in METRES

Attachment 2

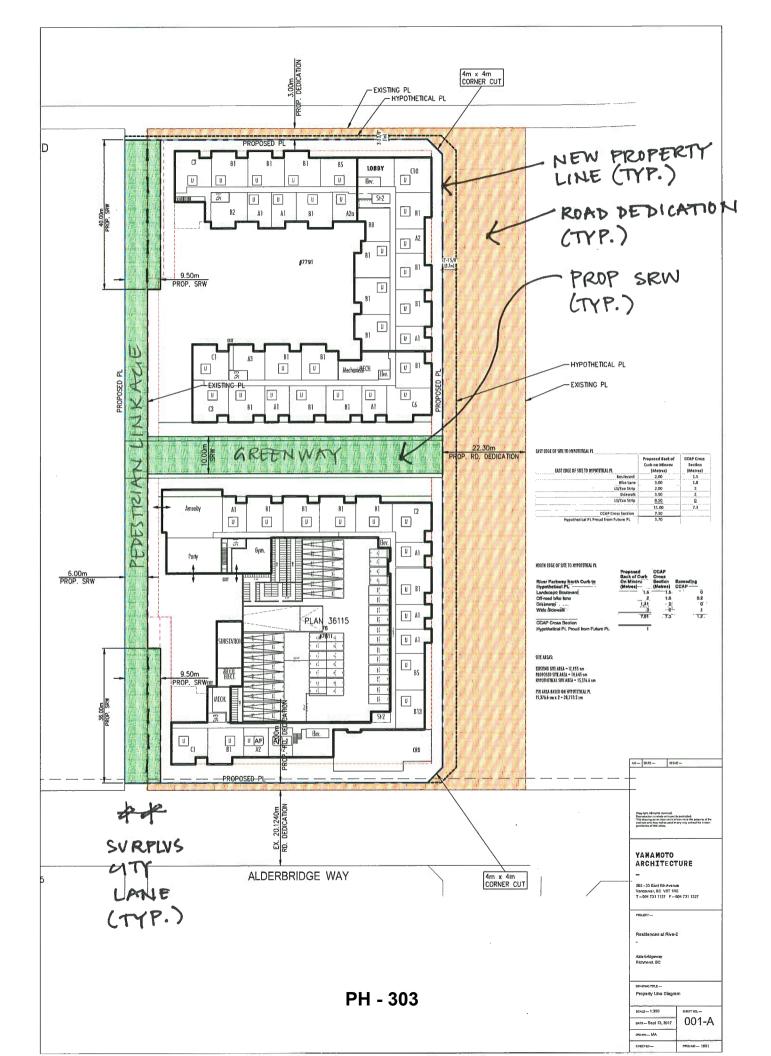
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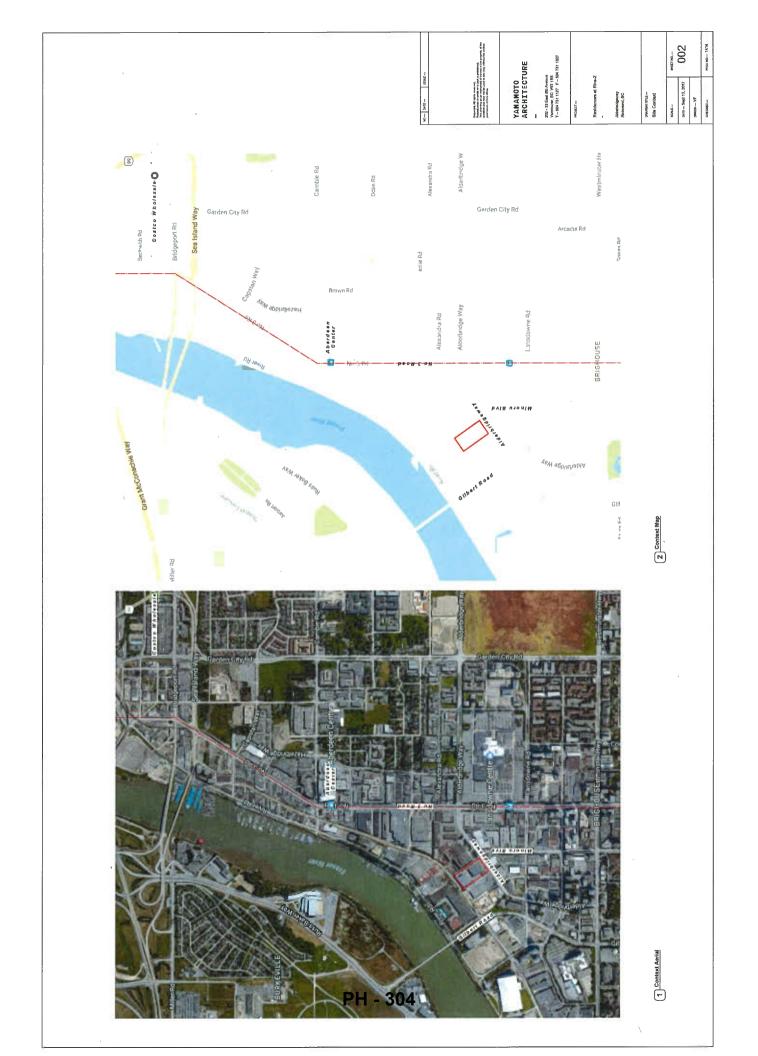
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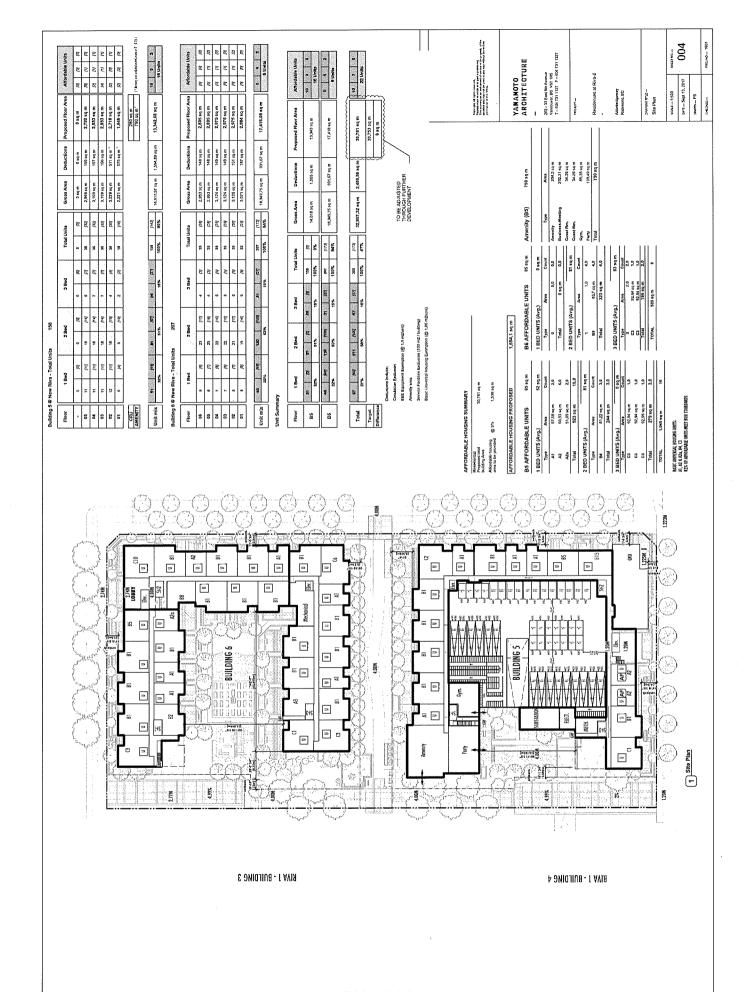


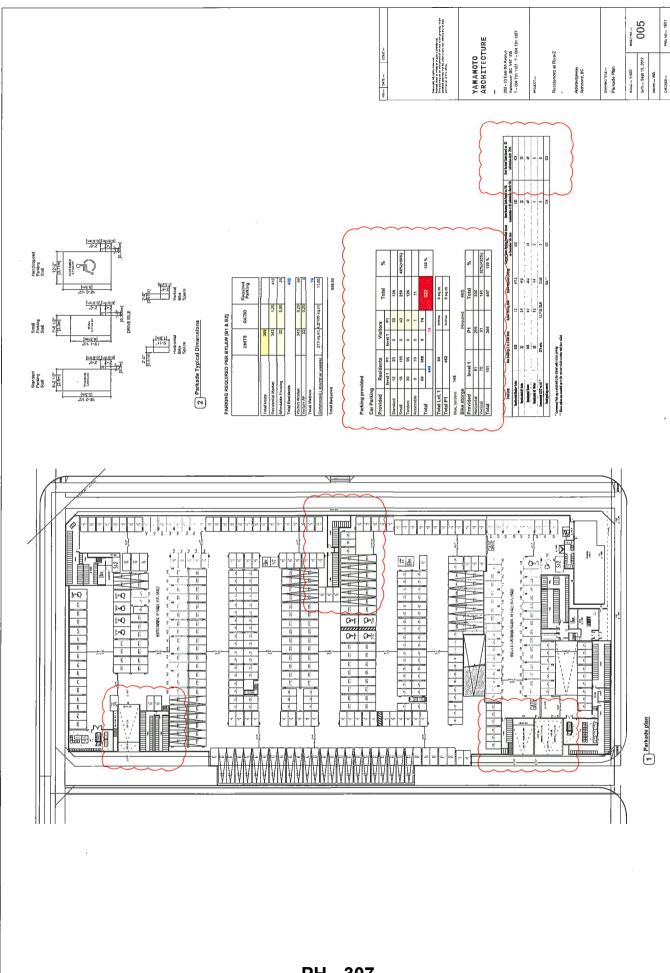
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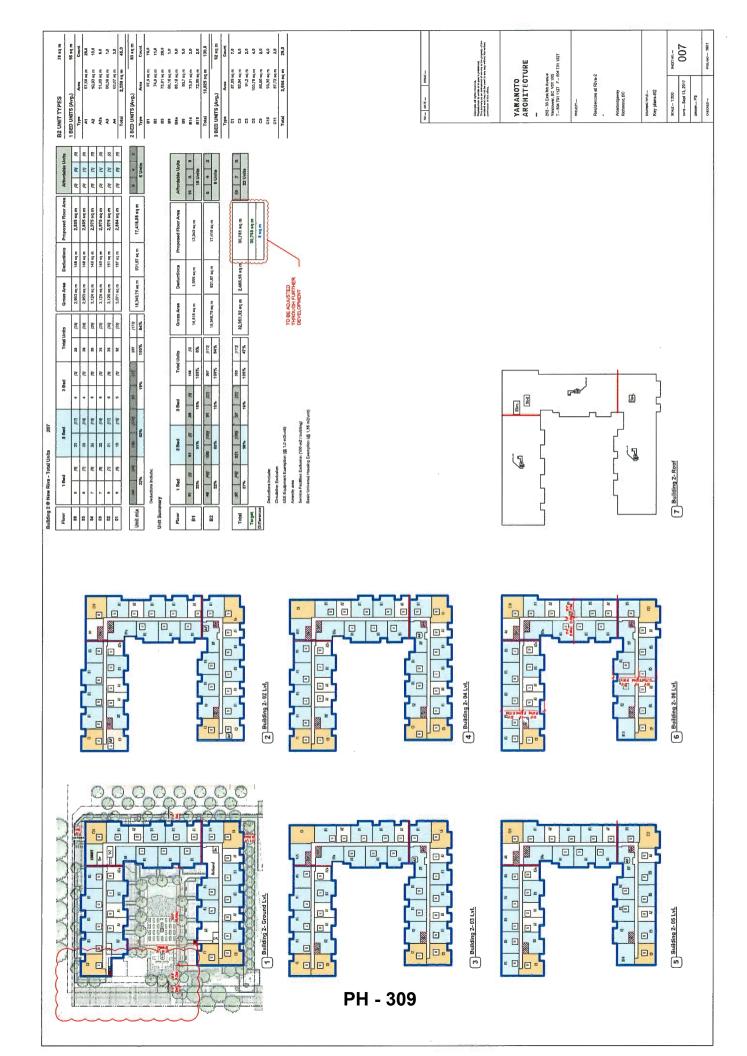


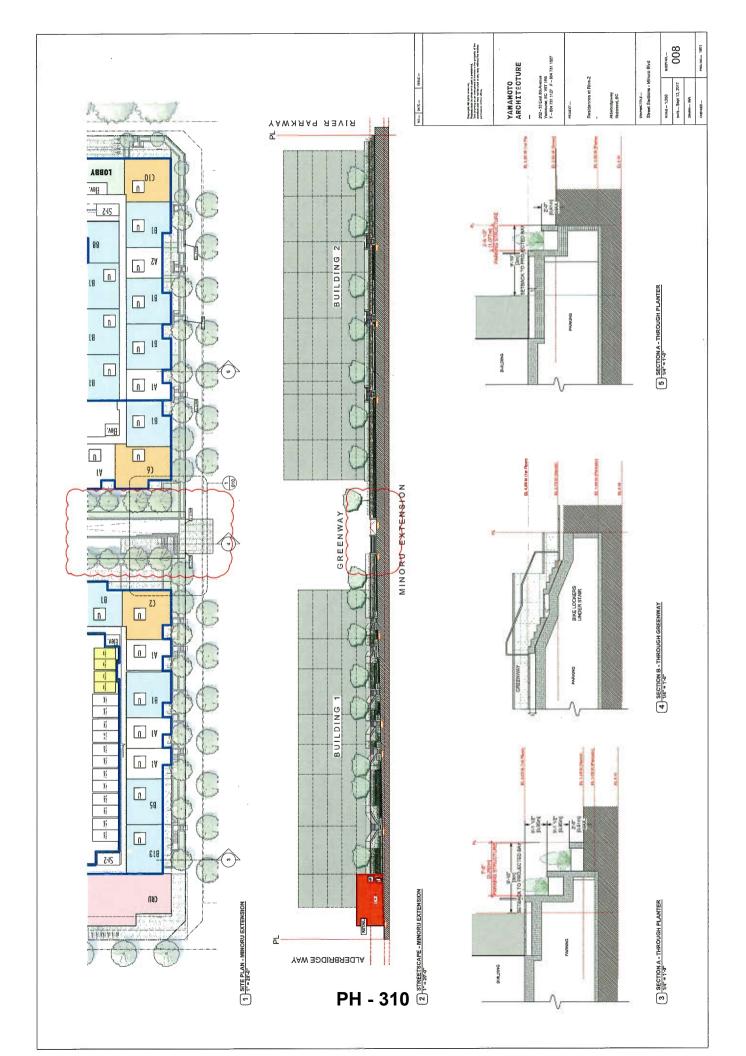






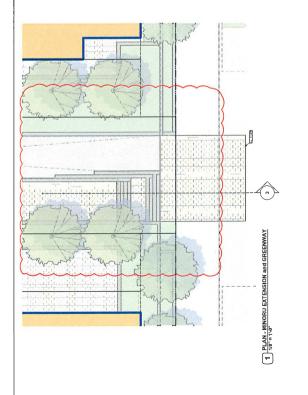


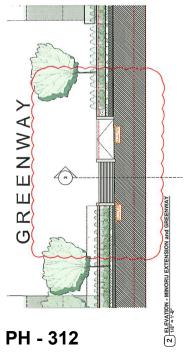


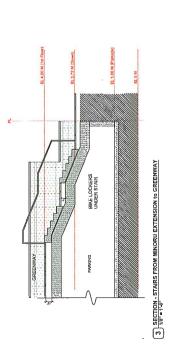


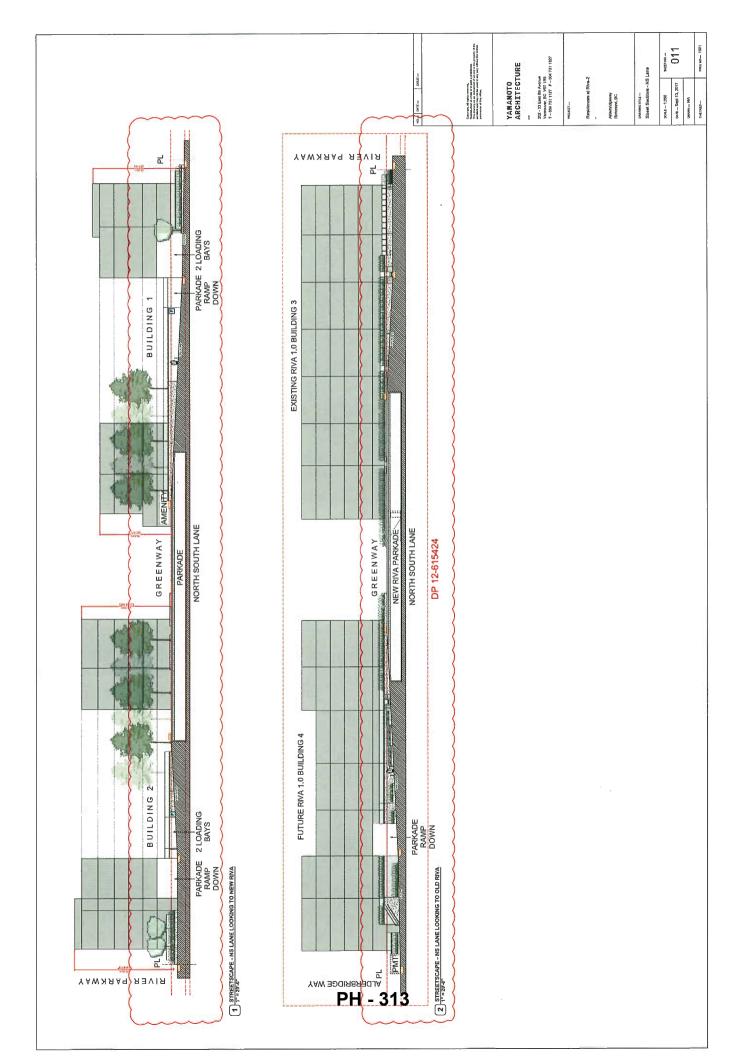


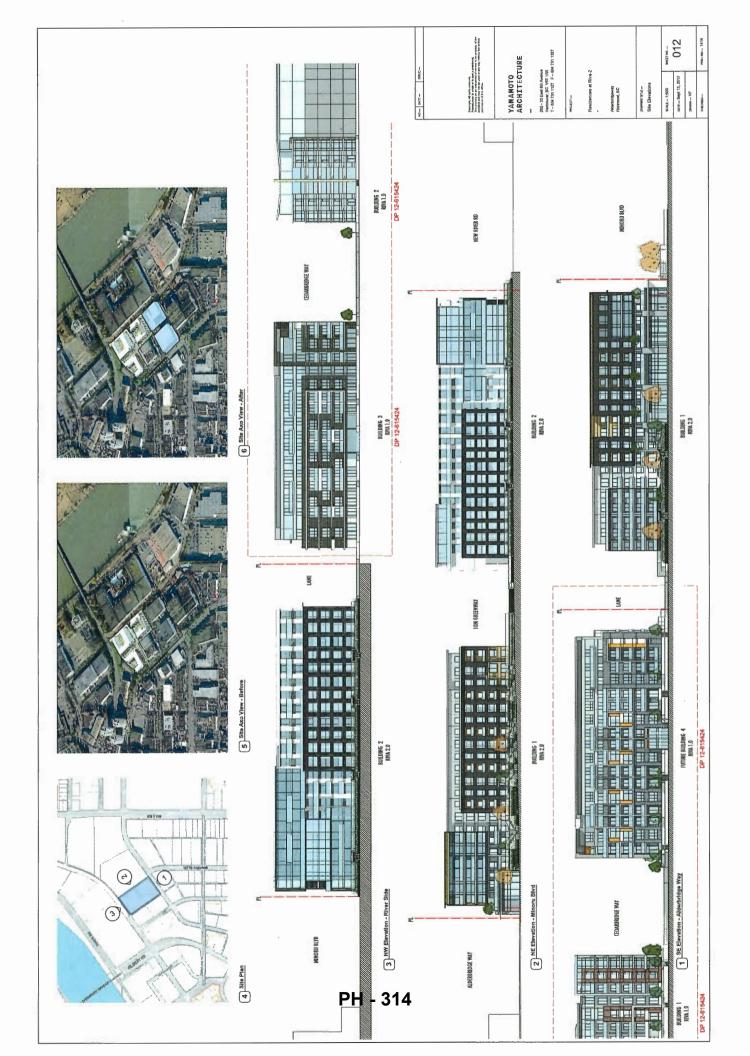
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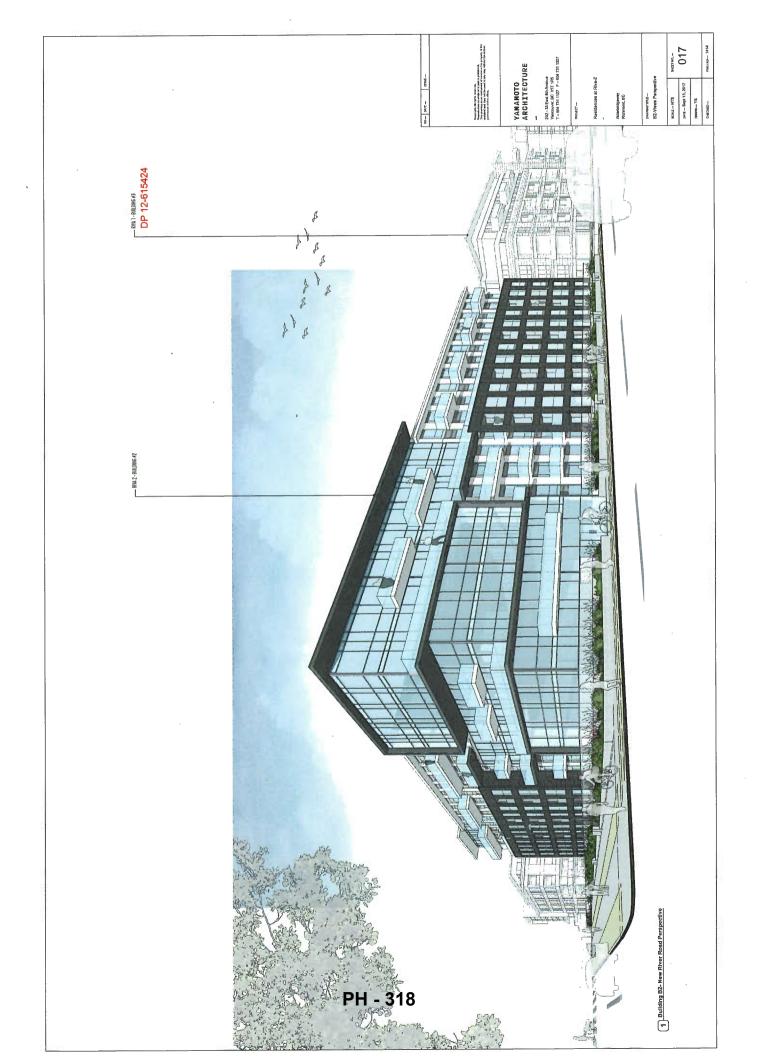
















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PUBLIC BIKE PARKING AND REST STATION





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LANDSCAPE AND PLANTING THEME

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URBAN AGRICULTURE IN COURTYARDS









PLANTINGS TO PROVIDE PRIVACY AND BUFFERING FOR PRIVATE PATIOS

CONNECTURE

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CONSIECT LANDSCAPE ARCHITECTURE INC., DOES NOT GUAVANTEE THE EASTERNEE, LOCATION.
AND ELEVATION OF UTILITIES AND / OR CONCEALED STRUCTURES AT THE PROJECT STE.

**RIVA 2-0** 

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NORTH BUILDING KEY PLAN

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SECTION 1

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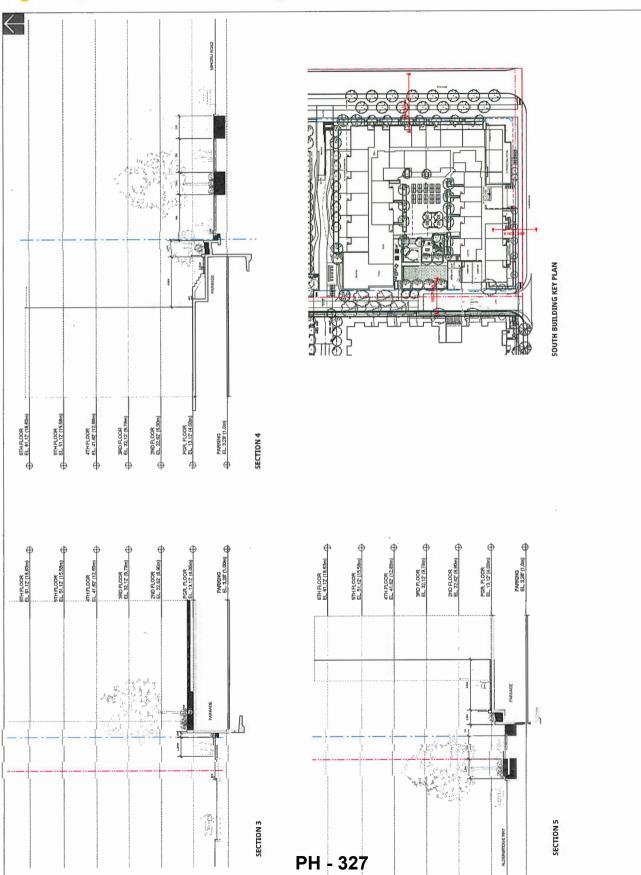
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SECTIONS: SOUTH BUILDING





# **Development Application Data Sheet**

2,190 m<sup>2</sup>, and

1,689 m² greenway corridor

None

**Development Applications Department** 

## RZ 17-765420

Address:

7811 Alderbridge Way

Applicant:

Onni 7811 Alderbridge Holding Corp Inc.

Planning Area(s): Lansd	owne Village				
	Existing		Propose	ed	
Owner:	Onni 7811 Alderbridge Holding Corp. Inc. No. BC1067884				
Site Size:	Existing lot: Surplus lane: Total:	1,05	34.8 m <sup>2</sup> 52.5 m <sup>2</sup> 37.3 m <sup>2</sup>	Net site: Road dedication: Total:	14,645.5 m <sup>2</sup> 4,341.8 m <sup>2</sup> 18,987.3 m <sup>2</sup>
Land Uses:	Light Industrial			Mixed-Use	
OCP Designation:	Mixed-Use			Complies	
Area Plan Designation:	Urban Centre T5 (25m), St	ub-area	B.2	Complies	
Zoning:	Industrial Retail (IR1)			Residential/Limited Comm	ercial (RCL2)
Number of Units:	2 Industrial buildings			1 CRU & 365 apartments, affordable housing units	including 22
	Bylaw Requireme	nt		Proposed	Variance
Floor Area Ratio:	Max. 2.0, including Al-	1	2.0		None permitted
Buildable Floor Area:*	Max. 30,753.2 m² (331,024.7 ft²)		Residential: 30,473.2 m² (328,010.8 ft²) Affordable Housing: 1,554 m² (16,727 ft²) Commercial: 280 m² (3,013.9 ft²)		None permitted
Lot Coverage:*	Max. 90%	Max. 90%		44%	None
Lot Size:	Min. 2,400 m²		-	14,645.5 m²	None
Lot Dimensions:	Width: Min. 40 m Depth: Min. 40 m		Width: 79.2 m Depth: 171.8 m		None
Setbacks:	Public Road: Min. 3 m Side (Interior): Min. 0 r			ublic Road: Min. 3 m ide (West): Min. 9 m	None
Height:	25 m	25 m		24 m	None
Off-street Parking Spaces:*	City Centre Zone 2: Resident: 412 Affordable Housing: 20 Visitor/Commercial: 73 Total: 506	Resident: 412 ordable Housing: 20 A itor/Commercial: 73 V		Resident: 422 ffordable Housing: 20 isitor/Commercial: 74 Total: 516	None
Accessible Parking Spaces:	Min. 2%			2%	None
Tandem Parking Spaces:	Resident: Max. 50%			Resident: 24%	None
Amenity Space – Indoor:	Min. 730 m²			790 m²	None
			0.400 2 4		

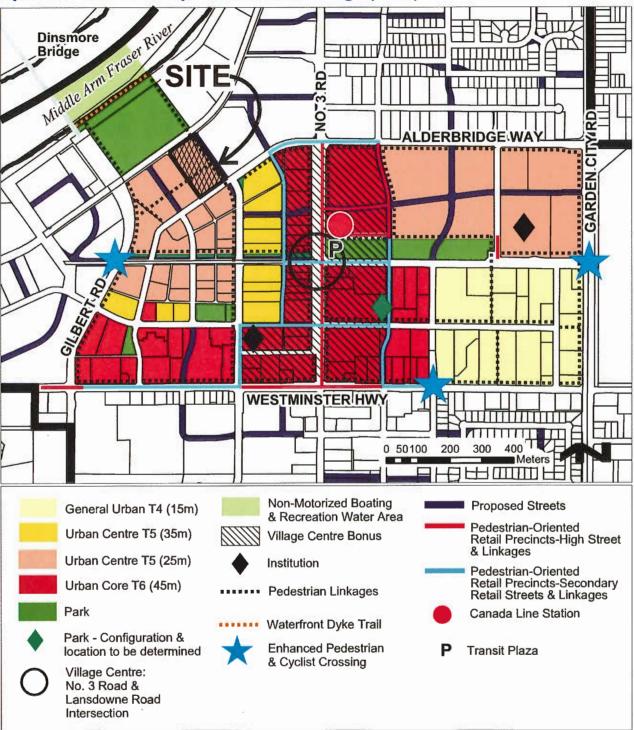
<sup>\*</sup> Preliminary estimates; building design to be refined and reviewed at DP stage for zoning bylaw compliance.

Min. 2,190 m<sup>2</sup>, and

Min. 1,464.55 m<sup>2</sup> (CCAP)

Amenity Space - Outdoor:

# Specific Land Use Map: Lansdowne Village (2031)



File No.: RZ 17-765420



# **Rezoning Considerations**

**Development Applications Department** 

Address: 7811 Alderbridge Way

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9867, the owner is required to complete the following:

- (Site Contamination General) Submission to the City of a contaminated sites legal instrument (e.g. Certificate of Compliance (CoC) or Final Site Determination (FSD) showing no contamination in the project footprint) or an alternative notification from the Ministry of Environment and Climate Change Strategy confirming to the City that the City may approve the zoning, development, subdivision, and demolition applications.
- 2. (Site Contamination Dedicated Land) Submission to the City of contaminated sites legal instrument (e.g. Certificate of Compliance (CoC) or Final Site Determination (FSD) showing no contamination in the footprint of the lands proposed to be dedicated to the City) from the Ministry of Environment and Climate Change Strategy or another form of assurances satisfactory to the City in the City's sole discretion to support the City accepting the proposed dedicated land. Such assurances would include, at minimum the registration of a legal agreement on the title to the subject development lands which provides that:
  - a) No occupancy of any building on the subject development lands will be granted by the City until such time that the owner has satisfied the City in the City's sole discretion that the lands to be dedicated to the City are in a satisfactory state from an environmental perspective and a contaminated sites legal instrument has been obtained from the Ministry of Environment and Climate Change Strategy for the proposed dedication lands.
  - b) The owner will release and indemnify the City from and against any and all claims or actions that may arise in connection with those portions of the lands being dedicated to the City being contaminated in whole or in part.
- 3. City acceptance of the owner's offer to provide the following voluntarily contributions and should the contributions not be provided within one year of the application bylaw receiving third reading, the contribution rates will be increased annually to reflect current contribution rates.
  - a) \$92,686.91 (i.e. \$0.28/ft<sup>2</sup> of buildable area, excluding affordable housing) to future City community planning studies, as set out in the City Centre Area Plan.
  - b) \$216,000.00 towards interim treatment along the north edge of River Parkway behind the curb (asphalt walkway, lock block retaining wall, guard rail and fill material).
  - c) \$110,000 towards the City's Watermain Replacement Reserve account for new water main installation along the subject lands' River Parkway frontage via the City's Capital Works, as per Subdivision and Development Bylaw No. 8751. Not required if the watermain servicing works are constructed by the owner through the SA.
- 4. Council approval of the lane closure bylaw for the adjacent surplus City lane lands located to the west of the property at 7811 Alderbridge Way. The owner shall be required to enter into a purchase and sales agreement with the City for the purchase of the Land, which is to be based on the business terms approved by Council. The primary business terms of the purchase and sales agreement will be brought forward for consideration by Council in a separate report from the Manager, Real Estate Services. All costs associated with the purchase and sales agreement shall be borne by the owner.
- 5. Consolidation of the subject lands into one development parcel.
- 6. Road dedication (which requires building demolition):
  - a) River Parkway 3.0 m wide road dedication along the entire north property line.
  - b) Alderbridge Way 2.0 m wide road dedication along the entire south property line.
  - c) Minoru Boulevard 22.3 m wide road dedication along the entire east property line, including 4 m x 4 m corner cuts at the northeast and southeast corners of the site.
- 7. Granting of the statutory rights-of-ways (SRWs) referred to below for the purposes of public rights-of-passage (PROP) to accommodate 24-hour-a-day access and use by the public, City, emergency services and bylaw enforcement activities. The owner is responsible for construction, maintenance and liability. The design of the SRW areas is to be included in the Development Permit (DP) design, is to include 24-hour-a-day lighting and way finding signage, and must be prepared in accordance with Phi en 30 ering practice with the objective to optimize public

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safety. The final areas of the SRWs will be determined based on the DP design, including detailed design of parkade access and truck turning movements, and confirmed by legal surveys prepared by a BC Land Surveyor to the satisfaction of the City. Following completion of the works, the owner is required to provide a certificate of inspection for the works, prepared and sealed by the appropriate registered professional in a form and content acceptable to the City, certifying that the works have been constructed and completed in accordance with the Development Permit design. Statutory Rights-of-Way:

- a) East-West Greenway: approximately 10 m wide mid-block SRW on top of the proposed parking structure, extending the existing greenway west of the site to Minoru Boulevard. The greenway is to accommodate the continuation of the approximately 3.5 m wide hard surface treatment for pedestrians and bicycles, seating, landscaping, related uses and features and a children's play area.
- b) North-South Private Roads: approximately 9.5 m by 48 m SRWs along the west property line abutting Alderbridge Way and River Parkway. The private roads are to: (i) accommodate a minimum 2.0 m wide paved north-south pedestrian links between Alderbridge Way and River Parkway for pedestrians, bicycles, related uses and features, with clear physical delineation from vehicle use areas; (ii) provide vehicle and truck access to adjacent property west of the site; and (lii) include 4 m x 4 m corner cuts at the lane/road intersections. The exact length of these SRWs will be determined based on detailed design of parkade access, truck turning movements, and legal surveys. The two corner cuts at the lane may be waived if the following conditions are met: vehicle access at both ends of the lane is restricted to right-in/right-out; pedestrian passages are not obstructed; and the requirements of the City of Richmond Traffic Bylaw 5870 Sightline Enforcement Policy are fully adhered to. The design of the SRW areas are to be included in the required Servicing Agreement, to the satisfaction of the Director of Transportation.
- c) North-South Pedestrian Link and Children's Play Area: approximately 6 m to 10.5 m wide SRW on top of the proposed parking structure and along the west property line between the northerly and southerly north-south private road SRW areas, providing a pedestrian link to Alderbridge Way, River Parkway and the east-west greenway and providing a children's play area abutting the east-west greenway. The exact configuration of this SRW/PROP will be determined based on the required DP detailed design.
- 8. Granting of all necessary statutory rights-of-way (on-grade, below grade and open-sky above) to accommodate above ground utility cabinets and kiosks required to service the proposed development, as identified in the servicing agreement requirements. The size, location and requirements for such rights-of-way shall be determined through coordination with the City and the respective third party utilities companies and shown on a functional plan for the City's approval as part of the DP process. Such rights-of-way shall be granted prior to City approval of SA design.
- 9. Granting of a 6 m wide temporary statutory right-of-way for the purposes of utilities along the entire west property line over the surplus City lane area to accommodate existing private and City owned utilities. This temporary SRW is to be discharged after all utilities have been relocated or alternate SRW secured. City responsible for maintenance and liability associated with City-owned utility works.
- 10. While the standard RCL2 zoning allows commercial indoor recreation use, registration of a legal agreement on Title prohibiting commercial indoor recreation uses on the subject lands.
- 11. Registration of a legal agreement on Title to ensure that the two guest suites to be constructed in the development are restricted to short term accommodation only and once the subject lands are stratified will be designated as common property and accessible to all residents of the development for the duration of the life of the building. Each of the suites are to be approximately 34 m² (369 ft²) studio units located on the second floor of the southern building adjacent to the indoor amenity area meeting room and limited to southern exposure only.
- 12. Registration of a flood indemnity restrictive covenant on Title (Area A).
- 13. Registration of an aircraft noise sensitive use restrictive covenant on Title (Area 2), identifying that the proposed dwelling units must be designed and constructed to achieve the following:
  - a) CMHC guidelines for interior noise levels as indicated in the chart below:

Portions of Dwelling Units	Noise Levels (decibels)	
Bedrooms	35 decibels	
Living, dining, recreation rooms	40 decibels	
Kitchen, bathrooms, hallways, and utility rooms	45 decibels	

- b) The ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy" standard for interior living spaces.
- 14. Registration of a legal agreement on Title stipulating that the development is subject to potential impacts due to other development that may be approved within the City Centre including without limitation, loss of views in any direction, increased shading, increased overlook and reduced privacy, increased ambient noise and increased levels of night-time ambient light, and requiring that the owner provide written notification of the agreement through the disclosure statement to be issued by the owner to all initial purchasers, and to erect signage in the sales centre for the proposed development advising purchasers of the potential for these impacts.
- 15. Registration of a legal agreement on Title stating that while the development is a mixed use project that includes both commercial and residential uses and is located within 30 m of other residential uses, the owner/occupant is required to mitigate unwanted noise, including demonstrating that the building envelope is designed to avoid noise generated by the internal use from penetrating into residential areas that exceed noise levels allowed in the City's Noise Bylaw and that noise generated from rooftop HVAC units will comply with the City's Noise Bylaw.
- 16. Registration of a parking legal agreement on Title that includes the following terms:
  - a) Where two parking spaces are provided in a tandem arrangement both parking spaces must be assigned to the same dwelling unit for the sole purpose of vehicle parking and prohibiting conversion of any of this area into habitable space including without limitation general storage purposes.
  - b) The provision of shared bicycle storage areas designated as common property for the sole purpose of bicycle storage by residents of units within the subject development and prohibiting conversion of any of these areas into habitable space including without limitation general storage purposes.
  - c) The provision of visitor and shared visitor/commercial parking spaces in accordance with the DP and such spaces will be identified and will not be sold, leased, assigned or designated, or allocated in any other manner to individual unit owners/renters/occupants or any other person. The shared parking spaces are to be available for use by customers of commercial units within the subject development during business hours and available for use at all times by both visitors of residents of residential units; and owners and employees of commercial units. The exact number and location of parking spaces will be confirmed through the DP process.
- 17. Registration of the City's standard Housing Agreement under section 483 of the *Local Government Act* [RSBC 2015] to secure the following affordable housing units, the combined habitable floor area of which shall comprise at least 5% 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 all on-site indoor and outdoor amenity spaces. 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**
Building 1				
1-bedroom	10	50.9 to 57.5 m <sup>2</sup> (548.2 to 619.5 ft <sup>2</sup> )	\$975	\$38,250 or less
2-bedroom	3	81.2 m <sup>2</sup> (2,868.2 ft <sup>2</sup> )	\$1218	\$46,800 or less
3-bedroom	3	92.9 m <sup>2</sup> (1000.3 ft <sup>2</sup> )	\$1480	\$58,050 or less
Building 2		AND THE RESERVE OF THE PROPERTY OF THE PROPERT		
2-bedroom	4	80.7 m <sup>2</sup> (868.6 ft <sup>2</sup> )	\$1218	\$46,800 or less
3-bedroom	2	92.9 m <sup>2</sup> (1000.3 ft <sup>2</sup> )	\$1480	\$58,050 or less
Total	22			

<sup>\*\*</sup> May be adjusted periodically as provided for under adopted City policy.

- 18. Public Art: City acceptance of the owner's offer to make a voluntary contribution towards Public Art, the terms of which voluntary owner contribution shall include the following.
  - a) The value of the owner's voluntary public art contribution shall be based on the minimum Council-approved rates for residential and non-residential uses and the maximum buildable floor area permitted under the subject lands'

proposed zoning, excluding affordable housing, as indicated in the following table:

Use	Floor Area	Affordable Housing Exemption	Contribution Rates	Contribution
Residential	Max. 28,919 m <sup>2</sup> (311,283 ft <sup>2</sup> )	1,554 m <sup>2</sup> (16,728ft <sup>2</sup> )	\$0.85/ft <sup>2</sup>	\$ 264,590.21
Commercial	280 m <sup>2</sup> (3,014 ft <sup>2</sup> )	Nil	\$0.45/ft <sup>2</sup>	\$ 1,356.25
Total	Max. 30,753 m <sup>2</sup> (331,025 ft <sup>2</sup> )	1,554 m <sup>2</sup> (16,728ft <sup>2</sup> )	Varies	\$ 265,946.46

- b) Where the owner elects to provide Public Art on-site as part of the subject development, prior to rezoning adoption, the owner shall submit a Public Art Plan for the subject lands, which Plan shall be:
  - i. Prepared by an appropriate professional.
  - ii. Based on a contribution value of at least the total amount indicated in the table above.
  - iii. Consistent with applicable City policies and objectives (for example, the Richmond Public Art Program, City Centre Public Art Plan, and other relevant supplementary public art and heritage planning that may be undertaken by the City), as determined to the satisfaction of the Director of Development and Director, Arts, Culture, and Heritage Services.
  - iv. Presented for review(s) by the Public Art Advisory Committee and endorsement by Council, as required by the Director, Arts, Culture, and Heritage Services.
  - v. Implemented by the owner, as required by legal agreement(s) registered on Title to prior to rezoning adoption.
- c) "No development" shall be permitted on the subject lands, restricting Development Permit issuance for any building on the lot, in whole or in part (excluding parking), until the owner, to the City's satisfaction:
  - i. Enters into additional legal agreement(s), if any, required to facilitate the implementation of the City-approved Public Art Plan, which may require that, prior to entering into any such additional agreement(s), a Detailed Public Art Plan is submitted by the owner for the subject lands and/or an artist is engaged, to the satisfaction of the City (as generally set out in the legal agreement entered into and the Public Art Plan submitted prior to rezoning adoption).
  - ii. Submits a Letter of Credit or cash (as determined at the sole discretion of the City) with respect to the Plan's implementation, the value of which contribution shall be at least the total amount indicated in the table above.
- d) "No occupancy" shall be permitted on the subject lands, restricting final Building Permit\* inspection granting occupancy of the building (exclusive of parking), in whole or in part, on the subject lands until:
  - i. The owner, at the owner's sole cost and expense, commissions one or more artists to conceive, create, manufacture, design, and oversee or provide input about the manufacturing of the public artwork, and causes the public artwork to be installed on City owned lands, if expressly permitted by the City in writing and pre-approved by Council, or within a statutory right-of-way on the subject lands (which right-of-way shall be to the satisfaction of the City for rights of public passage, Public Art, and related purposes, in accordance with the City-approved Public Art Plan and, as applicable, Detailed Public Art Plan).
  - ii. The owner, at the owner's sole cost and expense and within 30 days after the date on which the applicable public art is installed in accordance with the Public Art Plan, executes and delivers to the City a transfer of all of the owner's rights, title, and interest in the public artwork to the City if on City owned lands or to the subsequent strata corporation if on the subject lands (including transfer of joint world-wide copyright) or as otherwise determined to be satisfactory by the City Solicitor and Director, Arts, Culture, and Heritage Services.

NOTE: It is the understanding of the City that the artist's title and interest in the public artwork will be transferred to the owner upon acceptance of the artwork based on an agreement solely between the owner and the artist and that these interests will in turn be transferred to the City, subject to approval by Council to accept the donation of the artwork.

- iii. The owner, at the owner's sole cost and expense, submits a final report to the City promptly after completion of the installation of the Public Art in accordance with the City-approved Public Art Plan, which report shall, to the satisfaction of the Director of Development and Director, Arts, Culture, and Heritage Services, include:
  - Information regarding the siting of the Public Art, a brief biography of the artist(s), a statement from the

- artist(s) on the Public Art, and other such details as the Director of Development and Director, Arts, Culture, and Heritage Services may require.
- A statutory declaration, satisfactory to the City Solicitor, confirming that the owner's financial obligation(s) to the artist(s) have been fully satisfied.
- The maintenance plan for the Public Art prepared by the artist(s).
- Digital records (e.g., photographic images) of the public art, to the satisfaction of the Director of Development and Director, Arts, Culture, and Heritage Services.
- e) As an alternative to the provision on Public Art on-site, the owner may offer to make a voluntary cash contribution in lieu; provided that the value of such voluntary public art contribution shall be at least the total amount indicated in the table in item a) above. In this case, the requirements of b) through d) will not apply.
- 19. 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), and granting the statutory right of way(s) necessary for supplying the DEU services to the building(s), which covenant and statutory right of way 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 low carbon energy plant district energy utility (LCDEU) service area bylaw which applies to the site has been adopted by Council prior to the issuance the development permit for the subject site, no building permit will be issued for a building on the subject site unless:
    - i) the owner designs, to the satisfaction of the City and the City's DEU service provider, Lulu Island Energy Company Ltd. (LIEC), a low carbon energy plant to be constructed and installed on the site, with the capability to connect to and be serviced by a DEU; and
    - ii) the owner enters into an asset transfer agreement with the City and/or the City's DEU service provider on terms and conditions satisfactory to the City to transfer ownership of the low carbon energy plant to the City or as directed by the City, including to the City's DEU service provider, at no cost to the City or City's DEU service provider, LIEC, on a date prior to final building inspection permitting occupancy of the first building on the site.
  - c) The owner agrees that the building(s) will connect to a DEU when a DEU is in operation, unless otherwise directed the City and the City's DEU service provider, LIEC.
  - d) If a DEU is available for connection and the City has directed the owner to connect, no final building inspection permitting occupancy of a building will be granted unless and until:
    - i) the building is connected to the DEU;
    - ii) the owner enters into a Service Provider Agreement for that building with the City and/or the City's DEU service provider, LIEC, executed prior to depositing any Strata Plan with LTO and on terms and conditions satisfactory to the City; and
    - iii) prior to subdivision (including Air Space parcel subdivision and Strata Plan filing), the owner grants or acquires, and registers, all Statutory Right-of-Way(s) and/or easements necessary for supplying the DEU services to the building.
  - e) If a DEU is not available for connection, but a LCDEU service area bylaw which applies to the site has been adopted by Council prior to the issuance of the development permit for the subject site, no final building inspection permitting occupancy of a building will be granted unless and until:
    - 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;
    - ii) the building is connected to a low carbon energy plant supplied and installed by the owner, at the owner's sole cost, to provide heating, cooling and domestic hot water heating to the building(s), which energy plant will be designed, constructed and installed on the subject site to the satisfaction of the City and the City's service provider, LIEC;
    - iii) the owner transfers ownership of the low carbon energy plant on the subject site, to the City or as directed by the City, including to the City's DEU service provider, LIEC, at no cost to the City or City's DEU service provider, on terms and conditions satisfactory to the City;

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- iv) prior to depositing a Strata Plan, the owner enters into a Service Provider Agreement for the building with the City and/or the City's DEU service provider, LIEC, on terms and conditions satisfactory to the City; and
- v) prior to subdivision (including Air Space parcel subdivision and Strata Plan filing), the owner grants or acquires, and registers, all additional Covenants, Statutory Right-of-Way(s) and/or easements necessary for supplying the services to the building and the operation of the low carbon energy plant by the City and/or the City's DEU service provider, LIEC.
- f) If a DEU is not available for connection, and a LCDEU service area bylaw which applies to the site has not been adopted by Council prior to the issuance of the development permit for the subject site, no final building inspection permitting occupancy of a building will be granted until:
  - 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; and
  - ii) the owner grants or acquires any additional Statutory Right-of-Way(s) and/or easements necessary for supplying DEU services to the building, registered prior to subdivision (including Air Space parcel subdivision and strata plan filing).
- 20. The submission and processing of a Development Permit (DP)\* completed to a level deemed acceptable by the Director of Development.
- 21. Enter into a Servicing Agreement (SA)\* for the design and construction of greenway, servicing, and road works. Works include, but may not be limited to, the following:
  - a) Road Functional and Traffic Signal Design Works: Submission of a functional design (road works and behind the curb frontage works), prepared to the satisfaction of the City, is required. Design to accommodate: River Parkway widening with new intersection and traffic signalization at Minoru Boulevard, new Minoru Boulevard extension, Alderbridge Way widening with interim intersection improvements at Minoru Boulevard and ultimate cross-section and intersection design, and the north and south private road accesses to accommodate right-in / right-out only traffic movements with driveway letdown design, physical measures (e.g. concrete island channelization), stop sign controlled and signage to enforce the left turn restrictions. Works also include street lighting, traffic signage, pavement marking, hard landscape features, boulevard landscaping, street trees, street furnishings, bollards and banner poles. A full set of traffic signal design drawings is required.
  - b) North-South Private Roads Works (within required approximately 9.5 m by 48 m SRWs along the west property line abutting Alderbridge Way and River Parkway). The private roads are to (i) accommodate a minimum 2.0 m wide paved north-south pedestrian links between Alderbridge Way and River Parkway for pedestrians, bicycles, related uses and features, with clear physical delineation from vehicle use areas (ii) provide vehicle and truck access to adjacent property west of the site, and (iii) include 4 m x 4 m corner cuts at the lane/road intersections. The exact length of these SRWs will be determined based on detailed design of parkade access, truck turning movements, and legal surveys. The two corner cuts at the lane may be waived if the following conditions are met: vehicle access at both ends of the lane is restricted to right-in / right-out; pedestrian passages are not obstructed; and the requirements of the City of Richmond Traffic Bylaw 5870 Sightline Enforcement Policy are fully adhered to.
  - c) River Parkway Widening (from West property line to 30 m beyond Minoru Boulevard intersection). The City, as part of its 2018 Capital & Construction Program, will construct approximately the equivalent of three traffic lanes along the north side of River Parkway from the current westerly limit of this roadway to Cambie Road. The Owner is responsible for completing the following works across the River Parkway development frontage: behind the curb frontage improvements; ultimate curb-to-curb five-lane cross-section; and intersection at Minoru Boulevard including traffic signals. The owner's works also include completing the ultimate five-lane cross-section beyond the Minoru Boulevard intersection for a distance of 30 m and additional road transition works with a 20:1 taper section. Interim cross-section (measured from property line northward to inside of north curb):
    - 3.0 m wide sidewalk abutting property line
    - 1.41 m wide buffer strip (with street furniture, bollards, trees and/or shrubs)
    - 2.0 m wide off-road bike lane
    - 1.5 m wide landscaped boulevard (with a single row of street trees)
    - 0.15 m wide curb with gutter

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- 3.2 m and 3.25 m wide eastbound traffic lanes
- 3.2 m wide median (grade level with decorative paving treatment)
- 3.25 m and 3.2 m wide westbound traffic lanes
- Other features: banner poles, hard landscape features, street furnishings, and street lights

Ultimate cross-section: remaining cross-section behind the north curb will be determined as part of future Park development.

- d) Alderbridge Way Widening (from West property line through Minoru Boulevard intersection). Works include completing the ultimate frontage improvements and curb, interim curb-to-curb 4-lane with median cross-section along frontage, interim intersection improvements at Minoru Boulevard. Interim cross-section (measured property line southward to the inside of the existing south curb):
  - 2.0 m wide sidewalk abutting new property line
  - 1.78 m wide landscaped boulevard (with a single row of street trees)
  - 0.15 m wide curb with gutter
  - 3.25 m and 3.2 m wide westbound traffic lanes
  - 2.33 m wide painted median
  - 3.2 m and 3.25 m wide eastbound traffic lanes

Ultimate cross-section: Five 3.25 m wide traffic lanes (two eastbound, two westbound and a left turn lane) with concrete raised median, curb and gutter, landscaped boulevard and 2.0 m wide sidewalk abutting property lines.

- e) Minoru Boulevard Extension (from River Parkway to Alderbridge Way).
  - i) Works include: completing the ultimate frontage improvements and curb, interim curb-to-curb three-lane cross-section (including parking lane) and interim retaining wall with safety barrier as needed. Interim cross-section (measured from west to east):
    - 0.5 m wide landscape strip abutting new property line (part of Parks greenway)
    - 3.5 m wide sidewalk
    - 2.0 m wide landscaped buffer (with row of street trees, part of Parks greenway)
    - 3.0 m wide greenway/bike path (with structural soil cells below providing continuous boulevard soil volume to support double row of street trees, part of Parks greenway)
    - 2.0 m wide landscaped boulevard (with row of street trees, part of Parks greenway)
    - 0.15 m wide curb with gutter
    - 2.5 m wide southbound parking lane
    - 3.75 m and 3.75 m wide southbound and northbound traffic lanes
    - 0.15 m wide curb with gutter
    - 1.0 m wide clearance /retaining wall /safety barrier as needed

Ultimate cross-section (measured from the west curb to the east curb): Two 2.5 m wide parking lanes, two 3.5 m wide traffic lanes and 0.15 m wide curbs with gutters. Remaining cross-section behind the east curb will be determined as part of future development.

- ii) Minoru Boulevard and Alderbridge Way Intersection. Before the remaining properties adjacent to the intersection are redeveloped, the section of Minoru Boulevard north of Alderbridge Way will be offset from the section of Minoru Boulevard to the south. In the interim, for traffic operations and safety reasons, the traffic movements at the intersection of Alderbridge Way and the north approach of Minoru Boulevard will be restricted to right-in/right-out. The design and construction of this intersection is to accommodate the permitted traffic movements, to enforce the interim restricted left turn traffic movements, and to be compatible with the ultimate conditions. In the future, after the remaining properties adjacent to the intersection are redeveloped, all four legs of the intersection will achieve signalization, direct connection and ultimate lane configuration.
- f) Traffic Signals:
  - i) Minoru Boulevard and River Parkway intersection. Works include: conduits, junction boxes, traffic pole bases, traffic signal heads, illuminated street name signs, video detection, Accessible Pedestrian Signals (APS), UPS (Uninterrupted Power Supply) base and controller cabinet base. New communications conduit/cable are also required to tie in this traffic signal with City-owned communication network.

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- ii) Minoru Boulevard and Alderbridge Way intersection (modification works). Works include: any required modification of existing traffic signal resulting from the SA works, new "ornamental traffic poles" powder coated to match surrounding street light poles, pole bases, video detection, UPS system, controller cabinet/controller, illuminated street name signs and APS.
- iii) During the SA detailed design stage, equipment location may require granting of new SRW(s) to the City and additional works may be required including modifying, relocating and/or replacing the following elements at a traffic signal device and/or communications network:
  - traffic signal poles/bases, conduits, junction boxes, street light fixtures, cable and conductors
  - traffic signal equipment such as controller cabinet/base, UPS (Uninterrupted Power Supply) and service panel
  - vehicle/pedestrian detection and vehicle phasing including left turn arrows
  - communications conduit, cable and junction boxes

# g) Water Works:

Using the OCP Model, there is 315 L/s available at 20 psi residual at the hydrant located at the subject lands' Alderbridge Way frontage. Based on the proposed development, a minimum fire flow of 220 L/s is required. No capacity analysis is required.

- At the Owner's cost, the Owner 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 on-site fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit designs at BP stage.
- ii) Provide approximately 104 m of 300 mm diameter water main complete with fire hydrants (spaced as per City standard) along the subject lands' entire River Parkway frontage should servicing be required before the City's Capital Works are completed, in place of the voluntary cash contribution amount specified above. The proposed water main shall tie-in to the existing watermain west of the subject lands.
- iii) Provide approximately 206 m of 300 mm diameter water main complete with fire hydrants (spaced as per City standard) along the subject lands' entire Minoru Boulevard frontage. The proposed watermain shall tie-in to proposed watermains at River Parkway and Alderbridge Way.
- iv) Upgrade approximately 104 m of existing watermain from 200 mm diameter AC to 300 mm PVC complete with fire hydrants (spaced as per City standard) along the subject lands' entire Alderbridge Way frontage. The upgraded watermain shall tie-in to existing water mains east and west of the subject lands.
- At the Owner's cost, the City will:
- v) Abandon and cap at main all existing water service connections.
- vi) Install a new water service connection at Alderbridge Way frontage, complete with meter, meter box, and secured by statutory right-of-way. The dimensions of the right-of-way shall be finalized during the Servicing Agreement process and confirmed by legal surveys prepared by a BC Land Surveyor to the satisfaction of the City.
- vii) Complete all proposed water main tie-ins.

# h) Storm Sewer Works:

- At the Owner's cost, the Owner is required to:
- Upgrade the existing ditch (approximately 104 m) to 750 mm diameter storm sewer complete with manholes (spaced as per City standards) along the subject lands' entire River Parkway frontage should the servicing be required before the City's Capital Works are completed. The proposed storm sewer shall tie-in to the storm sewer built via Servicing Agreement SA12-615759 west of the subject lands and to the existing ditches east of the subject lands.
- ii) Provide approximately 205 m of 600 mm diameter storm sewer complete with manholes (spaced as per City standard) along the subject lands' entire Minoru Boulevard frontage. The proposed storm sewer shall tie-in to the proposed storm sewers at River Parkway and Alderbridge Way.
- Remove and replace approximately 117 m of existing 250 mm diameter storm sewer with 600 mm complete with manholes (spaced as per City standard) along the subject lands' entire Alderbridge Way frontage. The new storm sewer shall be placed in an alignment 337 is consistent with the storm sewers built via Servicing

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- Agreement SA12-615759. The upgraded storm sewer shall tie-in to existing storm sewers east and west of the subject lands.
- iv) Confirm whether the required 300 mm diameter private drainage line, which is to service the proposed north private road that will connect to River Parkway, will conflict with existing utilities such as Metro Vancouver trunk sewer lines, Telus duct bank, etc. at River Parkway which would obstruct the tie-in to the storm sewer located north of the trunk lines. If conflicts exist, then the required lane drainage system (with an approximate length of 40 meters) shall tie-in to the on-site drainage system and the lane runoff shall be collected on-site before being discharged into City's drainage system via the subject lands' storm sewer service connection at Alderbridge Way.
- v) Install a storm sewer service connection, complete with an inspection chamber and tie-in to the proposed storm sewer at Alderbridge Way via a manhole.
- vi) Take over ownership and maintenance of the 50 m long storm sewer in the proposed south private road (surplus City lane) along the west property line of the subject lands.
- At the Owner's cost, the City will:
- vii) Cut and cap at main all existing storm service connections.
- viii) Remove all existing inspection chambers and storm service leads and dispose off-site.
- ix) Complete all proposed storm sewer tie-ins.
- i) Sanitary Sewer Works:
  - At the Owner's cost, the Owner is required to:
  - i) Upgrade approximately 110 m of existing 200 mm diameter sanitary sewer complete with manholes (spaced as per City standard) along the subject lands' entire River Parkway frontage. The upgraded sanitary sewer shall tie-in to the sanitary sewers that were built via Servicing Agreement (SA12-615759) located west of the subject lands. Pipe size for this section shall be determined via the SA process.
  - ii) Discharge the portions of existing utility SRW plan 45474 along the west and south property lines of 7080 River Road after the new sanitary sewer is operational and the existing 200 mm sanitary sewer is removed. This excludes the portion of existing utility SRW plan 45474 along the entire east property line, which is to remain in effect.
  - iii) Confirm whether extending the new sanitary line, along the River Parkway frontage, northwards to connect to existing sanitary line running north-south will conflict with existing utilities such as Metro Vancouver trunk sewer lines, Telus duct bank, etc. at River Parkway. Coordination is required with Metro Vancouver and Telus. If no conflict exists, extend the new sanitary sewer at River Parkway from its east end (via a new manhole) northwards by approximately 20 m and tie-in to a new manhole (replacing existing manhole SMH4745) at the southwest corner of 7280 River Road. This section which will cross underneath the existing Metro Vancouver trunk sewer shall be pipe encased and shall be designed similar to the existing pipe encased sanitary crossing River Parkway at the west property line of the subject lands. The design and construction of this section shall be coordinated with Metro Vancouver. Pipe size for this section shall be determined via the SA process.
  - iv) Fill as per MMCD, then abandon, the existing 200 mm diameter sanitary sewer that crosses River Parkway just north of the subject land's west property line.
  - v) Upgrade approximately 104 m of existing sanitary sewer from 150 mm diameter to 450 mm PVC complete with manholes (spaced as per City standard) along the subject lands' entire Alderbridge Way frontage and tie in to the west existing manhole (SMH56636). The new sanitary sewer shall be extended from its east end (via a new manhole) northwards to tie in to the existing manhole (SMH4691).
  - vi) Discharge existing utility SRW plan 42489 along the subject lands' south property line fronting Alderbridge Way after the new 450 mm sanitary sewer is operational and the existing 150 mm sanitary sewer is removed.
  - vii) Remove the existing 200 mm diameter FRP sanitary sewers located on the subject lands parallel to the entire west property line. Simply filling and abandoning the existing pipe is not acceptable because the pipe will be located under the proposed parkade. Prior to removal of the existing sanitary sewers, relocate the existing sanitary connection that services 7771 Algerhridge Way to its Alderbridge Way frontage (if required).

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- viii) Install a sanitary sewer service connection, complete with an inspection chamber, at the Alderbridge Way frontage and tie-in to the proposed storm sewer at Alderbridge Way.
- At the Owner's cost, the City will:
- ix) Cut and cap at main all existing sanitary service connections to the subject lands.
- x) Remove all existing inspection chambers and sanitary leads connected to the subject lands and dispose off-site.
- xi) Complete all proposed sanitary sewer service connections and tie-ins.
- j) Frontage Improvements:
  - At the Owner's cost, the Owner is required to:
  - i) Provide frontage improvements in accordance with the requirements of the Director of Transportation. Improvements shall be built to the ultimate condition wherever possible.
  - ii) Proposed sidewalks, bike paths and boulevards shall be included in City road area, with the exception of the north-south pedestrian connection and east-west greenway.
  - iii) Provide street lighting along River Parkway, Minoru Boulevard and Alderbridge Way frontages. Provide interim street lighting along the east side of the Minoru Boulevard frontage. An engineered sonotube will be required for the east side of Minoru Boulevard to address clearance issues due to the lock block wall to support the grade difference between 7851 Alderbridge Way and the roadway.
  - iv) Remove or underground in a new corridor all existing private utility overhead lines (e.g., BC Hydro, Telus and Shaw) along the west edge of the subject lands. The owner is required to coordinate with the private utility companies to facilitate removal or undergrounding.
  - v) Underground the existing private utility overhead lines (e.g., BC Hydro, Telus and Shaw) along the subject lands' River Parkway frontage. The owner is required to coordinate with the private utility companies to facilitate undergrounding.
  - vi) Provide street lighting as per City Center specifications along the proposed north private road abutting River Parkway. Ownership and maintenance of this infrastructure shall be by the owner.
  - vii) Take over ownership and maintenance of the existing street lighting in the proposed south private road abutting Alderbridge Way. Modifications to the system shall be finalized through the SA design.
  - viii) Remove the existing above ground private utility kiosk located at the northwest corner of 7811 Alderbridge Way. The owner is required to coordinate with the private utility company that owns the kiosk to facilitate removal.
  - ix) The owner shall provide private utility companies with the required rights-of-ways for their equipment (e.g. vista, PMT, LPT, telephone and cable kiosks, etc.) and/or to accommodate the future under-grounding of the overhead lines. This equipment must be located on private property and not within City rights-of-way or public rights-of-passage and not impact public amenities such as east-west greenway, north-south pedestrian connection, sidewalks, boulevards and bike paths. The owner is responsible for coordination with private utility companies.
  - x) Locate all above ground utility cabinets and kiosks required to service the proposed development within the subject lands (see list below for examples). While this infrastructure and the associated statutory rights-of-way have not been shown in the rezoning conceptual development plans, a functional plan showing conceptual locations for such infrastructure shall be included in the DP design review. The owner is to coordinate with the respective private utility companies and the owner's lighting and traffic signal consultants are to confirm the rights-of-way requirements and the locations for the aboveground structures. If a private utility company does not require an aboveground structure, that company shall confirm this by

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way of letter addressed to the Director of Engineering. The following are examples of statutory rights-ofway that must be shown in the functional plan and registered prior to Servicing Agreement design approval by the City:

> BC Hydro vista BC Hydro PMT  $4 \text{ m x } 5 \text{ m}^*$ (width x depth) BC Hydro LPT 3.5 m x 3.5 m\* Street light kiosk 2 m x 1.5 m 3.2 m x 1.8 m Traffic signal controller Traffic signal UPS  $1.8 \text{ m} \times 2.2 \text{ m}$ Shaw cable kiosk 1 m x 1 m\* (show possible location in functional plan) Telus FDH cabinet 1.1 m x 1 m\* (show possible location in functional plan) \*Confirm SRW dimensions with BC Hydro, Shaw and Telus

## k) City utilities relocation

Required relocation of existing City utilities prior to start of site preparation works (e.g. soil densification, preload, etc.), if site preparation works are required:

Note: If the soil densification and/or preload works are to start after Third Reading of the Rezoning of the subject lands by Council or after Public Consultation, the works set out below shall be designed and constructed in accordance with the Servicing Agreement under the rezoning application. If not, then a separate Report to Council will be required to facilitate a Servicing Agreement (for the removal and replacement of the existing sanitary lines along the west and south property lines) which will be independent of the rezoning process.

- At the Owner's cost, the Owner is required to:
- i) Upgrade approximately 110 m of existing 200 mm diameter sanitary sewer complete with manholes (spaced as per City standard) along the subject lands' entire River Parkway frontage. The upgraded sanitary sewer shall tie-in to the sanitary sewers that were built via Servicing Agreement (SA12-615759) west of the subject lands. Pipe size for this section shall be determined via the SA design process.
- ii) Discharge the portions of existing utility SRW plan 45474 along the west and south property lines of 7080 River Road after the new sanitary sewer is operational and the existing 200 mm sanitary sewer is removed. This excludes the portion of existing utility SRW plan 45474 along the entire east property line, which is to remain in effect.
- iii) Extend the new River Parkway sanitary sewer from its east end (via a new manhole) northward by approximately 20 m and tie-in to the existing manhole (SMH4745) located at the southwest corner of 7280 River Road. This section shall be pipe encased and shall be designed similar to the existing pipe encased sanitary crossing River Parkway at the west property line of the subject lands. The design and construction of this section shall be coordinated with Metro Vancouver. Pipe size for this section shall be determined via the SA process.
- iv) Fill as per MMCD, then abandon, the existing 200 mm diameter sanitary sewer that crosses River Parkway just north of the subject land's west property line.
- v) Upgrade approximately 104 m of existing sanitary sewer from 150 mm diameter to 450 mm PVC complete with manholes (spaced as per City standard) along the subject lands' entire Alderbridge Way frontage. The upgraded sanitary sewer shall tie-in to the existing sanitary sewers east and west of the subject lands.
- vi) Discharge existing utility SRW plan 42489 along the subject lands' south property line fronting Alderbridge Way after the new 450 mm sanitary sewer is operational and the existing 150 mm sanitary sewer is removed.
- vii) Remove the existing 200 mm diameter FRP sanitary sewers that run parallel to the subject lands' entire west property line. Simply filling and abandoning the existing pipe is not acceptable because the pipe will be located under the proposed parkade. Prior to removal of the existing sanitary sewers, relocate the existing sanitary connection that services 7771 Alderbridge Way to its Alderbridge Way frontage (if required).
- viii) Install a sanitary sewer service connection, complete with an inspection chamber, at the Alderbridge Way frontage and tie-in to the proposed storm sewer at Alderbridge Way.

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- ix) Remove and replace approximately 104 m of existing water line located close to the subject lands' south property line with a new 300 mm diameter water main within Alderbridge Way. The upgraded watermain shall tie-in to the existing water mains east and west of the subject lands.
- x) Remove and replace approximately 117 m of existing 250 mm diameter storm sewer with 600 mm complete with manholes (spaced as per City standard) along the subject lands' Alderbridge Way frontage. The new storm sewer shall be placed in an alignment that is consistent with the storm sewers built via Servicing Agreement (SA12-615759). The upgraded storm sewer shall tie-in to the existing storm sewers east and west of the subject lands.

#### 1) Private utilities relocation

Required removal and replacement of existing private utility infrastructures prior to start of site preparation works (e.g. soil densification, preload, etc.), if site preparation works are required:

- The development proposal includes acquiring the existing surplus City lane at the west edge of the subject lands and dedicating an equivalent area of land along the east edge of the subject lands for the proposed Minoru Boulevard extension. Therefore, the private utility overhead lines currently existing in the laneway are to be removed. This overhead system is to be replaced with new underground lines installed along Alderbridge Way, Minoru Boulevard, and River Parkway. The existing overhead system located in the laneway shall remain operational throughout the installation process of the new underground lines and shall only be removed once the new system is fully operational and connected to all the properties that are currently served by the existing system. Site preparations, including soil densification and preloading, can only proceed once the existing overhead lines are removed. With regards to any interim above ground utility boxes (e.g., vista, etc.) required to facilitate the removal/undergrounding of the private utility lines, their location shall be coordinated by the owner with the private utility companies (e.g., BC Hydro, Telus, Shaw, etc.) and temporarily placed either at the north or the south end of the Minoru Boulevard extension and shall be removed once they are replaced by an operational permanent box installed inside the proposed development. The on-site general location of the permanent vista box shall be shown in the Rezoning plan and finalized as part of the Development Permit approval process. At this point, BC Hydro is the only company that has provided input to the City and BC Hydro has flagged the requirement for a vista box. The owner shall be responsible to contact and coordinate with the other private utility companies that have infrastructures in the surplus laneway to be acquired and obtain their requirements.
- ii) As the replacement underground works will be installed prior to site preparation works and within the proposed Minoru Boulevard extension dedication lands, a general schedule outlining the timing of the required design coordination with the private utility companies (e.g., BC Hydro, Telus, Shaw, etc.) and the replacement/removal works (including timing of installation and removal of the interim BC Hydro vista and its permanent installation inside the proposed development) in relation to the timing of the required road dedication and the required site preparation works (e.g., soil densification, preload, etc.) is required and shall be reviewed as part of the rezoning process.

#### m) General Items:

- At the Owner's cost, the Owner is required to:
- i) Prior to the commencement of any site preparation works (e.g., soil densification, preload, DSM wall installation, parkade excavation, dewatering, etc.) coordinate with Metro Vancouver to obtain their input or requirements regarding mitigation measures (if required) to address potential impacts to the existing Metro Vancouver trunk sewers.
- ii) Coordinate the servicing agreement design with the existing Metro Vancouver trunk sewers at River Parkway frontage.
- Manage any contamination encountered during construction of the servicing agreement works in compliance with the *Environmental Management Act* [SBC 2003], c.53, as amended or replaced from time to time; and if the City determines, in the City's sole discretion, that remediation works are required in order to address contamination within lands already dedicated by the owner to the City in connection with the proposed development on the subject lands, the owner will enter into a licence of occupation with the City, on the City's standard form and which will include an indemnity in favour of the City, in order to allow the owner to carry out any such remediation works; provided that the City will not charge a fee to the owner for the use of the dedicated lands in order to carry out such remediation works.

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- iv) In the event that a Certificate of Compliance (CoC) satisfactory to the City in its sole discretion cannot be obtained by the date of land dedication, the Servicing Agreement shall be amended to secure the estimated costs to remove the top two metres of the land to be dedicated to the City, to relocate it to an appropriate disposal facility and to be replaced by clean fill. This commitment shall be secured by the provision of a Letter of Credit in the amount estimated by a Contaminated Site Approved Professional to perform this removal, relocation and replacement. This amount will be not be released until such time as a Certificate of Compliance (CoC) satisfactory to the City in its sole discretion is obtained or another arrangement satisfactory to the Director of Development and the Director of Engineering is made.
- v) Replace the existing road structure along Alderbridge Way, which is constructed as a local road, with the appropriate arterial road structure in accordance with City specifications.
- vi) Provide, prior to start of site preparation works or within the first servicing agreement submission, whichever comes first, a preload plan and geotechnical assessment of preload, dewatering, and soil preparation impacts on the existing utilities fronting the subject lands and provide mitigation recommendations.
- vii) Provide a video inspection report of the existing storm sewer along City and private road frontages prior to start of site preparation works or within the first servicing agreement submission, whichever comes first. A follow-up video inspection after site preparation works are complete (i.e. pre-load removal, completion of dewatering, etc.) to assess the condition of the existing utilities is required. Any utilities damaged by the pre-load, de-watering, or other ground preparation shall be replaced at the Owner's cost.
- viii) Monitor the settlement at the adjacent utilities and structures during pre-loading, dewatering, and soil preparation works in accordance with a geotechnical engineer's recommendations, and report the settlement amounts to the City for approval.
- Enter into, if required, additional legal agreements, as determined by and set out in 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.

# Prior to a Development Permit\* being forwarded to the Development Permit Panel for consideration, the owner is required to complete the following:

1. Submit acoustical and mechanical reports and recommendations prepared by an appropriate registered professional, which demonstrates that the interior noise levels and noise mitigation standards comply with the City's Official Community Plan and Noise Bylaw requirements. The standard required for air conditioning systems and their alternatives (e.g. ground source heat pumps, heat exchangers and acoustic ducting) is the ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy" standard and subsequent updates as they may occur. Maximum interior noise levels (decibels) within the dwelling units must achieve CMHC standards follows:

Portions of Dwelling Units	Noise Levels (decibels)	
Bedrooms	35 decibels	
Living, dining, recreation rooms	40 decibels	
Kitchen, bathrooms, hallways, and utility rooms	45 decibels	

# Prior to a Building Permit\* being issued, the owner is required to complete the following:

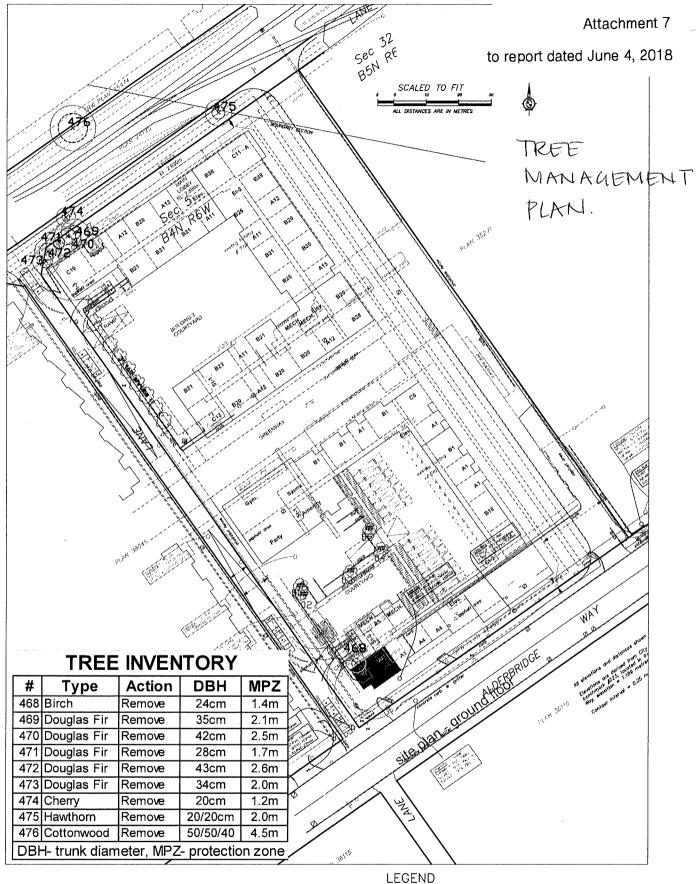
- 1. Incorporation of accessibility, sustainability, amenity and Affordable Housing measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.
- Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management
  Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and
  proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of
  Transportation) and MMCD Traffic Regulation Section 01570.
- 3. If applicable, payment of Latecomer Agreement charges, plus applicable interest associated with eligible latecomer works.

4. Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

#### Note:

- \* This requires a separate application.
- All Builders Liens on the subject lands must be removed before the subdivision and registration of covenants can occur.
- 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	 
	3.30		



# **Undersized Trees**

#	Туре	DBH	MPZ			
1	Japanese Maple	4/4/4cm	0.0m			
2	Japanese Maple	6/4/4cm	0.0m			
3	Japanese Maple	6/5cm	0.0m			
4	Japanese Maple	5/5/5cm	0.0m			
5	Japanese Maple	5/5/5cm	0.0m			

Undersized Tree



# TREE PROPOSED FOR REMOVAL



NOTES:

1. SITE LAYOUT INFORMATION
AND TREE SURVEY DATA PER
SUPPLIED DRAWING

2. REFER TO ATTACHED TREE PROTECTION REPORT FOR INFORMATION CONCERNING TREE SPECIES, STEM DIAMETER, HEIGHT, CANOPY SPREAD AND CONDITION.

3. ALL MEASUREMENTS ARE METRIC

#### Froggers Creek Tree Consultonts Ltd

7763 McGregor Avenue Burnaby BC VSJ 4H4 Telephone: 604-721-6002 Fax: 604-437-0970

7811 Alderbridge Way, Richmond BC

TREE PROTECTION DRAWING
THE DRAWING PLOTS ALL TREES, PROPOSEO FOR
REMOVAL, THEIR CANOPIES AND PROTECTION
ZONES IN RELATION TO PROPOSED LAYOUT

March J, 2017



# Richmond Zoning Bylaw 8500 Amendment Bylaw 9867 (RZ 17-765420) 7811 Alderbridge Way

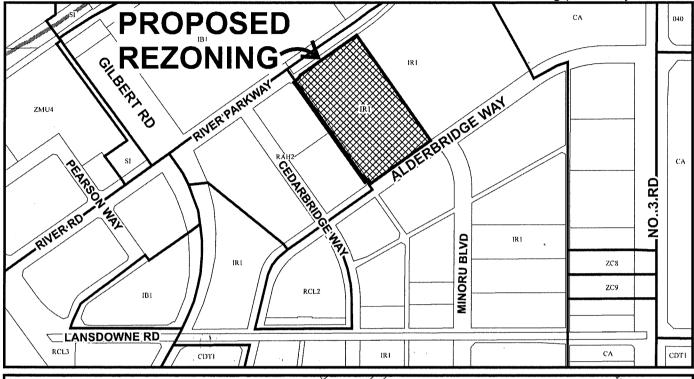
The Council of the City of Richmond, in open meeting assembled, enacts as follows:

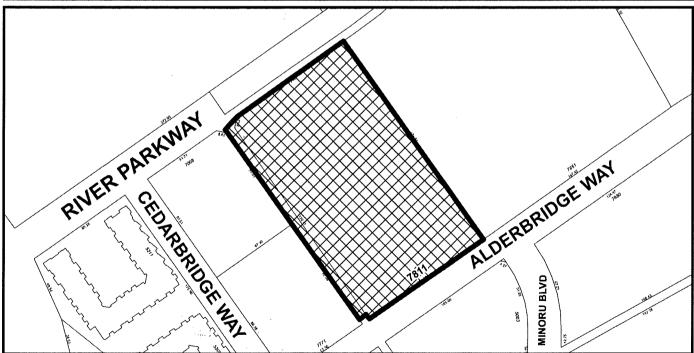
- 1. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning Bylaw 8500, is amended for that area shown cross-hatched on "Schedule A attached to and forming part of Bylaw 9867", repealing the existing zoning designation and by designating it "RESIDENTIAL/LIMITED COMMERCIAL (RCL2)".
- 2. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9867".

FIRST READING	JUN 2 5 2018	CITY OF RICHMOND
A PUBLIC HEARING WAS HELD ON		APPROVED by
SECOND READING	· · · · · · · · · · · · · · · · · · ·	APPROVED by Director
THIRD READING		or Solicitor
OTHER CONDITIONS SATISFIED	· · · · · · · · · · · · · · · · · · ·	
ADOPTED		
MAYOR	CORPORATE OFFICER	



Schedule A attached to and forming part of Bylaw 9867







RZ 17-765420

Original Date: 03/14/17

Revision Date: 05/30/18

Note: Dimensions are in METRES

# CityClerk

To Public Hearing
Date: July 16,2018
Item # 3

Re: Bulaw 9867

From:

CitvClerk

Sent:

Monday, 9 July 2018 08:42

To:

'danny5460603@gmail.com'

Subject:

FW: legal document and submitted to email:

Attachments:

Hi City clerk.pdf; RZ 17-765420 JULY 16 2018 7PM NOTICE OF PUBLIC HEARING.PDF

Hello,

This is to acknowledge and thank you for your email. Please be advised that copies of your email will be forwarded to the Mayor and each Councillor, and will be included as part of the July 16<sup>th</sup> Public Hearing Agenda materials. In addition, your email has been forwarded to staff in the Planning and Development Division.

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

Hanieh Berg | Acting Manager, Legislative Services

City Clerk's Office | City of Richmond 6911 No. 3 Road, Richmond, BC V6Y 2C1

From: danny5460603@gmail.com [mailto:danny5460603@gmail.com]

Sent: Saturday, 7 July 2018 13:02

To: CityClerk

Subject: legal document and submitted to email:

Hi City clerk

This 2 email attachments are a legal documents and submitted to email: cityclerk@richmond.ca

Internet link do not work

https://www.richmond.ca/cityhall/council/hearings/about.htm https://cms.richmond.ca/Page1793.aspx?PageMode=Hybrid

Important Note: The online submission form is currently unavailable. Please submit comments for Public Hearings directly to the <u>City Clerk</u>.

danny5460603@gmail.com



Hi Director City Clerk of Richmond. and to Sara Badyal Fax: 604-278-5139

This email is a legal document and submitted to email: cityclerk@richmond.ca

RZ 17-765420 JULY 16 2018 7PM NOTICE OF PUBLIC HEARING

Strong Objection for any change to the current zoning of "Industrial Retail (IR1)"

For the following reasons:

ONNI as a company and their representative have lied and declared that the proposed area and specifically 7811 Alderbridge Way will be an Open Public Park In particularly Lindy Su <lsu@onni.com> have lied when she and other ONNI representative advised this in several occasions in the presentation center RIVA 2 on site. At any moment, it was never stated that a commercial or business center is planned to be erected at the area.

No public park area is present anywhere in the region.

Any damages have to be properly compensated for these false promises. To all the units facing the current industrial area that supposed to be a city park in RIVA 3.

Richmond is sinking into the sub-continent in a rate of few millimeters to centimeters each year. This is due to the overwhelming infrastructures and high risers erected by the City of Richmond.

Sea Dike will eventually fail in the next 10 to 20 years and City of Richmond will be submerged in meters of water. Street level in Richmond is already bellow the sea level. Any earthquake and or tsunami will cause this or natural raise in sea level.

Resident of RIVA 3 facing the current industrial area: For any communication, please contact me by phone as preferred method of transfer of information 250-882-3249 <a href="mailto:danny5460603@gmail.com">danny5460603@gmail.com</a>

\*\*\*\*\*\*

Internet link and does not work properly https://www.richmond.ca/cityhall/council/hearings/about.htm https://cms.richmond.ca/Page1793.aspx?PageMode=Hybrid

Important Note: The online submission form is currently unavailable. Please submit comments for Public Hearings directly to the <u>City Clerk</u>.

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# **Notice of Public Hearing**

# Monday, July 16, 2018 -- 7 pm

Council Chambers, 1st Floor, Richmond City Hall 6911 No. 3 Road, Richmond, BC V6Y 2C1

# Richmond Zoning Bylaw 8500, Amendment Bylaw 9867 (RZ 17-765420)

Location/s:

7811 Alderbridge Way and surplus City lane lands west of the property

Applicant/s:

Onni 7811 Alderbridge Holding Corp. Inc.

Purpose:

To rezone the subject location from the "Industrial Retail (IR1)" zone to

the "Residential/Limited Commercial (RCL2)" zone to permit development of one 5-storey and one 6-storey building with

approximately 365 apartment units and 280 m<sup>2</sup> (3,014 ft<sup>2</sup>) of commercial

space.

City Contact:

Sara Badyal, 604-276-4282, Planning and Development Division

#### How to obtain further information:

- By Phone: If you have questions or concerns, please call the CITY CONTACT shown above.
- On the City Website: Public Hearing Agendas, including staff reports and the proposed bylaws, are available on the City Website at http://www.richmond.ca/cityhall/council/agendas/hearings/2018.htm
- At City Hall: Copies of the proposed bylaw, supporting staff and Committee reports and other background material, are also available for inspection at the Planning and Development Division at City Hall, between the hours of 8:15 am and 5 pm, Monday through Friday, except statutory holidays, commencing July 6, 2018 and ending July 16, 2018, or upon the conclusion of the hearing.
- By FAX or Mail: Staff reports and the proposed bylaws may also be obtained by FAX or by standard mail, by calling 604-276-4007 between the hours of 8:15 am and 5 pm, Monday through Friday, except statutory holidays, commencing July 6, 2018 and ending July 16, 2018.

# Participating in the Public Hearing process:

- The Public Hearing is open to all members of the public. If you believe that you are affected by the proposed bylaw, you may make a presentation or submit written comments at the Public Hearing. If you are unable to attend, you may send your written comments to the City Clerk's Office by 4 pm on the date of the Public Hearing as follows:
  - By E-mail: using the on-line form at http://www.richmond.ca/cityhall/council/hearings/about.htm
  - By Standard Mail: 6911 No.3 Road, Richmond, BC, V6Y 2C1, Attention: Director, City Clerk's Office
  - By Fax: 604-278-5139, Attention: Director, City Clerk's Office
- Public Hearing Rules: For information on public hearing rules and procedures, please consult the City website at http://www.richmond.ca/cityhall/council/hearings/about.htm or call the City Clerk's Office at 604-276-4007.
- All submissions will form part of the record of the hearing. Once the Public Hearing has concluded, no further information or submissions can be considered by Council. It should be noted that the rezoned property may be used for any or all of the uses permitted in the "new" zone.

David Weber Director, City Clerk's Office





# **Report to Committee**

To:

Planning Committee

Date:

May 23, 2018

From:

Wayne Craig

File:

RZ 15-707952

Director, Development

Re:

Application by Yamamoto Architecture Inc. for Rezoning at 7460 & 7480 Railway

Avenue from Single Detached (RS1/E) to Low Density Townhouses (RTL4)

#### **Staff Recommendation**

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9873, for the rezoning of 7460 & 7480 Railway Avenue from "Single Detached (RS1/E)" to "Low Density Townhouses (RTL4)", be introduced and given first reading.

Wayne Craig

Director, Development

WC:sds

Att. 5

REPORT CONCURRENCE

ROUTED TO:

Affordable Housing

REPORT CONCURRENCE

CONCURRENCE OF GENERAL MANAGER

White Concurrence of General Manager

# **Staff Report**

## Origin

Yamamoto Architecture Inc. has applied to the City of Richmond for permission to rezone the properties at 7460 & 7480 Railway Avenue (Attachment 1) from the "Single Detached (RS1/E)" zone to the "Low Density Townhouses (RTL4)" zone in order to permit the development of eight townhouse units with vehicle access from 7388 Railway Avenue via a Statutory Right-of-Way (SRW) registered on the title of 7388 Railway Avenue. The townhouse development at 7388 Railway Avenue recently completed construction. The applicant has discussed the use of the SRW with the adjacent developer and negotiated a cost sharing agreement for the shared driveway easement area.

# **Project Description**

The subject properties have a total combined frontage of 33.5 m (110 ft.) and are proposed to be consolidated into one development parcel. The proposal includes eight two-storey townhouse units, in three duplex and two single unit buildings, with a proposed floor area ratio (FAR) of 0.6. The preliminary site plan, building elevations and landscape plan are provided in Attachment 2. The subject site is currently occupied by two single-family dwellings, which are proposed to be demolished.

# **Findings of Fact**

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

#### Existing Housing Profile

The applicant has advised the existing single-family dwelling at 7460 Railway Avenue is currently owner occupied and contains no secondary suites, and the existing single-family dwelling at 7480 Railway Avenue is currently rented and contains no secondary suites.

# **Surrounding Development**

Development immediately surrounding the subject site is as follows:

To the North: 14-unit townhouse development (two and three-storeys) recently completed

construction on a lot zoned "Low Density Townhouses (RTL4)", which will provide vehicle access to the subject site from Railway Avenue, and a single-family dwelling on a lot zoned "Single Detached (RS1/H)" fronting Lindsay

Road.

To the South: Single-family dwellings on lots zoned "Single Detached (RS1/B)" fronting

Railway Avenue.

To the East: Single-family dwellings on a lot zoned "Single Detached (RS1/E)" fronting

Lindsay Road.

To the West: Across Railway Avenue, the City-owned Railway Greenway.

#### **Related Policies & Studies**

#### Official Community Plan

The Official Community Plan (OCP) land use designation for the subject site is "Neighbourhood Residential (NRES)". The development proposal is consistent with this designation.

# **Arterial Road Policy**

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

### 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 1<sup>st</sup> reading to the rezoning bylaw, the bylaw will be forwarded to a Public Hearing, where any area resident or interested party will have an opportunity to comment.

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

#### **Analysis**

#### **Built Form and Architectural Character**

The applicant is proposing to consolidate the subject properties into one development parcel, with a total frontage of 33.5 m (110 ft.) and a site area of 2,024 m<sup>2</sup> (21,786 ft<sup>2</sup>), in order to construct eight townhouse units. The proposed townhouse units are oriented around a drive-aisle providing access to the site from the adjacent townhouse development to the north at 7388 Railway Avenue and an east-west internal maneuvering aisle providing access to the garages of the units. The shared outdoor amenity area is proposed to be situated in a central area.

The proposal consists of eight two-storey townhouse units, all with side-by-side double car garages, with a proposed FAR of 0.6. Five buildings are proposed, including three duplex buildings and two single unit buildings.

#### **Existing Legal Encumbrances**

There is an existing 4.5 m (15 ft.) wide utility Statutory Right-of-Way (SRW) located along a portion of the north and east property lines of the subject site for existing sanitary sewer services. The SRW will be modified (reduced) after the removal of the existing sanitary system, which will be secured as part of the Servicing Agreement. The width of the modified SRW will be 3.0 m (10 ft.), measured from the property lines, to facilitate access to the new service connection. The SRWs will not be impacted by the proposed development and the developer is aware that encroachment into the SRWs is not permitted.

## Transportation and Site Access

Vehicular access to the subject site is to be provided via the driveway crossing and internal drive-aisles at 7388 Railway Avenue, through an existing SRW (CA5251946 & EPP51555) registered on the title of 7388 Railway Avenue. This access arrangement was envisioned and secured through the rezoning application for the adjacent townhouse development at 7388 Railway Avenue, which received final adoption in 2016 (RZ 12-619835).

Direct vehicular access from Railway Avenue along the subject site's frontage is not permitted. Registration of a legal agreement on title prohibiting direct vehicle access from Railway Avenue and limiting access to the SRW on the driveway at 7388 Railway Avenue will be required prior to final adoption of the rezoning bylaw. This agreement must include language indemnifying and releasing the City from any issues from this arrangement.

The applicant has also discussed the use of the SRW with the adjacent developer and negotiated a cost sharing agreement for the shared driveway easement area to divide the maintenance cost of the driveway on a proportionate basis between all owners of 7388 Railway Avenue and the future owners of the subject development.

#### Tree Retention and Replacement

The applicant has submitted a Certified Arborist's Report, which identifies tree species, assesses tree structure and condition, and provides recommendations on tree retention and removal relative to the proposed development. The Report assesses 44 trees on-site and 13 trees located on neighbouring properties.

The City's Tree Preservation Coordinator has reviewed the Arborist's Report and Tree Management Plan (Attachment 4), conducted an on-site visual assessment and concurs with the Arborist's recommendations, with the following comments:

- Nine trees (tag# 305, 306, 391, 395, 496, 497 & 632-634) located on-site along the Railway Avenue frontage and four trees (tag# 552 & 555-557) in the rear of the property are all in good condition. Trees are to be protected as per City of Richmond Tree Protection Information Bulletin TREE-03.
- 28 trees located on the development site (tag# 1, 392-394, 471, 478-480, 482-484, 512, 522, 530, 531, 550, 640-644, 680, 726-729, 786 and 787) are unsuitable for retention due to poor structural condition and health and should be removed and replaced.

- One tree (tag# 521) located on-site in the southeast corner and one tree in the northeast corner (tag# 744) are in good condition but not expected to survive construction impacts, including significant grade changes and removal of the existing sanitary sewer system in the SRW.
- One tree (tag# 481) located on-site along the Railway Avenue frontage is in good condition, however, the tree is not expected to survive construction impacts by the removal of the adjacent trees (tag# 480, 482 & 483) in poor condition, and is also in direct conflict with the pedestrian access pathway to Railway Avenue. This tree should be removed and replaced with larger specimen trees (i.e. 10 cm in caliper), which have been specified in the Landscape Plan.
- 13 trees (tag# 504, 505, 529, 743, 801-809) located on neighbouring properties to the north, east and south are undersized except for tag# 804. These trees are a sufficient distance from the property line and impacts associated from the proposed construction will be minimal. No tree protection barriers are required on the development site.

## Tree Replacement

The applicant is proposing to remove 31 trees on-site, however seven trees are undersized (tag# 392, 394, 471, 483, 484, 522, 727) and do not require compensation. For the remaining 24 trees, the OCP tree replacement ratio of 2:1 requires 48 trees to be planted and maintain on-site. Based on the submitted preliminary Landscape Plan (Attachment 2), the developer is proposing to plant 34 new trees.

To satisfy the 2:1 replacement ratio established in the OCP, the applicant will contribute \$7,000 (\$500/tree) to the City's Tree Compensation Fund in lieu of the remaining 14 trees that cannot be accommodated on the development site.

The size and species of replacement trees, and overall landscape design, will be reviewed in detail through the Development Permit application process. To ensure the replacement trees are planted and maintained on-site, the applicant is required to provide an acceptable Landscape Plan and Landscape Security based on 100% of the cost estimate provided by the Landscape Architect, prior to Development Permit issuance.

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

#### Tree Protection

The proposed Tree Management Plan is provided in Attachment 4, which outlines the protection of the 13 trees on-site. To ensure the protection of these trees, the applicant is required to provide the following, prior to final adoption of the rezoning bylaw:

• Submission to the City of a contract with a Certified Arborist for supervision of all works conducted within or in close proximity to tree protection zones.

 Submission of a Tree Survival Security in the amount of \$105,000 based on the sizes of the trees to be retained.

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

#### Variance Requested

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

- Reduce the minimum lot width along major arterial roads from 50 m to 33.5 m.
  - Staff are supportive of the proposed variance as the subject development site is being considered as an orphan lot, bound by a townhouse development to the north and a single-family subdivision to the south, identified as "Arterial Road Compact Lot Single Detached" in the Arterial Road Land Use Policy. During the rezoning process of the townhouse development to the north (7388 Railway Avenue), the subject site was considered as a future extension to this townhouse development.
- Allow one small car parking stall in each of the side-by-side garages in two of the units at the rear of the development site (two small car stalls in total).
  - Staff are supportive of the proposed variance as it enables the required resident parking spaces to be provided within the garages of both units, in a side-by-side arrangement. The Zoning Bylaw allows small parking stalls for on-site parking areas which contain 31 or more spaces.

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

### Affordable Housing Strategy

As per the City's Affordable Housing Strategy, townhouse rezoning applications received prior to July 24, 2017 are required to provide a cash-in-lieu contribution of \$4.00/ft<sup>2</sup> of total buildable area towards the City's Affordable Housing Reserve Fund. The applicant proposes to make a cash-in-lieu contribution in the amount of \$52,286.77.

The applicant has stated that due to all the units being two-storeys in height, the provision of secondary suites would severely compromise the functionality of the proposed units and the objective to build a family-oriented development.

# Townhouse Energy Efficiency and Renewable Energy

The applicant has committed to achieving an EnerGuide Rating System (ERS) score of 82 and to provide pre-ducting for solar hot water heating for the proposed development. As part of the Development Permit application review process, the applicant is required to submit an evaluation

report by a Certified Energy Advisor (CEA) providing details about the specific construction requirements that are need to achieve the rating.

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

#### **Amenity Space**

The applicant is proposing a cash contribution in-lieu of providing the required indoor amenity space on-site. As per Council Policy 5041, rezoning applications received prior to February 28, 2018 may choose to provide a cash contribution of \$1,000 per unit for developments up to 19 units. The total cash contribution required for this 8 unit townhouse development is \$8,000.

Shared outdoor amenity space will be provided on-site. Based on the preliminary design, the size of the proposed outdoor amenity space complies with the Official Community Plan (OCP) requirements of 6 m<sup>2</sup> per unit. Staff will work with the applicant at the Development Permit stage to ensure the configuration and design of the outdoor amenity space generally complies with the Development Permit Guidelines in the OCP.

## Site Servicing and Frontage Improvements

Prior to final adoption of the rezoning bylaw, the developer is required to enter into a Servicing Agreement for the design and construction of required site servicing and frontage improvements, as described in Attachment 5. Frontage improvements include, but are not limited to, removing the existing sidewalk next to the curb along Railway Avenue and replacing it with a minimum 2.0 m wide grassed boulevard and 1.5 m wide concrete sidewalk with connections to the existing sidewalk north and south of the subject site.

The developer is also required to pay DCC's (City & Metro Vancouver), School Site Acquisition Charge, Address Assignment Fees, and the costs associated with the completion of the required site servicing and frontage improvements as described in Attachment 5.

Cutting, capping, and removal of existing storm services and installation of new tie-in for storm sewer on Railway Avenue is to be outside of the tree protection area. Any special measures such as the use of low impact methods (i.e. hydro vac, air spade and hand digging) to be conducted within and near the tree protection area is to be supervised by the project arborist. Project arborist supervision is to be coordinated by the developer with City crews when installation is to occur.

## **Development Permit Application**

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

• Compliance with Development Permit Guidelines for multi-family developments and arterial road townhouses in the OCP.

- Refinement of the proposed building form and architectural features to achieve sufficient variety in design and create an interesting streetscape along Railway Avenue, and to address potential adjacency issues.
- Review of size and species of on-site replacement trees to ensure bylaw compliance and to achieve an acceptable mix of conifer and deciduous trees on-site.
- Refinement of the shared outdoor amenity area design, including the choice of play
  equipment, to create a safe and vibrant environment for children's play and social
  interaction.
- Review of relevant accessibility features, including aging-in-place features in all units and the provision of a convertible unit.
- Review of a sustainability strategy for the development proposal, including measures to achieve an EnerGuide Rating System (ERS) score of 82.

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

## **Financial Impact or Economic Impact**

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

#### Conclusion

The purpose of this application is to rezone the properties at 7460 & 7480 Railway Avenue from the "Single Detached (RS1/E)" zone to the "Low Density Townhouses (RTL4)" zone in order to permit the development of eight townhouse units.

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

The list of rezoning considerations is included in Attachment 5, 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 9873 be introduced and given first reading.

Steven De Sousa

Planner 1

SDS:cas

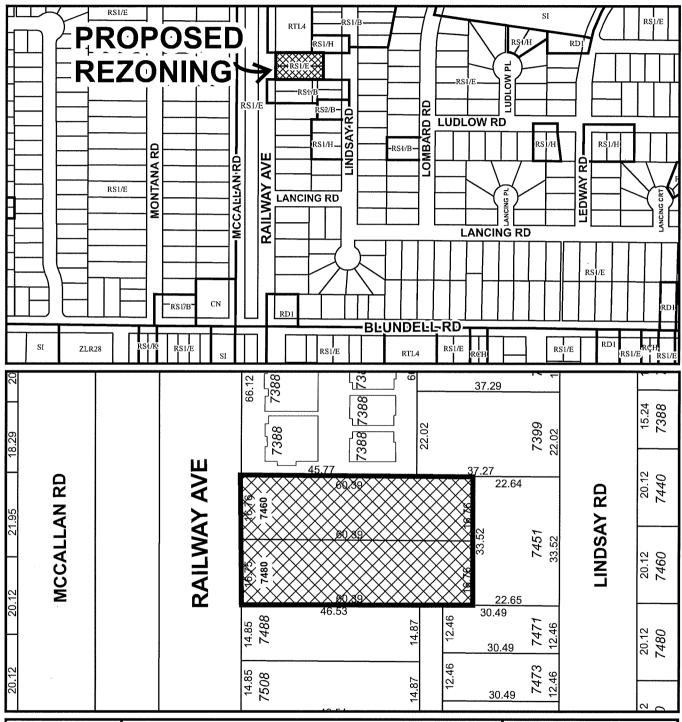
Attachment 1: Location Map/Aerial Photo

Attachment 2: Conceptual Development Plans

Attachment 3: Development Application Data Sheet Attachment 4: Tree Management Plan

Attachment 5: Rezoning Considerations







RZ 15-707952

Original Date: 09/14/15

Revision Date: 05/23/18

Note: Dimensions are in METRES





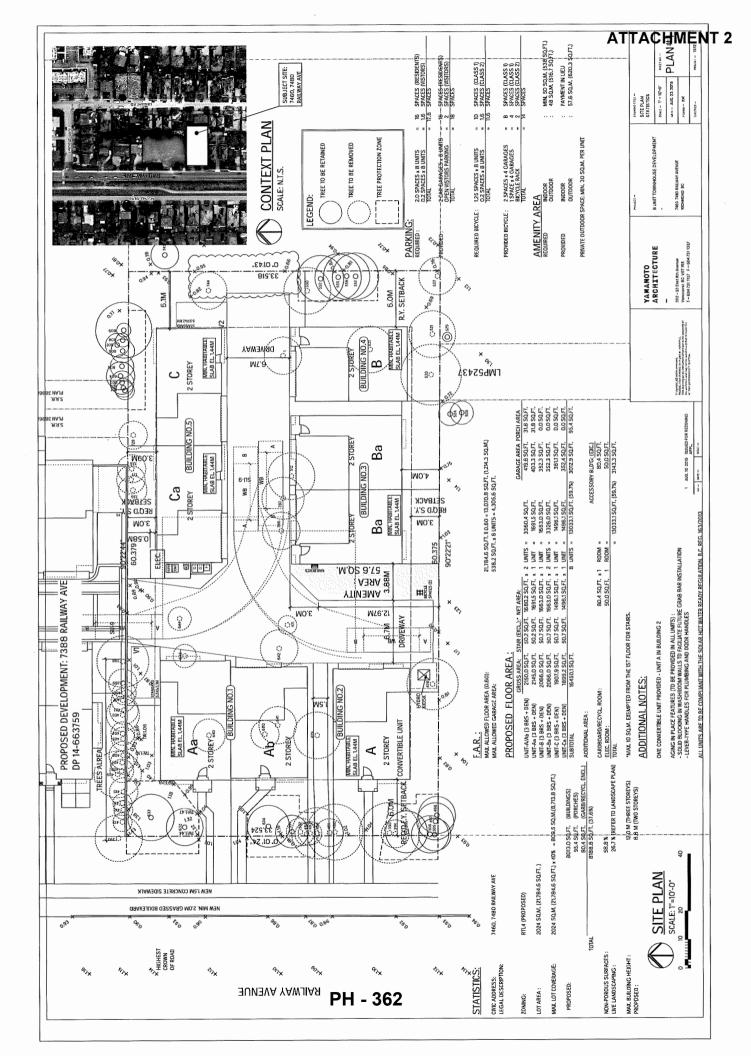


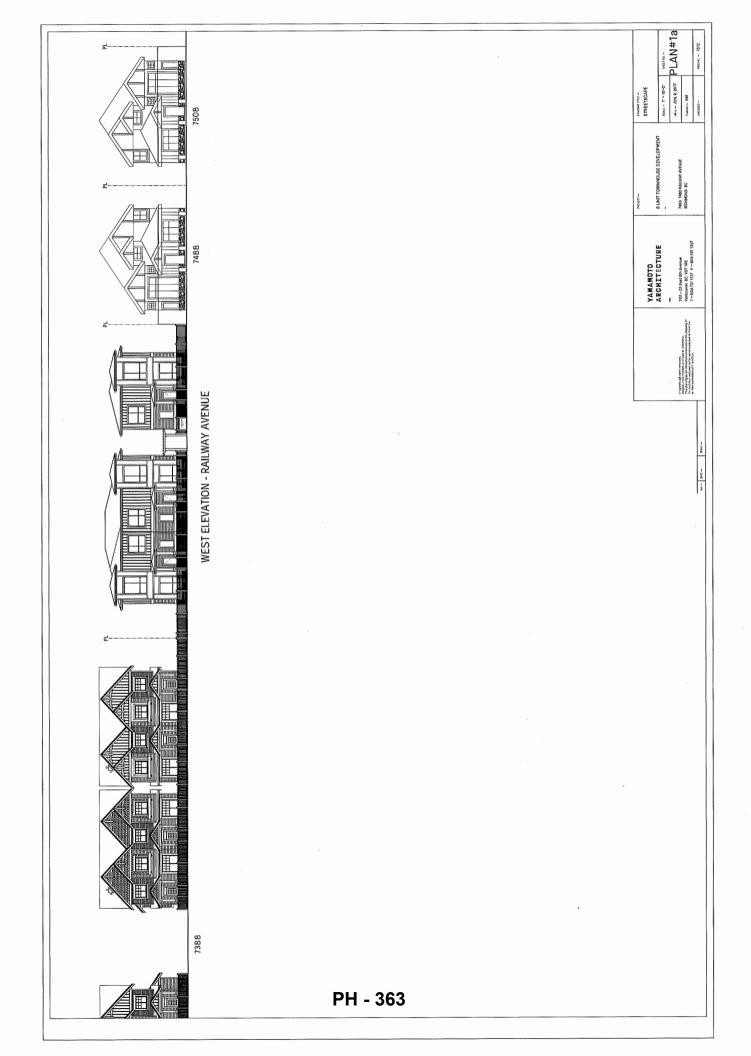
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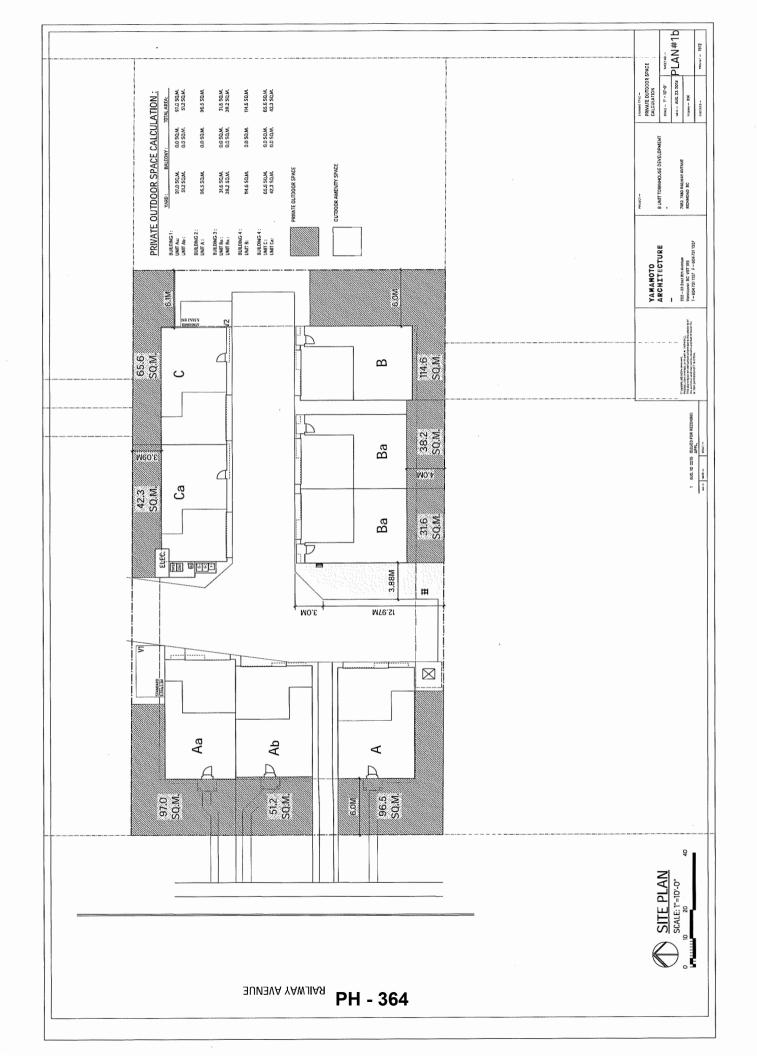
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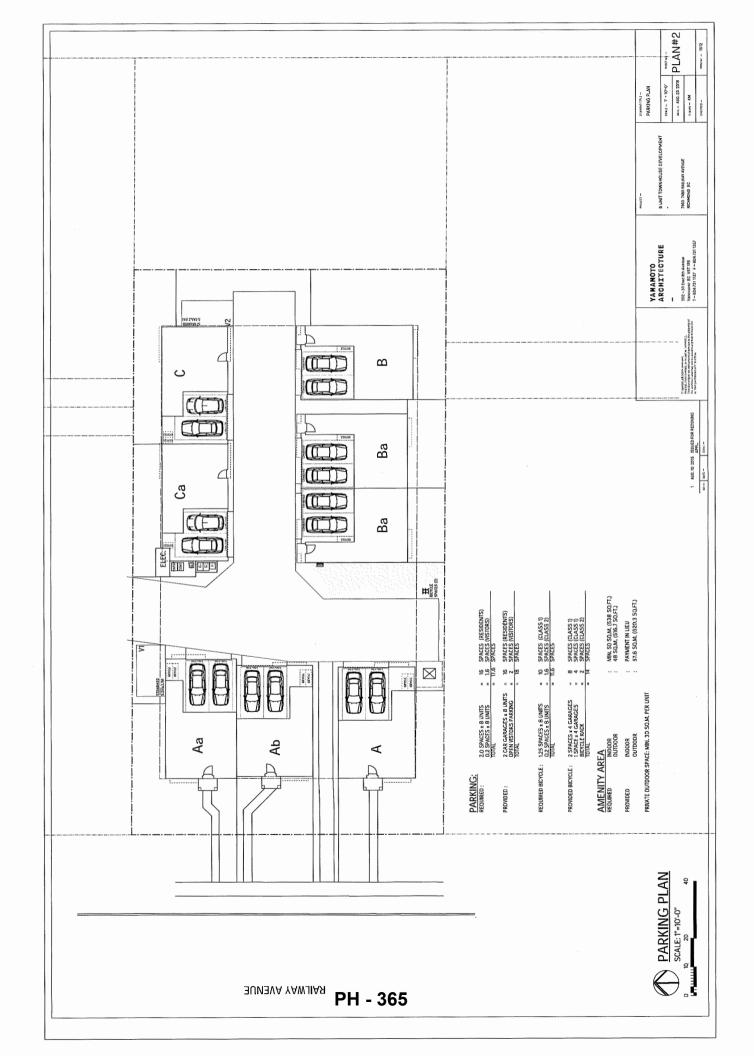
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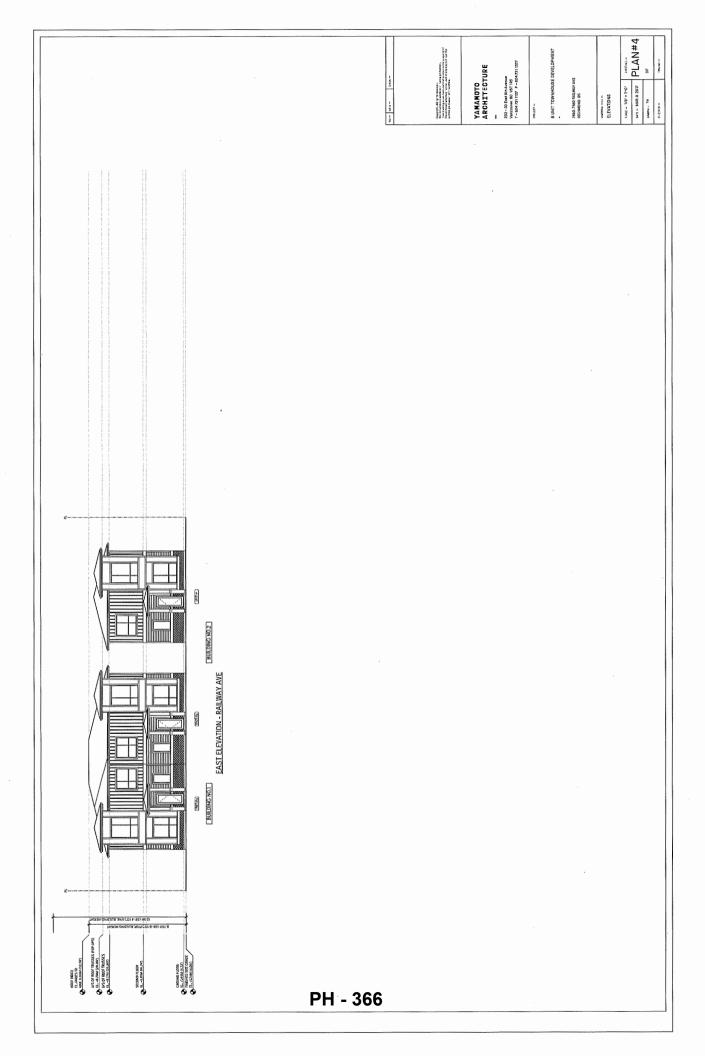
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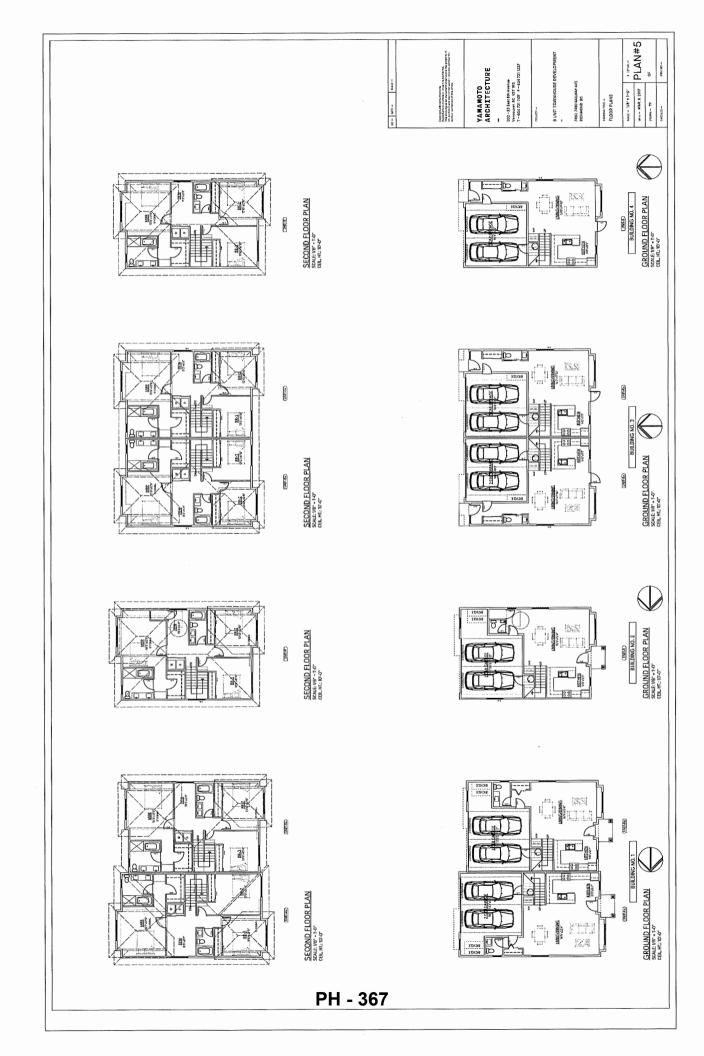


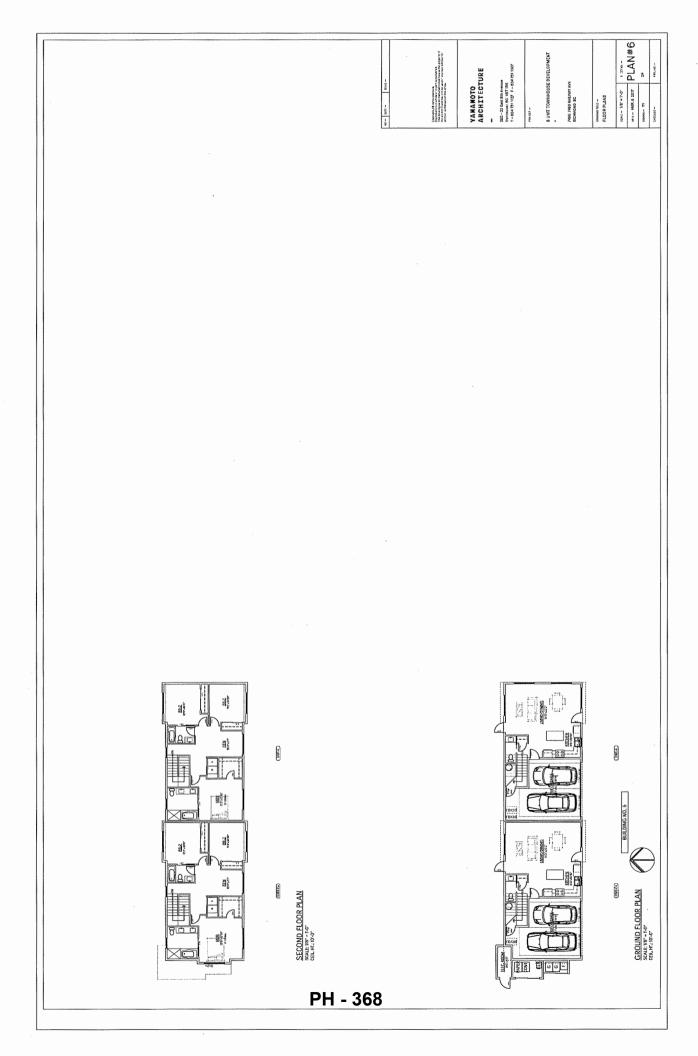


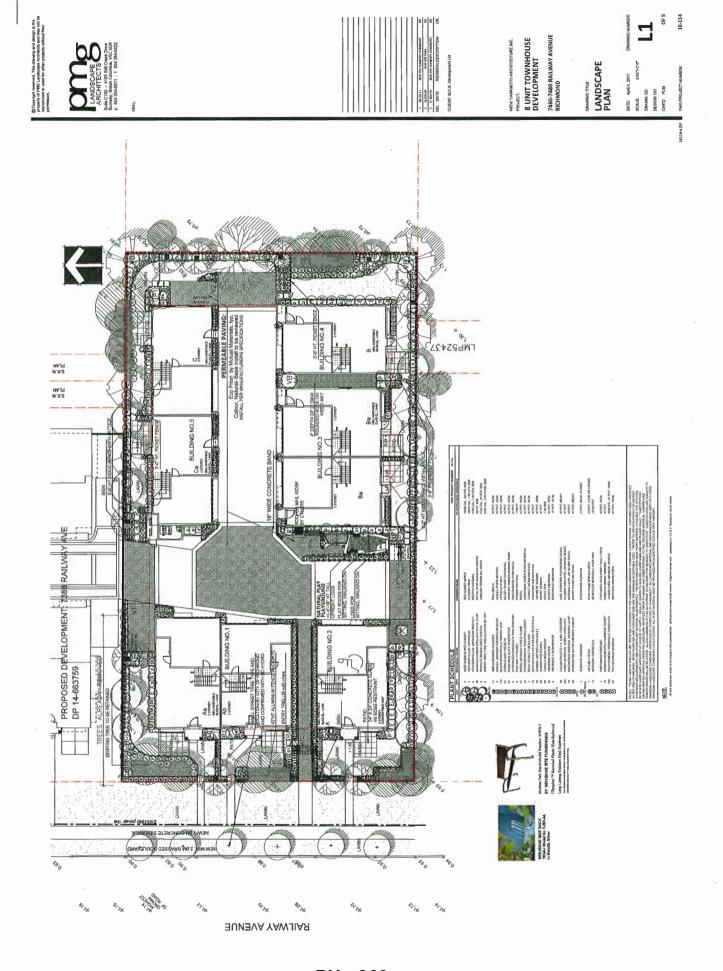




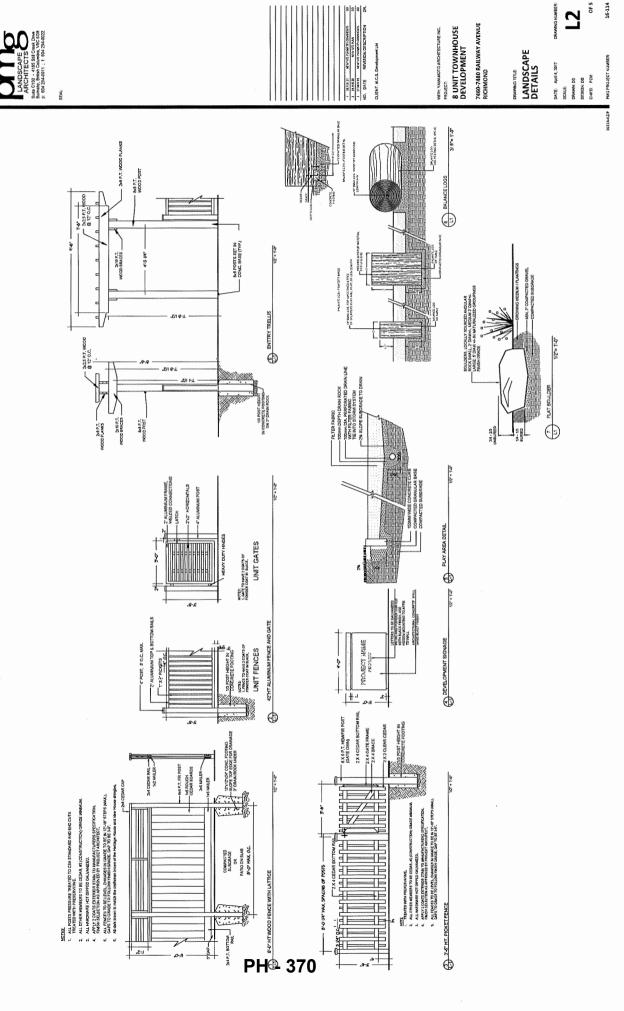


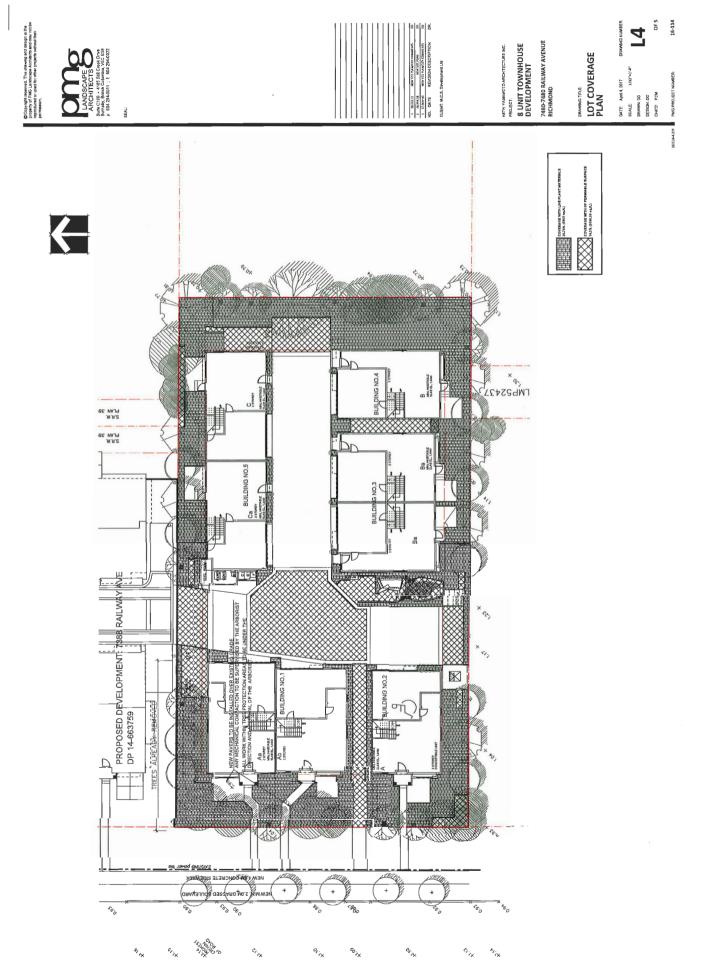






PH - 369







# **Development Application Data Sheet**

**Development Applications Department** 

RZ 15-707952 Attachment 3

Address: 7460 & 7480 Railway Avenue

Applicant: Yamamoto Architecture Inc.

Planning Area(s): Blundell

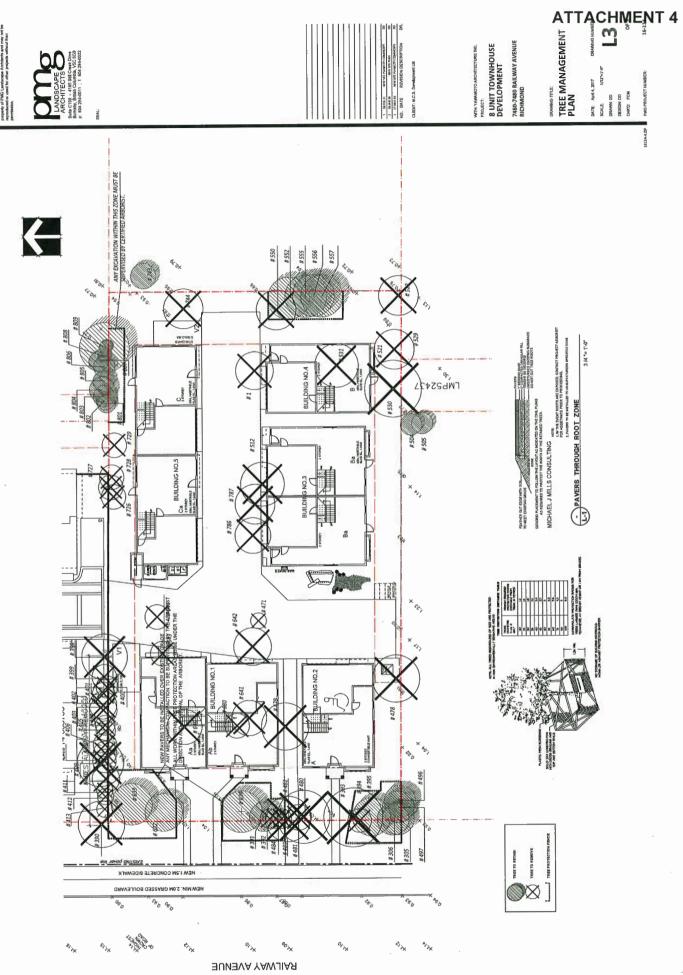
	Existing	Proposed
Owner:	7460 Railway Ave: N. Li & W. Kong 7480 Railway Ave: M C S Development Ltd.	To be determined
Site Size:	2,024 m <sup>2</sup> (21,784 ft <sup>2</sup> )	No change
Land Uses:	Single-family residential	Multi-family residential
OCP Designation:	Neighbourhood Residential	No change
Area Plan Designation:	N/A	No change
702 Policy Designation:	Single Detached (RS2/B) with lane or internal road access. The Policy does not apply to multi-family development.	No change
Zoning:	Single Detached (RS1/E)	Low Density Townhouses (RTL4)
Number of Units:	2	8

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.6	Max. 0.6	None permitted
Lot Coverage – Buildings:	Max. 40%	Max. 40%	None
Lot Coverage - Non-porous:	Max. 65%	Max. 65%	None
Lot Coverage – Live Landscaping:	Min. 25%	Min. 25%	None
Lot Area:	N/A	2,024 m <sup>2</sup>	None
Lot Width:	Min. 50 m	33.5 m	Variance required
Lot Depth:	Min. 35 m	60.3 m	None
Setbacks – Front:	Min. 6.0 m	6.0 m	None
Setbacks – Rear:	Min. 3.0 m	6.0 m	None
Setbacks – Side:	Min. 3.0 m	3.0 m	None
Height:	Max. 12.0 m (3 storeys)	8.8 m (2 storeys)	None
Off-street Parking Spaces – Regular (R) / Visitor (V):	2 (R) and 0.2 (V) per unit	2 (R) and 0.2 (V) per unit	None

	Bylaw Requirement	Proposed	Variance
Off-street Parking Spaces – Total:	16 (R) and 2 (V)	16 (R) and 2 (V)	None
Tandem Parking Spaces:	Permitted – Max. 50% of required spaces	0	None
Small Car Parking Spaces:	None when fewer than 31 spaces are provided on site	2	Variance required
Handicap Parking Spaces:	N/A	0	None
Bicycle Parking Spaces – Class 1:	1.25 per dwelling unit	1.25 per dwelling unit	None
Bicycle Parking Spaces – Class 2:	0.2 per dwelling unit	0.2 per dwelling unit	None
Off-street Bicycle Parking Spaces – Total:	10 (Class 1) and 2 (Class 2)	12 (Class 1) and 2 (Class 2)	None
Amenity Space – Indoor:	Min. 50 m² or cash-in-lieu	Cash-in-lieu	None
Amenity Space – Outdoor:	Min. 6 m <sup>2</sup> per unit = 48 m <sup>2</sup>	57.6 m <sup>2</sup>	None
Private Space – Outdoor:	Min. 30 m² per unit	Complies	None

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

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



File No.: RZ 15-707952



# **Rezoning Considerations**

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

Address: 7460 & 7480 Railway Avenue

# Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9873, the developer is required to complete the following:

- 1. Consolidation of all the lots into one development parcel (which will require the demolition of the existing dwellings).
- 2. City acceptance of the developer's offer to voluntarily contribute \$7,000 to the City's Tree Compensation Fund for the planting of replacement trees within the City.
- 3. 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.
- 4. Submission of a Tree Survival Security to the City in the amount of \$105,000 for the 13 on-site trees (tag# 305, 306, 391, 395, 496, 497, 552, 555-557 and 632-634) to be retained.
- 5. Registration of a flood indemnity covenant on title.
- 6. Registration of a legal agreement on title ensuring that the only means of vehicle access is to 7388 Railway Avenue (as per the statutory right-of-way (SRW) agreement registered on title at 7388 Railway Avenue) and that there be no access to Railway Avenue. This agreement must include language indemnifying and releasing the City from any issues from this arrangement.
- 7. The submission and processing of a Development Permit\* completed to a level deemed acceptable by the Director of Development.
- 8. Contribution of \$1,000 per dwelling unit (e.g. \$8,000) in-lieu of on-site indoor amenity space.
- 9. City acceptance of the developer's offer to voluntarily contribute \$4.00 per buildable square foot (e.g. \$52,286.77) to the City's affordable housing fund.
- 10. Registration of a legal agreement on title identifying that the proposed development must be designed and constructed to meet or exceed EnerGuide 82 criteria for energy efficiency and that all dwellings are pre-ducted for solar hot water heating.

# Prior to a Development Permit\* being forwarded to the Development Permit Panel for consideration, the developer is required to:

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

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

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

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

1. Enter into a Servicing Agreement\* for the design and construction of required site servicing and frontage improvements. Works include, but may not be limited to, the following:

#### Water Works:

• Using the OCP Model, there is 409 L/s of water available at a 20 psi residual at the hydrant fronting 7420 Railway Avenue. Based on your proposed development, your site requires a minimum fire flow of 220 L/s.

Initial:	

- At the Developer's cost, 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 a fire hydrant at Railway Avenue frontage to service the proposed townhouse development and to meet code requirements of 90 metres from hydrant to furthest principal entry. Coordination with the City's Fire department to confirm the location of the new hydrant is required.
- At the Developer's cost, the City will:
  - Cut and cap at main the existing water service connections at Railway Avenue frontage.
  - Abandon the existing 100mm diameter AC watermain along the proposed site's Railway Ave frontage (i.e., east side of Railway Avenue). The new end of the 100mm AC watermain shall connect back to the existing 300mm watermain along the west side of Railway Avenue.
  - Provide water service connection to the proposed site from the existing 300mm diameter watermain at the west side of Railway Avenue, complete with meter. The meter shall be located on-site (ex. Mechanical room), and will require a right of way to be finalized during the servicing agreement process.

#### **Storm Sewer Works:**

- At the Developer's cost, The Developer is required to:
  - Upgrade approximately 35 meters of existing 450mm diameter storm sewers to 600mm diameter storm sewer along Railway Avenue frontage. Tie-in to the existing systems to the north and south shall be via new manholes.
- At the Developer's cost, the City will:
  - Cut and cap at main the existing storm service connections STCN34371 & STCN34372 along the Railway Avenue Frontage.
  - Cut and cap the existing storm service connection located at the southwest corner of the subject site (STCN34370), but retain the existing IC to service 7488 Railway Avenue.
  - Install a new storm service connection off of the 600mm storm sewer to be constructed along Railway Avenue, complete with inspection chamber.

### **Sanitary Sewer Works:**

- At the Developer's cost, The Developer is required to:
  - Remove the existing sanitary system (e.g., Sanitary main, manholes, laterals and inspection chambers) along the rear yards 7460 and 7480 Railway Avenue.
  - Modify the existing utility rights of ways along the rear yards of 7460 and 7480 Railway Avenue after removal of the existing rear yard sanitary system for access to the proposed service connection. The width of the modified east-west and north-south rights of ways will be 3m, measured from the property lines, to facilitate access to the proposed service connection.
- At the Developer's cost, the City will:
  - Provide a new sanitary service connection and tie-in to the existing manhole at the southwest corner of 7399 Lindsay Road.
  - Cut, cap, and remove all of the existing sanitary service connections serving 7460 & 7480 Railways Avenue.

#### **Frontage Improvements:**

- The Developer is required to:
  - Coordinate with BC Hydro, Telus and other private communication service providers:
    - To underground 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 on-site (e.g. Vista, PMT, LPT, Shaw cabinets, Telus Kiosks, etc).
  - Extend the existing street lighting system to be built via SA14-667212 across the Railway Avenue frontage.
  - Complete other frontage improvements as per Transportation's requirements.
- Transportation works include, but are not limited to, the following:

Initial:

- Remove the existing sidewalk next to the curb and backfill the area to provide a minimum 2.0 m wide grassed boulevard (not including the 0.15 m wide top of curb).
- Construct a new 1.5 m wide concrete sidewalk behind the grassed boulevard with connections to the existing sidewalk north and south of the subject site.
- The existing driveways to provide access to the site from Railway Avenue are to be closed permanently. Remove the existing driveway crossings and replace with barrier curb/gutter, boulevard and sidewalk per standards described above. The applicant is responsible for the design and construction of curb/gutter, sidewalk and boulevard as part of the driveway closure works in addition to other required frontage improvements.
- Consult Parks on the requirements for tree planting along the development frontage.
- Consult Engineering on lighting and other utility requirements as part of the frontage works.
- No direct driveway access to the site is permitted along the Railway Avenue development frontage.
- Vehicular access to the subject site is to be provided via the driveway crossing and internal drive-aisle at 7388 Railway Avenue.
- The applicant at 7460/7480 Railway Avenue is to enter into a legal agreement to acknowledge that they wish to make use of the SRW agreement registered on title at 7388 Railway Avenue for vehicular access to their site.
- Prior to the issuance of BP, a Construction Parking and Traffic Management Plan is to be submitted to the Transportation Division for approval (refer to ttp:www.richmond.ca/services/ttp/special.htm for more information).

#### General:

- The Developer is required to:
  - Coordinate all proposed offsite works with the servicing agreement design under 7388 Railway Avenue (i.e., SA14-667212).
  - Provide if pre-load is required, prior to pre-load installation, a geotechnical assessment of preload and soil preparation impacts on the existing utilities fronting or within the development site (e.g., existing sanitary mains), proposed utility installations, the existing houses along the south and east property lines, and provide mitigation recommendations. The mitigation recommendations shall be incorporated into the first SA design submission or if necessary to be implemented prior to pre-load.
  - Enter into additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required, including, but not limited to, site investigation, testing, monitoring, site preparation, dewatering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
  - The Developer is required to not encroach into the proposed SRW with trees, retaining walls, fences or other non-removable structures.
  - Cutting, capping, and removal of existing storm services and installation of new tie-in for storm sewer on Railway Avenue is to be outside of the tree protection area. Any special measures such as the use of low impact methods (i.e. hydro vac, air spade and hand digging) to be conducted within and near the tree protection area is to be supervised by the project arborist. Project arborist supervision is to be coordinated by the developer with City crews when installation is to occur.
- 2. Installation of appropriate tree protection fencing around all trees to be retained as part of the development prior to any construction activities, including building demolition, occurring on-site. Tree protection fencing must be installed to City standard in accordance with the City's Tree Protection Information Bulletin TREE-03, and must remain in place until construction and landscaping on-site is completed.
- 3. 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.
- 4. Incorporation of energy efficiency, CPTED, sustainability and accessibility measures in Building Permit (BP) plans as determined via the Rezoning and/or Development **Bunit prov**esses.

Initial:	

- 5. If applicable, payment of latecomer agreement charges, plus applicable interest associated with eligible latecomer works.
- 6. If applicable, obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

#### Note:

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

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

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

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

[Signed copy on file]	
Signed	Date



# Richmond Zoning Bylaw 8500 Amendment Bylaw 9873 (RZ 15-707952) 7460 & 7480 Railway Avenue

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

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

P.I.D. 003-598-969

Lot 257 Section 13 Block 4 North Range 7 West New Westminster District Plan 46362

and

P.I.D. 003-907-929

Lot 258 Section 13 Block 4 North Range 7 West New Westminster District Plan 46362

2. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9873".

FIRST READING	JUN 1 1 2018	CITY OF RICHMOND
A PUBLIC HEARING WAS HELD ON		APPROVED by
SECOND READING		APPROVED by Director
THIRD READING		or Solicitor
OTHER CONDITIONS SATISFIED		
ADOPTED		
•		
MAYOR	CORPORATE OFFICER	



# **Report to Committee**

To:

Planning Committee

Date:

May 28, 2018

From:

Wayne Craig

File:

RZ 17-779229

Director, Development

Re:

Application by W.T. Leung Architects, Inc. on behalf of Park Village Investments Ltd. & Grand Long Holdings Canada Ltd. for Rezoning at 8071 and 8091 Park

Road from "Downtown Commercial (CDT1)" to "High Density Mixed Use

(ZMU39) - Brighouse Village (City Centre)"

#### **Staff Recommendation**

 That Richmond Zoning Bylaw 8500, Amendment Bylaw 9878, to create the "High Density Mixed Use (ZMU39) - Brighouse Village (City Centre)" zone, and to rezone 8071 and 8091 Park Road from "Downtown Commercial (CDT1)" zone to "High Density Mixed Use (ZMU39) -Brighouse Village (City Centre)" zone, be introduced and given first reading; and

2. Staff be directed to prepare a service area bylaw to provide district energy services to the development at 8071 and 8091 Park Road.

Wayne Crajg

Director, Development

WC:nd Att.

REPORT CONCURRENCE		
ROUTED TO:	Concurrence	CONCURRENCE OF GENERAL MANAGER
Law Affordable Housing Child Care Recreation Services Sustainability Transportation		MeEneg

#### Staff Report

# Origin

W.T. Leung Architects, Inc. on behalf of Park Village Investments Ltd. & Grand Long Holdings Canada Ltd. has applied to create the "High Density Mixed Use (ZMU39) – Brighouse Village (City Centre)" zone and to rezone 8071 and 8091 Park Road from the "Downtown Commercial (CDT1)" zone to "High Density Mixed Use (ZMU39) – Brighouse Village (City Centre)" zone to permit the development of a high-density, mixed commercial, office and residential development that includes three towers and is located in the Brighouse Village (Attachment 1).

The proposed development includes:

- Two residential towers and one office/residential tower on a commercial podium with street-oriented commercial and retail uses fronting Park Road and Buswell Street at ground level;
- Approximately 39,483 m<sup>2</sup> (425,012 ft<sup>2</sup>) of proposed development comprised of approximately:

o 5,444 m<sup>2</sup> (58,605 ft<sup>2</sup>) of office space within proposed Tower A (4<sup>th</sup>-7<sup>th</sup> storey of the building):

- 29,971 m<sup>2</sup> (322,615 ft<sup>2</sup>) of residential space within proposed Tower A, B, and C, including twenty one (21) Low End Market Rental (LEMR)Affordable Housing (AH) units that will be secured with a legal agreement; and
- o 4,068 m<sup>2</sup> (43,791 ft<sup>2</sup>) of retail/restaurant space.
- Five percent of the residential floor area allocated to twenty one (21) Affordable Housing (AH) units in accordance with the provisions for in-stream applications;
- Public spaces that will be secured with a right of way, including:
  - A proposed north/south oriented public pedestrian connection through the site, which features lightwells in the podium building volume to introduce natural light and to encourage use of the north/south public pedestrian connection through the site; and
  - o A public plaza on the south side of the property;
- Community amenity contributions consistent with City Centre Area Plan (CCAP) density bonusing provisions, as well as transportation and infrastructure improvements, and public amenity contributions that apply within the City Centre; and
- The proposed transfer of an on-site low carbon energy plant to the City, which will
  enable immediate service by Lulu Island Energy Company (LIEC) and connection to the
  City's District Energy Utility (DEU) system in the future. A Service Area Bylaw for the
  subject site will be brought forward in a subsequent report from Engineering, for Council
  consideration before adoption of the rezoning bylaw.

Concept plans are attached (Attachment 2).

Required road and engineering improvements would be undertaken through the City's standard Servicing Agreement processes and are detailed in the attached Rezoning Considerations (Attachment 8).

## **Findings of Fact**

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

#### Subject Site Existing Housing Profile

There are currently no residential uses on the site.

# **Surrounding Development**

The subject site is located at the intersection of Park Road and Buswell Street and bound by existing north/south and east/west lanes. The site is currently developed with one and two storey commercial buildings and associated surface parking.

The subject site is in the Brighouse Village in the City Centre Area Plan (CCAP) and is in an area that is designated "Urban Core T6 (45m)" and "Village Centre Bonus (VCB)" (Attachment 4). Rezoning is proposed by the applicant to maximize the CCAP supported density for the site, which includes provisions to permit up to 1.0 Floor Area Ratio (FAR) of additional non-residential density.

Development surrounding the subject site includes:

To the North: An existing lane that will be widened as a condition of rezoning bylaw adoption, existing commercial buildings and a new fifteen storey mixed use (residential/commercial) tower at 6511 Buswell Street, at the intersection of Buswell Road and Cook Road, that is currently under construction (DP 13-634111). The properties are zoned "Downtown Commercial (CDT1)" and designated "Urban Core T6 (45 m)" and "Village Centre Bonus" in the Brighouse

Village in the CCAP.

To the South: Park Road and existing single storey commercial buildings with surface parking

within the building's front yard setback and a fourteen storey mixed use (residential/commercial) tower at 6733 Buswell Street, at the intersection of Park Road and Buswell Street. The properties are zoned "Downtown Commercial (CDT1)" and designated "Urban Core T6 (45 m)" and "Village Centre Bonus" in

the Brighouse Village in the CCAP.

To the East: Buswell Street and an existing low rise apartment building zoned "Medium

Density Low Rise Apartments (RAM1)" and designated "Urban Centre T5 (25

m)" in the Brighouse Village in the CCAP.

To the West: An existing lane that will be widened as a condition of rezoning bylaw adoption

and existing one and two storey commercial buildings that front No. 3 Road and provide vehicle parking within the front yard setback. 6560, 6600, 6640 and 6700 No. 3 Road are under application (RZ 15-694855) to rezone to a site specific zone to permit development of a mixed-use building (residential/commercial/office). This development proposal has First Reading and Public Hearing is scheduled for

June 18, 2018. The site is zoned "Downtown Commercial (CDT1)" and

designated "Urban Core T6 (45 m)" and "Village Centre Bonus" in the Brighouse

Village in the CCAP.

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#### Related Policies & Studies

## Official Community Plan/City Centre Area Plan

Official Community Plan: The site is designated "Downtown Mixed Use" in the Official Community Plan (OCP). The proposed rezoning is consistent with this designation.

<u>City Centre Area Plan</u>: The site is located within the Brighouse Village and is designated "Urban Core T6 (45m)" and "Village Centre Bonus" in the City Centre Area Plan (CCAP). The proposed rezoning is consistent with these designations.

### 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.

# OCP Aircraft Noise Sensitive Development (ANSD) Policy:

The site is affected by OCP Airport Noise Contours and is required to register a covenant on Title prior to rezoning bylaw adoption to ensure that the building is designed and constructed to comply with the Aircraft Noise Policy. Prior to a Development Permit application being considered by the Development Permit Panel, the applicant is required to submit an acoustical and thermal report and recommendations, prepared by a registered professional, to demonstrate that the interior noise levels and noise mitigation standards comply with the City's OCP for aircraft noise.

#### View, Mixed Use and Other Development Impacts

The proposed development is required to register a covenant on Title prior to rezoning bylaw adoption that identifies the development as a mixed use building and that notifies residents that they may be affected by on-site, as well as off-site, impacts that are typical in high density, mixed-use neighbourhoods (e.g. loss of view, shading, overlook, privacy, ambient noise and nighttime ambient light, etc.). The covenant will also require commercial and other non-residential uses to mitigate unwanted noise and to demonstrate that the building envelope is designed to comply with the City's Noise Bylaw. As part of the Development Permit review process, the applicant will provide an acoustic report from a qualified professional regarding sound attenuation measures.

#### Affordable Housing (AH) Strategy

The subject application was received prior to July 24, 2017 and is proceeding in accordance with in-stream provisions for applications that were in process at the time Council adopted amendments to the Affordable Housing (AH) Strategy in July 2017.

The applicant proposes to secure 5% of the permitted residential floor area as Low End Market Rental (LEMR) AH units on the third and fourth storey of building B and C. The applicant proposes to provide 21 AH units, with a combined unit floor area of 1,536 m<sup>2</sup> (16,534 ft<sup>2</sup>) Notably, 57% of the total AH units are family-friendly units, units meet or exceed the minimum unit areas referenced in the recently amended strategy, and units are secured at a lower monthly rate by way of complying with the superceded strategy terms.

Community Services staff support the applicant's response to the AH Strategy, including the proposal to cluster the units on two building levels. The applicant has demonstrated an intention to arrange for the AH to be managed by a paper profest housing provider, which is supported by

staff. The following units have been identified as future AH units and will be secured with a
legal agreement.

Unit Type	Number of Units	Proposed Unit Area	% of Unit Mix	Unit Location
1 bedroom	9	49 m <sup>2</sup> to 61.5 m <sup>2</sup> (535 to 662 ft <sup>2</sup> )	43%	3 <sup>rd</sup> floor: 7 units 4 <sup>th</sup> floor: 2 units
2 bedroom	7	79.8 to 102.6 m <sup>2</sup> (860 -1,105ft <sup>2</sup> )	33%	3 <sup>rd</sup> floor: 5 units 4 <sup>th</sup> floor: 2 unit
3 bedroom	5	92.8 to 102.7 m <sup>2</sup> (999 - 1,106 ft <sup>2</sup> )	24%	3 <sup>rd</sup> floor: 3 units 4 <sup>th</sup> floor: 2 units
Total	21			

# Accessible Housing

The OCP includes provisions to meet the needs of the City's aging population and people facing mobility challenges by encouraging the development of accessible housing. As part of the future Development Permit review process, the applicant would confirm:

- That all lobbies, common areas, and amenity spaces will be barrier-free;
- The inclusion of aging-in-place features (e.g., blocking in walls for grab bars, lever handles, etc.) in all units; and
- The inclusion of Richmond's Basic Universal Housing (BUH) standards in AH units. Through the Development Permit review process, the applicant would also confirm whether and how many market residential units will include BUH provisions.

#### Community Amenities

The CCAP Implementation Strategy includes density bonusing and other measures to support the provision of community amenities. The proposed rezoning includes contributions to community amenities as outlined below and in the Rezoning Considerations. Contributions are based on rates that apply at this time and would be subject to indexing adjustments as referenced in the proposed site specific zone.

# Child Care (T6 designation)

The subject site is located in the Brighouse Village Specific Land Use Map "T6" area and is subject to the T6 Child Care density bonus provision, which requires that 1% of the residential floor area is provided to the City as a turnkey child care facility or an equivalent cash-in-lieu contribution is provided to the Childcare Development Reserve Fund and Childcare Operating Reserve Fund accounts (90% and 10% respectively).

Community services staff have reviewed the location of the development and the potential to secure  $290 \text{ m}^2$  (3,130 ft²) for child care in the available floor area and recommend that the City accept a cash-in-lieu contribution based on a construction value contribution rate of \$6,997/m² (\$650/ft²). (\$2,036,915.00 using the residential floor, excluding AH floor area [0.01 x {30,647 m²-1,536 m²} x \$6,997/m²]).

# Community Facility (Village Centre Bonus (VCB) designation)

The site's existing Village Centre Bonus (VCB) designation supports a 1.0 FAR non-residential density bonus for designated sites that construct 5% of the bonus density as on-site community amenity space, or, if the City determines that a community amenity space should be located off-site, the applicant provides a construction value cash contribution to facilitate off-site construction by another developer. Comm**Phity 384** ces staff have reviewed the location of the

development and the potential to secure  $510 \text{ m}^2$  (5,498 ft²) of community amenity space and recommend that the City accept a cash-in-lieu contribution based on a construction value contribution rate of \$6,997/m² (\$650/ft²). (\$3,573,717.00 using the non-residential floor area  $[0.05 \times 10,215 \text{ m}^2 \times \$6,997/\text{m}^2]$ ).

#### Community Planning

The development proposal is subject to a community planning implementation contribution to be used for future community planning initiatives (a minimum of \$114,220.00 calculated using the proposed permitted floor area excluding AH floor area  $[(39,483 \text{ m}^2 - 1,536 \text{ m}^2) \text{ x } $3.01/\text{m}^2])$ .

#### Public Art

In accordance with the City's Public Art Program (Policy 8703), the applicant will either provide public art on-site or make a voluntary contribution to the City's Public Art Reserve fund calculated on both the non-residential and residential floor area excluding AH floor area (approximately \$308,380.00 as referenced in the Rezoning Considerations).

# Official Community Plan Sustainability

District Energy Utility (DEU): Under typical rezoning considerations, developments are required to be ready for connection to the City's District Energy Utility (DEU) system. In this case, the applicant is proposing to construct and transfer the low carbon energy plant to the City at no cost so that the Lulu Island Energy Company (LIEC) can provide immediate service to the customers and the equipment can be integrated into the future DEU system for this neighbourhood.

This servicing opportunity is consistent with the City Centre DEU due diligence analysis, which will be brought forward to Council in early 2019. While the City Centre due diligence analysis is being completed, this interim servicing strategy will secure the customer base for the immediate implementation of green house gas emissions reduction. LIEC staff have completed the business plan whereby LIEC can service new customers from the on-site low carbon energy plants at competitive cost to customers for the same level of service.

The applicant is working with LIEC staff to encourage the design of the system and equipment will be compatible with the future system. Mirroring the process of implementing the Affordable Housing Strategy, the transfer of the energy plant to the City will proceed only if Council adopts a new Service Area Bylaw, which will be provided for Council consideration in a separate report. If Council does not adopt the Service Area Bylaw, the development will be built as "DEU-Ready". A legal agreement securing these details is required to be registered on Title as a condition of rezoning bylaw adoption and details are provided in the attached Rezoning Considerations (Attachment 8).

Leadership in Energy and Environmental Design (LEED) Silver: In accordance with the CCAP, the proposed development will be constructed to achieve LEED Sliver equivalency. Prior to the Development Permit application being considered by the Development Permit Panel, the applicant will provide a list of sustainability features that may be incorporated into the development to ensure LEED Silver equivalency is achieved. The applicant's proposed sustainability strategy, including a draft checklist of anticipated provisions, is attached (Attachment 5).

#### **Public Consultation**

Rezoning signs have 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 signs 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**

# Proposed "High Density Mixed Use (ZMU39) - Brighouse Village (City Centre)" Zone

Within the City Centre, the greatest building density is supported by a combination of the "Urban Core T6 (45m)" and "Village Centre Bonus (VCB)" designations. Conditional to compliance with the provision of community amenities in according with CCAP density bonusing provisions, the site's designations may support bonus density to permit up to 1.0 FAR of non-residential density and a maximum 3.0 FAR of residential density on the property.

The proposed "High Density Mixed Use (ZMU39) – Brighouse Village (City Centre)" zone would secure community amenities in accordance with CCAP density bonusing provisions at current rates and include provisions for indexing adjustments if the rezoning bylaw is not adopted within time periods specified in the proposed site specific zone. In addition, the proposed site specific zone includes site specific provisions to permit:

- Reducing the street fronting building setback from 3.0 m (9.8 ft.) to 2.2 m (7.2 ft.) for a portion of the proposed building's Buswell Street frontage, subject to a supported interface at the sidewalk level and a Development Permit approved by the City.
- Below grade parking to encroach into required building setbacks;
- Shared on-site loading to maximize function and utility of designated loading spaces and to reduce the standard zoning Bylaw requirement based on the findings of a staff supported Traffic Impact Study; and
- A site specific Class 2 bicycle parking rate.

#### Built Form and Architectural Character.

The applicant proposes to construct a high-rise, high density, mixed use development that is generally consistent with policies and design guidelines that apply within the City Centre, and specifically within the Brighouse Village and applicable Sub-Area B.4.

# Site Planning

The subject site is surrounded by City streets and lanes and does not abut a private property. All service and access functions are provided from the lane. As a result, the pedestrian realm along the site's Park Road and Buswell Street frontages is uninterrupted. The public realm is characterized by active uses along the road frontages and connectivity between uses.

• Street-fronting uses, including a series of commercial retail units and lobbies to on-site residences and offices, are oriented to support pedestrian access from the sidewalk or from an approximately 368 m<sup>2</sup> (3,960 ft<sup>2</sup>) public plaza located along the property's Park Road frontage.

- The proposed Park Road plaza would interrupt and animate the development's long Park Road frontage and support pedestrian connectivity between Park Road, commercial uses (including a proposed grocery store), on-site enclosed parking, a proposed at grade north/south public pedestrian connection through the building, and a proposed new midblock Park Road push button pedestrian crossing. The proposed plaza would attract a variety of users throughout the day. As a condition of rezoning bylaw adoption, the proposed plaza would be secured by a right of way as described in Attachment 8.
- A north/south pedestrian connection through the building that connects Park Road, the proposed Park Road public plaza, and the east/west lane is proposed. Inclusion of a pedestrian connection is consistent with the CCAP's objective to introduce smaller block pedestrian connections (less than 100 m) to provide more access options and linkages for pedestrians. Public access through the building will be secured by a right of way as described in Attachment 8. To encourage its use by pedestrians and to maximize both the pedestrian experience and safety, the proposed building podium design includes lightwells to facilitate natural light penetration to the north/south pedestrian connection and inclusion of vertical landscaping.
- Towers are sited in accordance with CCAP tower separation guidelines to minimize overlook and shadow impacts on neighbouring properties and public spaces.

#### Massing

The proposed building massing is consistent with CCAP guidelines that encourage varied and distinctive building forms:

- The podium streetwall base includes porosity (Park Road plaza and north/south
  pedestrian connection through the podium), varied building setbacks along road frontages
  (from 2.2 m to 5 m from the new property lines), and a "human-scaled streetscape"
  (concealed parking and servicing, articulated building façades, and weather protection).
- The development proposal is characterized by its proposed stepped mid-rise building design, which would vary streetwall heights and floorplate shapes with consideration of overlook and shadow impacts on the public realm and adjacent properties.
- Proposed tower floorplates are generally consistent with CCAP design guidelines. The
  development's proposed stepped tower design is characterized by incrementally reduced
  tower floorplate sizes.
  - Tower A's podium includes office uses (4<sup>th</sup> to 7<sup>th</sup> storey), and proposes larger floorplates, with residential uses above.
  - Tower B has a slim profile and tower floorplates that are less than a 650m<sup>2</sup> (6,996 ft<sup>2</sup>).
  - Tower C similarly proposes a slim profile tower with floorplates that are less than 650 m<sup>2</sup> (6,996 ft<sup>2</sup>) for the upper 6 storeys of the tower.

#### Amenity Space

The proposed indoor and outdoor amenity spaces satisfy OCP and CCAP Development Permit (DP) guideline rates (Attachment 3). Programming and design details will be provided as part of the DP review process.

#### **Transportation**

Transportation Improvements and Related Features

The CCAP requires road, pedestrian and public realm improvements around the subject site as shown in the preliminary road functional plan (Attachment 6). The associated required land

dedications are listed in Attachment 8. In addition, the proposed development includes a variety of transportation related features including the following:

<u>Vehicle Access</u>: To minimize the impact of development on the City's roadways, all access to the site will be via the existing east/west and north/south laneways, which will be widened. Three parkade accesses are proposed. Two way access for both residential and non-residential uses would be located at the west laneway. Two way access would be provided for residential use from the north lane that is located adjacent to the proposed north/south pedestrian connection. Exit only use for both residential and non-residential uses would be provided at a second access at the north lane. In addition, the intersection at Buswell Street and Park Road will be upgraded from the current four way stop configuration into a signalized intersection and the applicant will undertake upgrades on the north side of Park Road along the subject property's frontage, with desired transitions as outlined in Attachment 8.

<u>Loading and Collection</u>: Six on-site medium size (SU-9) loading spaces are proposed. All spaces will be secured as shared spaces as a condition of rezoning bylaw adoption and a covenant will be registered on Title to prohibit access/service by large (WB-17) vehicles. A draft waste management plan has been provided and will be finalized through the Development Permit review process.

<u>Vehicle and Bike Parking</u>: Zone 1 City Centre parking rates apply to the subject site. The development proposal exceeds the required number of on-site vehicle parking spaces and complies with required bicycle parking requirements (Attachment 3).

<u>Electric Charging</u>: In accordance with the Zoning Bylaw, all residential parking spaces feature an energized outlet. Although not required by the Zoning Bylaw, the proposal includes electric vehicle charging provisions for the shared commercial and visitor parking spaces (20% of stalls with 120 V electric vehicle charging receptacle, 25% electric vehicle charging capable stalls with roughed in conduit for future installation of charging receptacle).

<u>Voluntary On-Site Car Share</u>: Although the development proposal meets the Zoning Bylaw onsite parking requirements outright, to encourage less reliance on personal automobiles by future residents, the applicant is facilitating the introduction of car share vehicles on the site for public use as a Transportation Demand Management (TDM) amenity. The applicant voluntarily proposes to:

- Provide two car share stalls on-site (accessible from the north/south lane, on-site maneuvering);
- Enter into a voluntary agreement with a car share provider (Attachment 7); and
- Provide a one-time contribution to the car share provider towards the purchase of a new vehicle(s).

The car share provider will initially introduce one car share vehicle on-site. A second vehicle will be introduced when there is public demand for the service. The applicant is required to register a legal agreement on Title to secure the car share space (Attachment 8).

## Site Servicing and Frontage Improvements

The applicant is responsible for the design and construction of required water, storm sewer, sanitary sewer, lighting and road and frontage upgrades, as well as related public and private utility improvements, to the satisfaction of the City. These works will be implemented through the standard Servicing Agreement (SA) process in accordance with the terms outlined in the attached Rezoning Considerations (Attach Responsible 1988)

#### **Existing Legal Encumbrances**

The proposed development of the subject site is not encumbered by existing legal agreements on Title that affect redevelopment. The proposed rezoning will change the current property boundaries. Supplementary Statutory Right of Way(s) (SRW) related to City and/or private utilities may be required. If required, these changes would be facilitated through the SA process.

# **Development Phasing**

The proposal is a single phase development. The applicant intends to create four airspace parcels and a remainder (three residential air space parcels, one office air space parcel, one commercial and parking remainder). An associated draft plan will be provided as part of the Development Permit review process.

# Tree Retention and Replacement

There are no existing bylaw trees on or adjacent to the subject site. No tree replacement or protection is required. Draft landscape plans are attached (Attachment 2) and will be reviewed in detail as part of the Development Permit review process.

#### **Development Permit**

The Rezoning Considerations attached to this report (Attachment 8) include a requirement for the substantive completion of a Development Permit (DP) for the subject site prior to adoption of the rezoning bylaw. The DP review process includes evaluation of the architecture and landscape plans by both staff and the Advisory Design Panel (ADP) and will include, but is not limited to review and/or resolution of the following:

- Provide material and color details, and detailed elevation plans for staff and ADP review;
- Confirm proposed balcony dimensions and total area for compliance with design guideline objectives, and proposed weather protection details (awnings);
- Provide design details for the proposed stairway to the second storey restaurant space, including information regarding how the stairs would be secured outside of business hours;
- Include signage references on the DP plans to identify public spaces, including the north/south public connection and Park Road plaza;
- Confirm that landscaping proposed within the lightwells will survive and thrive;
- Submit design and distribution details related to accessible units and general accessibility provisions;
- Articulate Crime Prevention Through Environmental Design (CPTED) measures and their inclusion on the plans to demonstrate natural surveillance, defensible space and maintenance measures;
- Confirm whether rooftop solar panels will be integrated into the final design;
- Reference provisions for electric bicycle receptacles;
- Confirm the location of above ground utilities and undertake any resulting required building design changes to facilitate placement of the equipment on-site and outside required building setbacks;
- Confirm that a minimum 7.5 m clearance is provided in designated garbage/recycling collection areas; and
- Include bike repair/maintenance station(s) for residents.

# Financial Impact or Economic Impact

The rezoning application results in approximately \$6,000.00 of Operational Budget Impact (OBI) related to the traffic signal upgrades. All other off-site City infrastructure including roadworks, waterworks, storm sewers, sanitary sewers, street lights, street trees and traffic signals results in an insignificant OBI impact.

#### Conclusion

W.T. Leung Architects, Inc. on behalf of Park Village Investments Ltd. & Grand Long Holdings Canada Ltd. has applied to the City to create the "High Density Mixed Use (ZMU39) – Brighouse Village (City Centre)" zone and to rezone 8071 and 8091 Park Road from the "Downtown Commercial (CDT1)" zone to the proposed site specific zone.

The applicant proposes a high-density development that includes mixed commercial, office and residential development in a building design that is characterized by three stepped towers above a mixed use building podium. The proposed on-site uses and features to support an animated public realm (proposed Park Road Plaza and north/south pedestrian connection, ground level commercial uses, varied building setbacks) and the proposed building massing (varied building setbacks, slim tower floorplates) are consistent with CCAP objectives and design guidelines. The site's existing designations in the CCAP identify it as eligible for consideration of supplementary non-residential density. Through the development review process, the applicant has demonstrated that the development proposal qualifies for bonus non-residential density and will contribute to child care and community facilities funds in accordance with the terms of the CCAP Implementation Strategy.

Based on staff's analysis of the development proposal, it is recommended that Richmond Zoning Bylaw 8500, Amendment Bylaw 9878, be introduced and given first reading.

Diana Nikolic, MCIP

Senior Planner/Urban Design

DN:cas

Attachment 1: Location Map

Attachment 2: Conceptual Development Plans

Attachment 3: Development Application Data Sheet

Attachment 4: Brighouse Village Specific Land Use Map

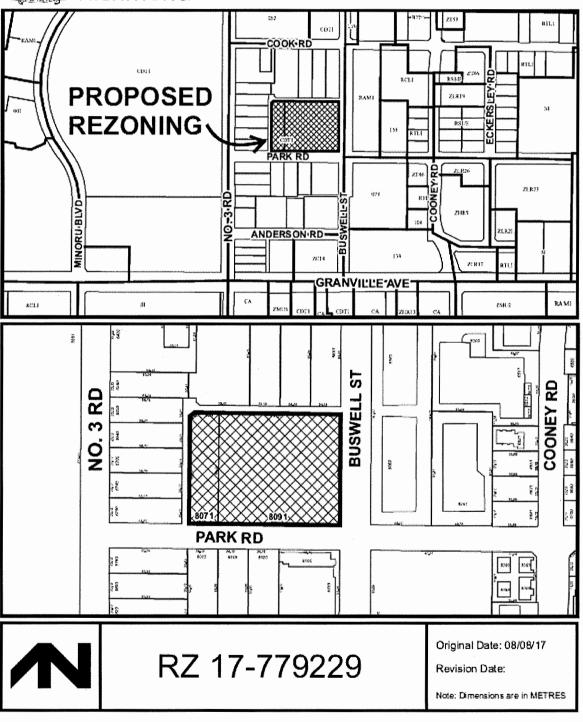
Attachment 5: Preliminary Sustainability Checklist

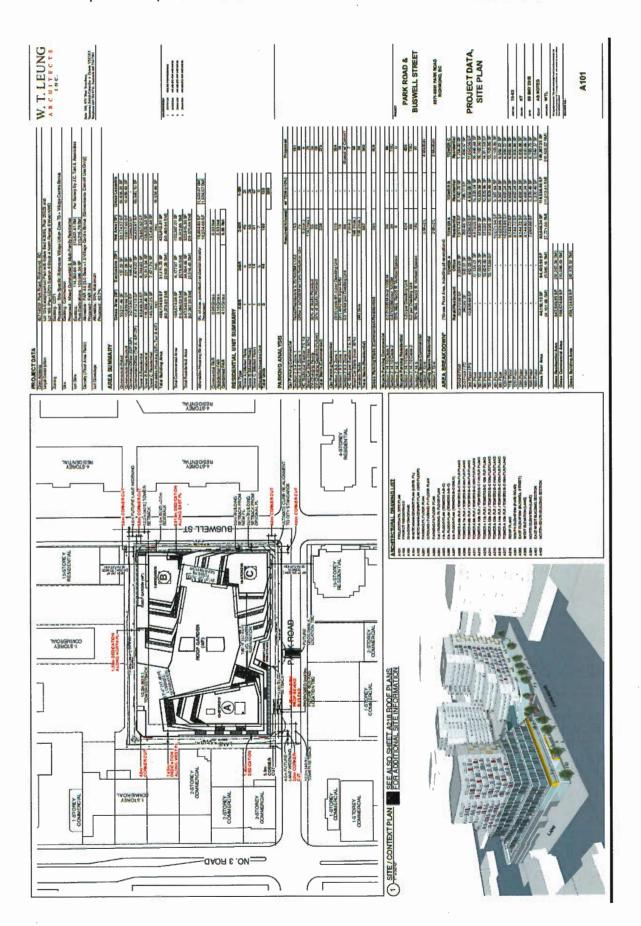
Attachment 6: Preliminary Road Functional Plan

Attachment 7: Car Share Letter of Undertaking

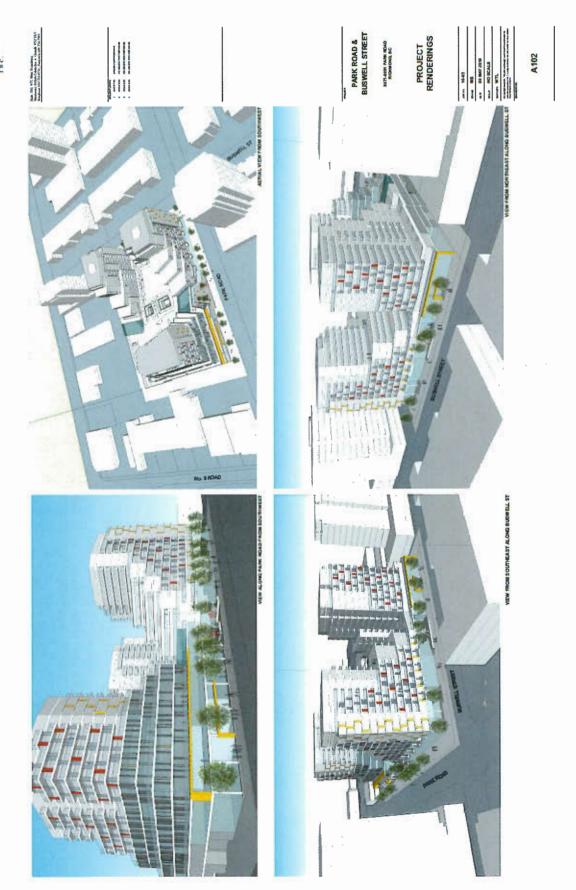
**Attachment 8: Rezoning Considerations** 







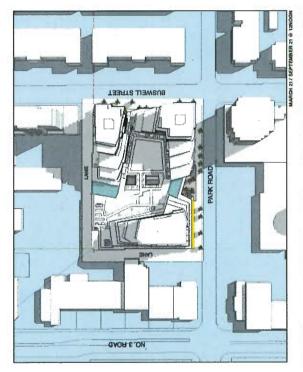
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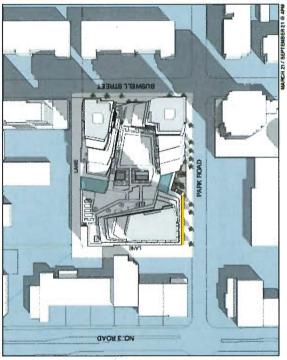


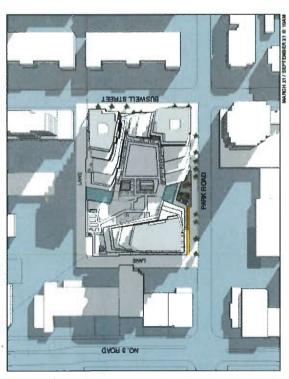
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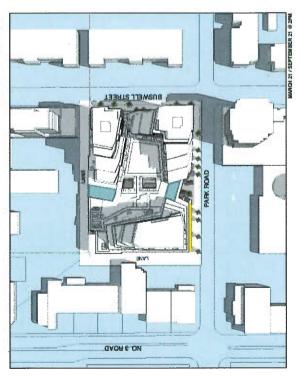


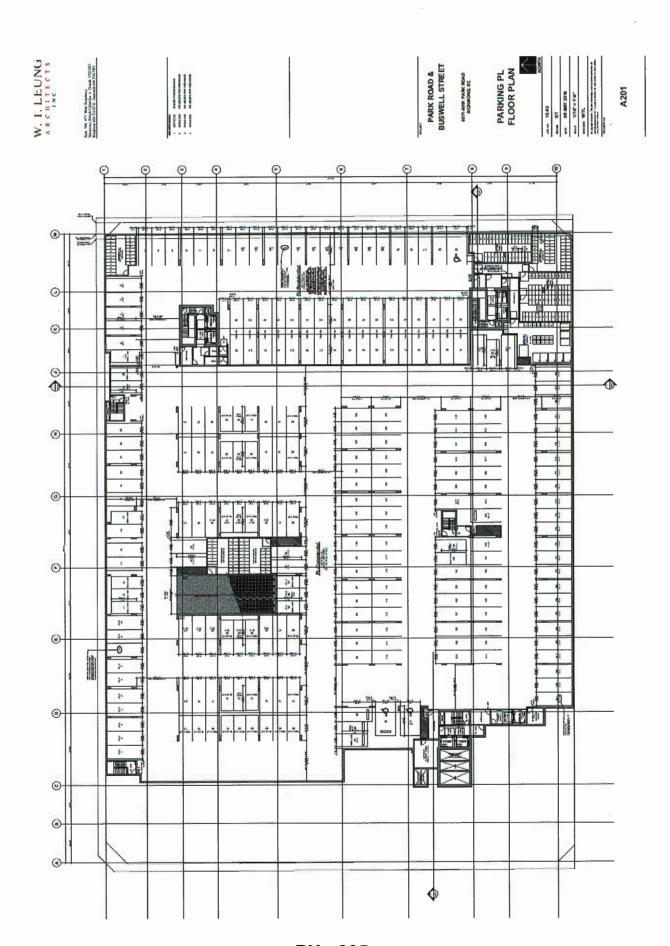
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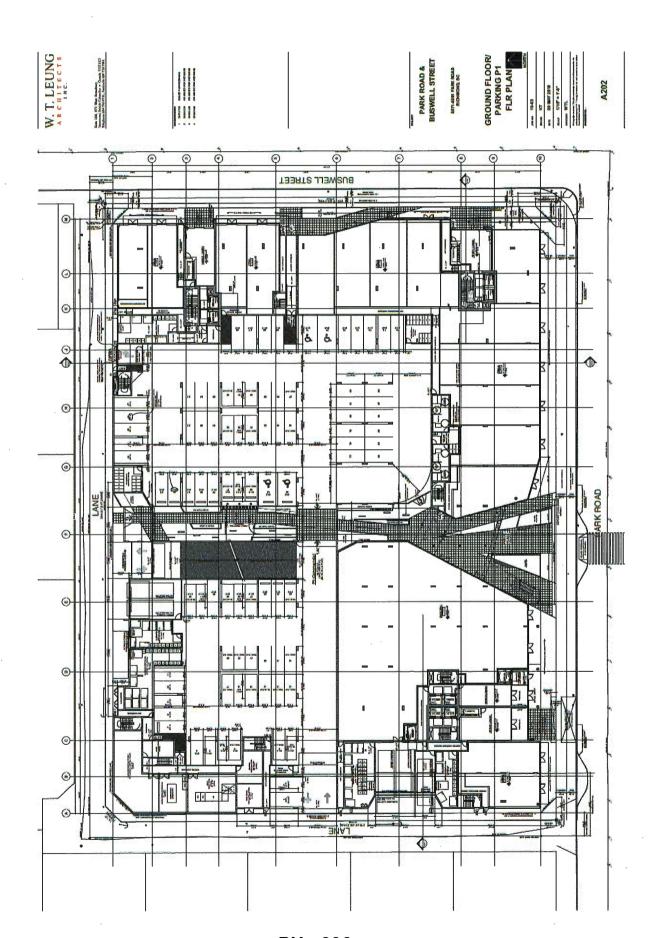




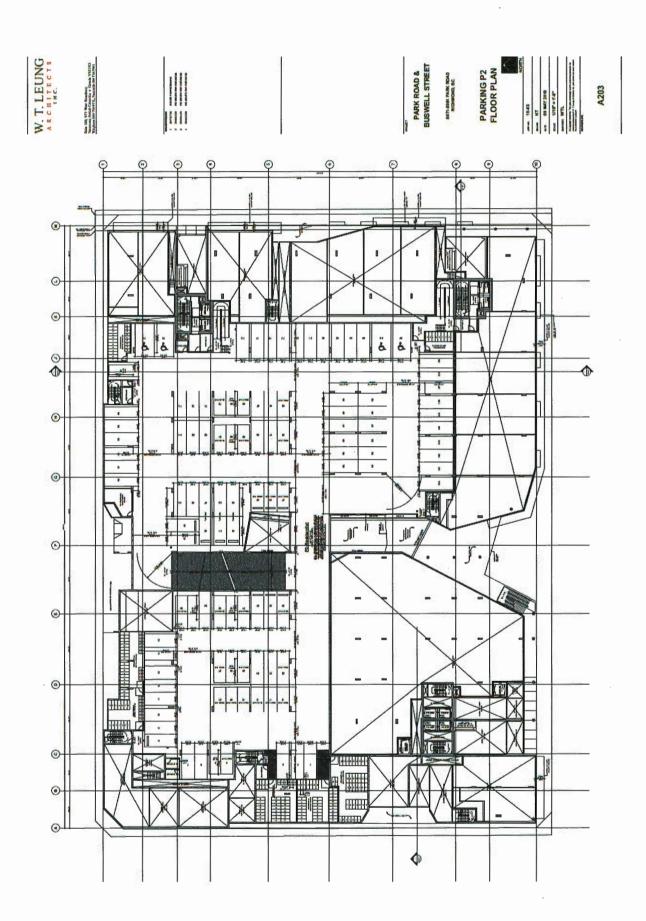


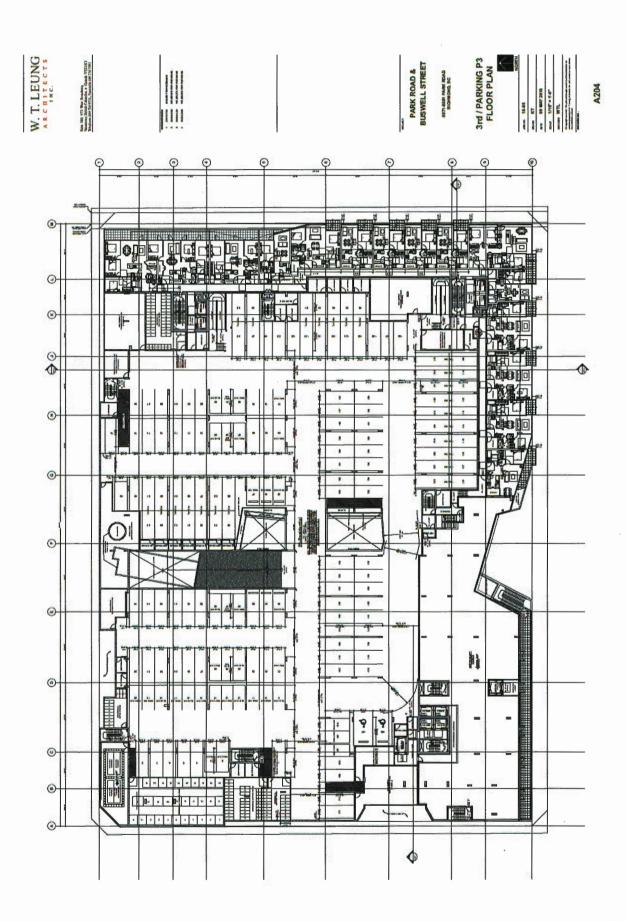


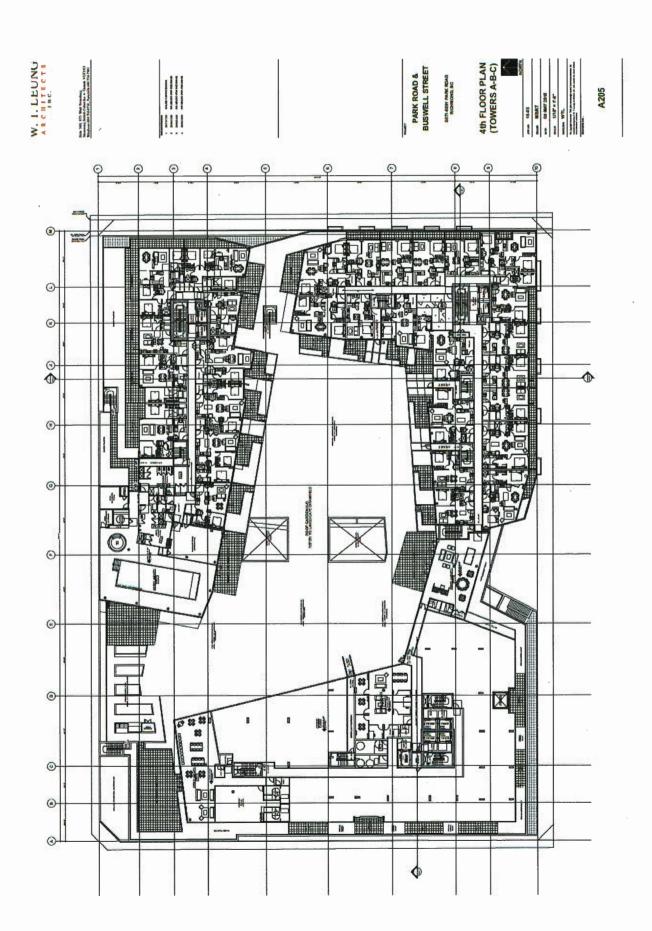
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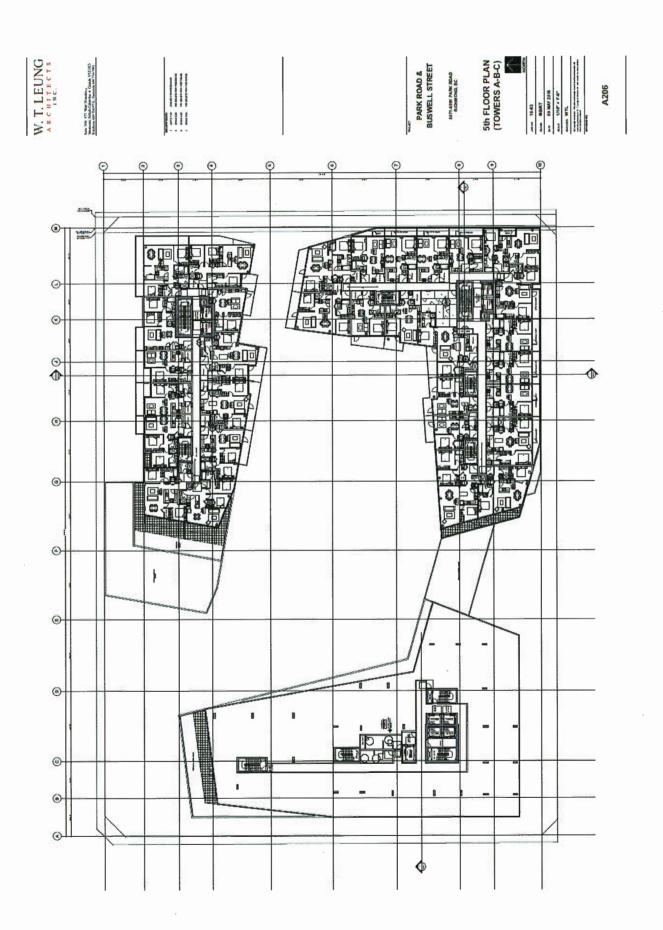
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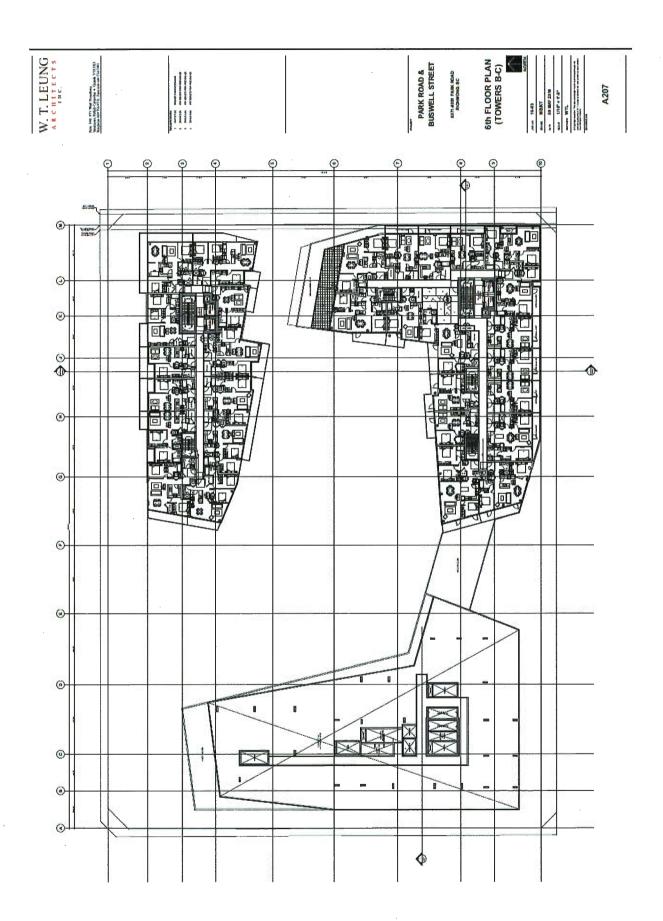


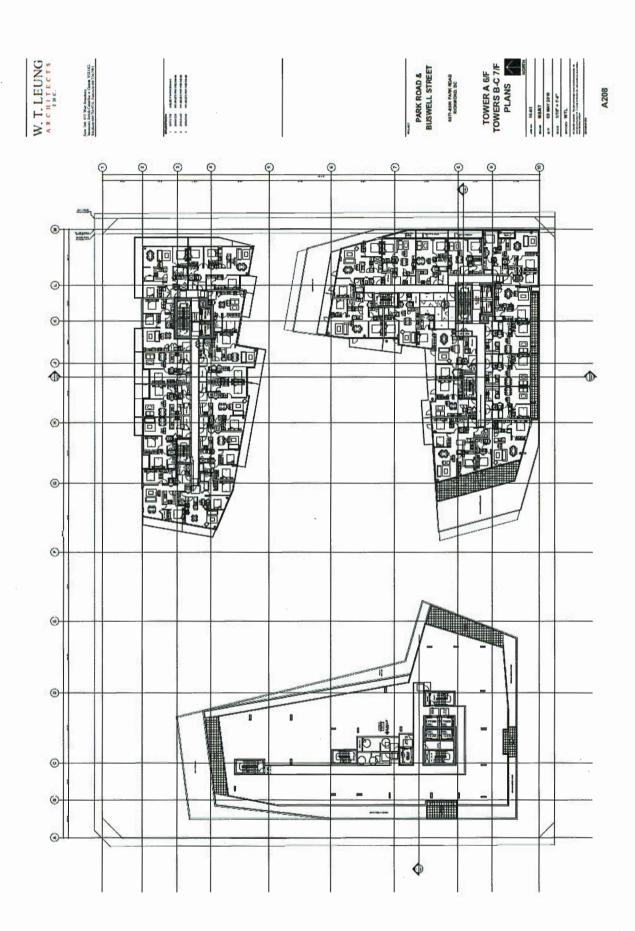


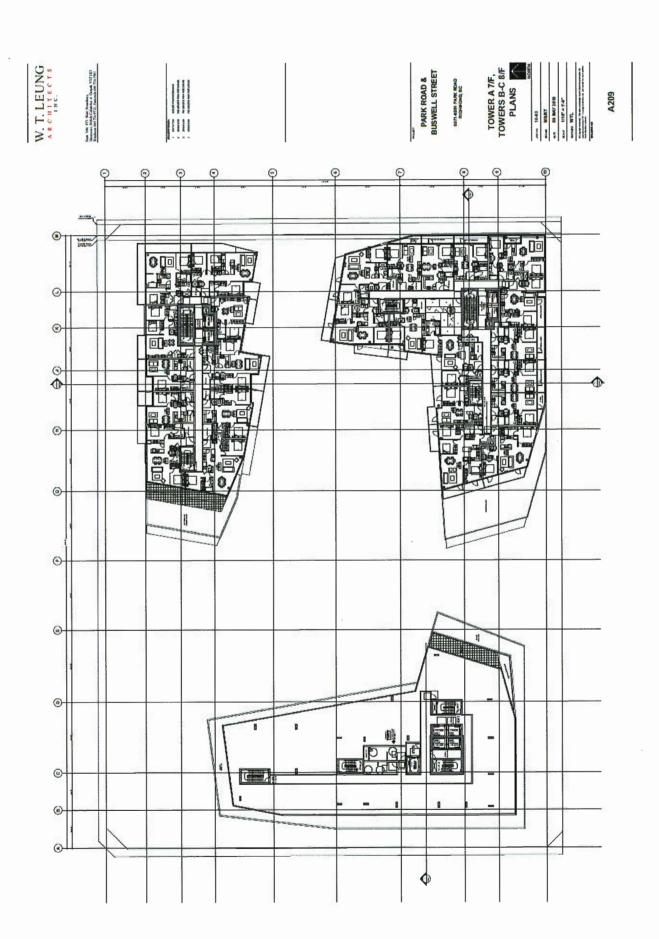


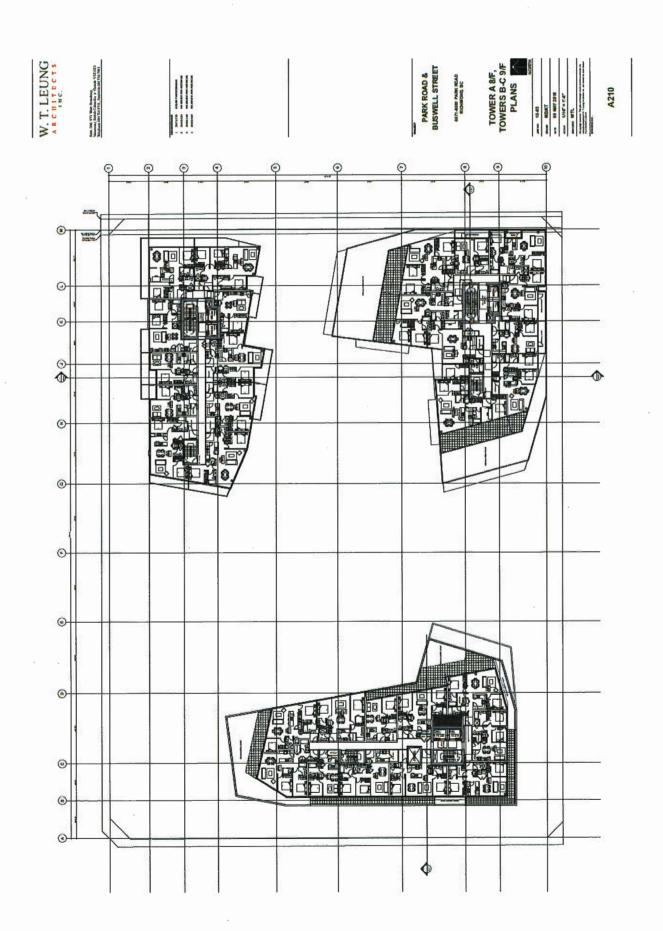
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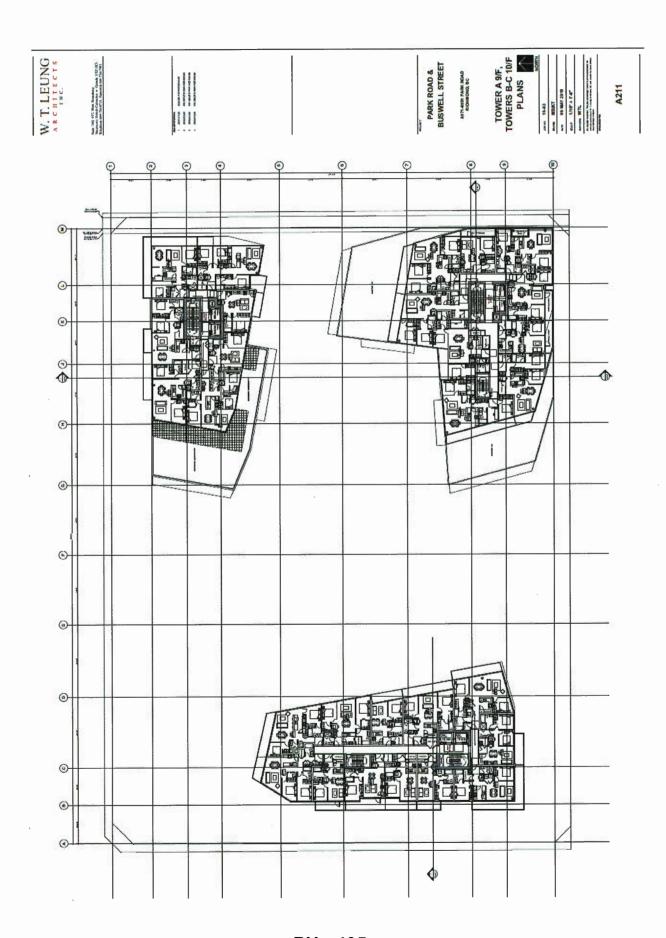




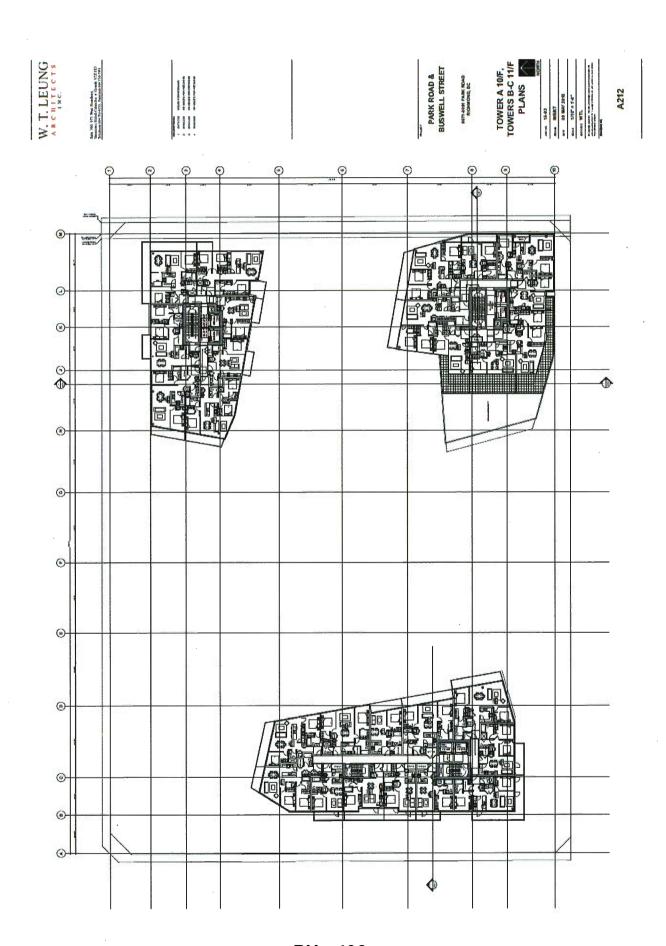




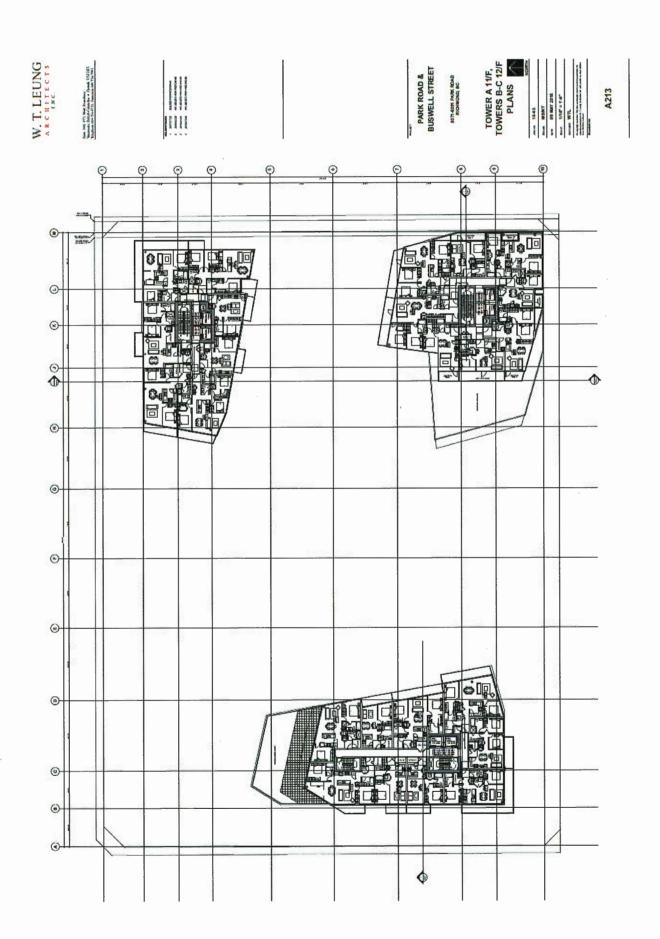


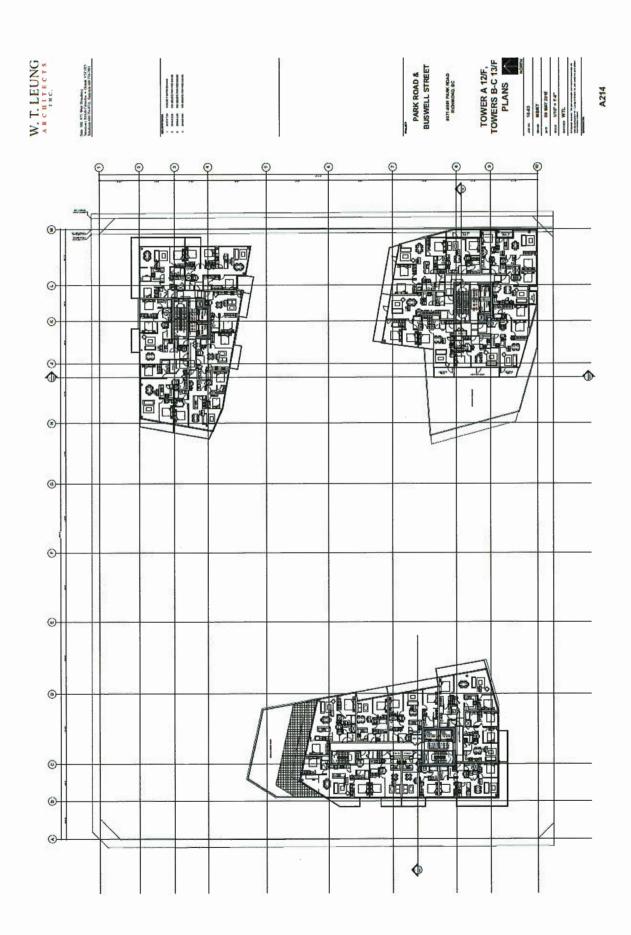


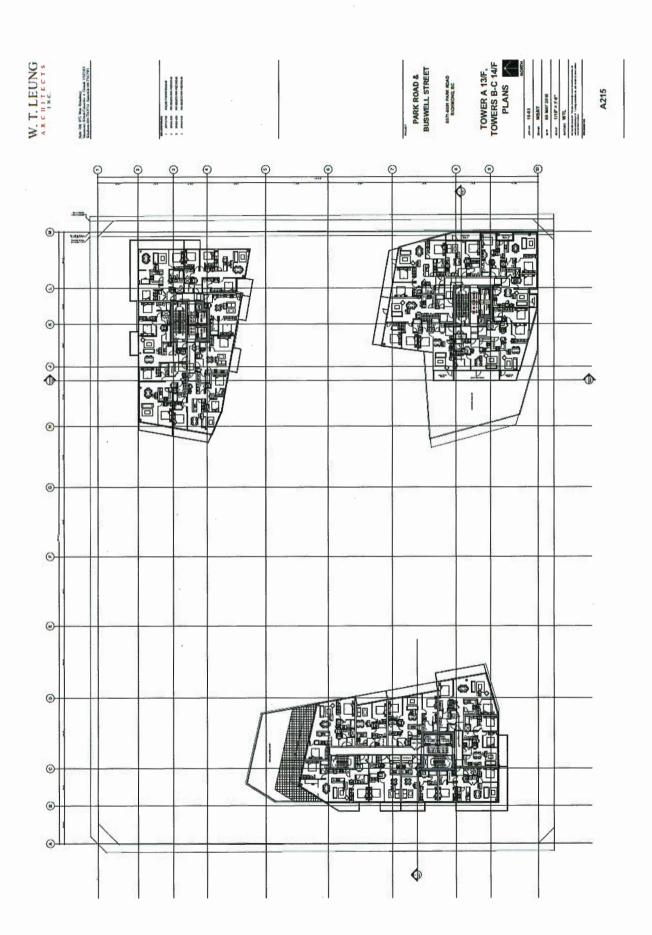
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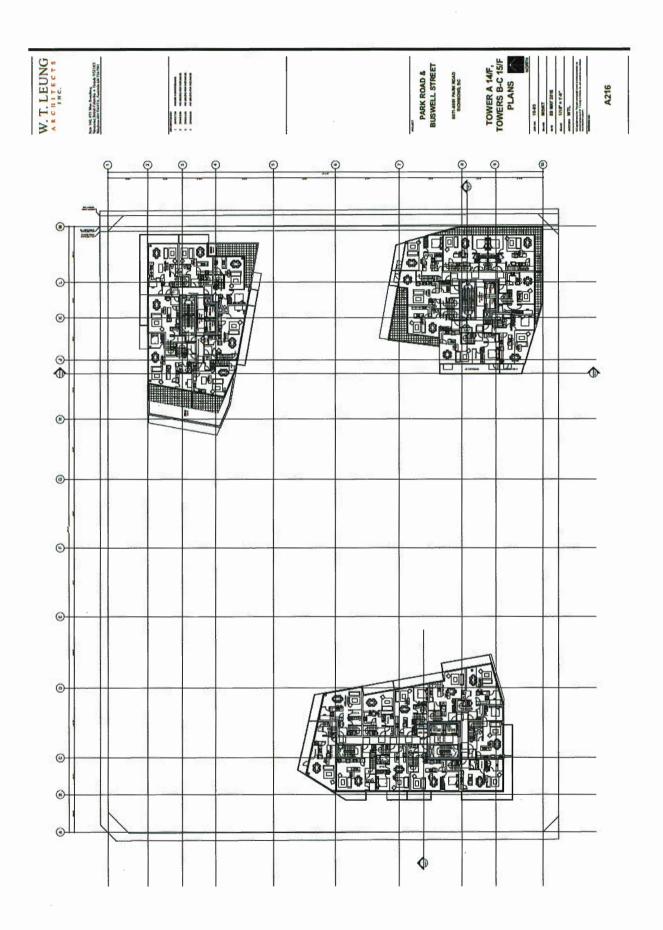
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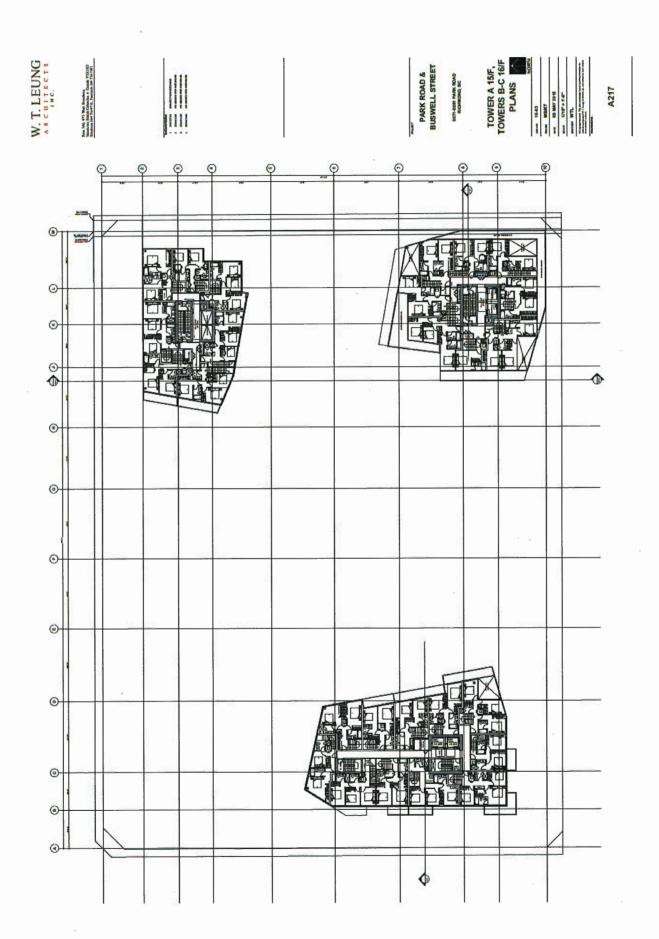




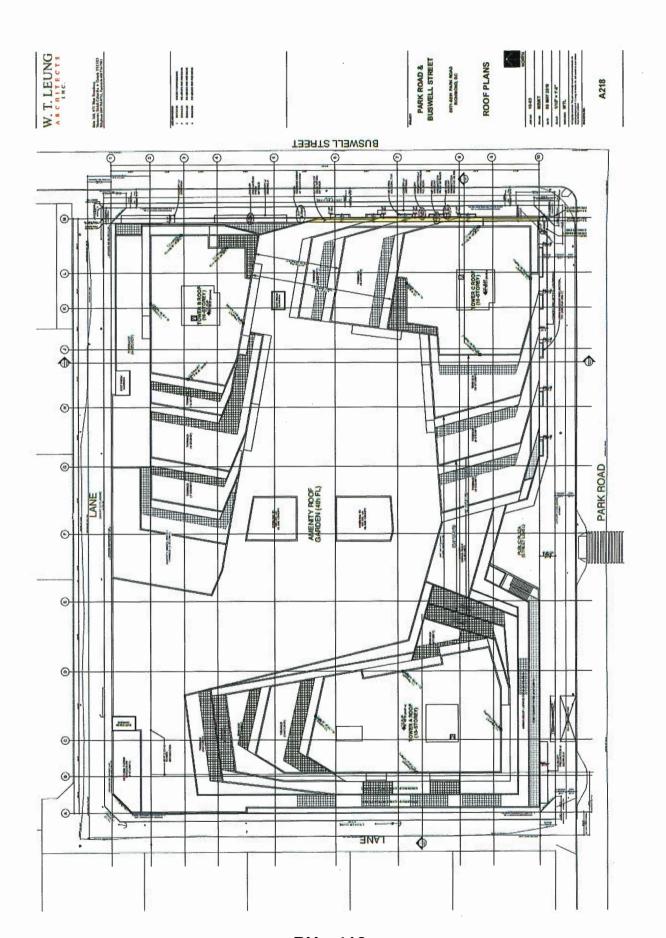


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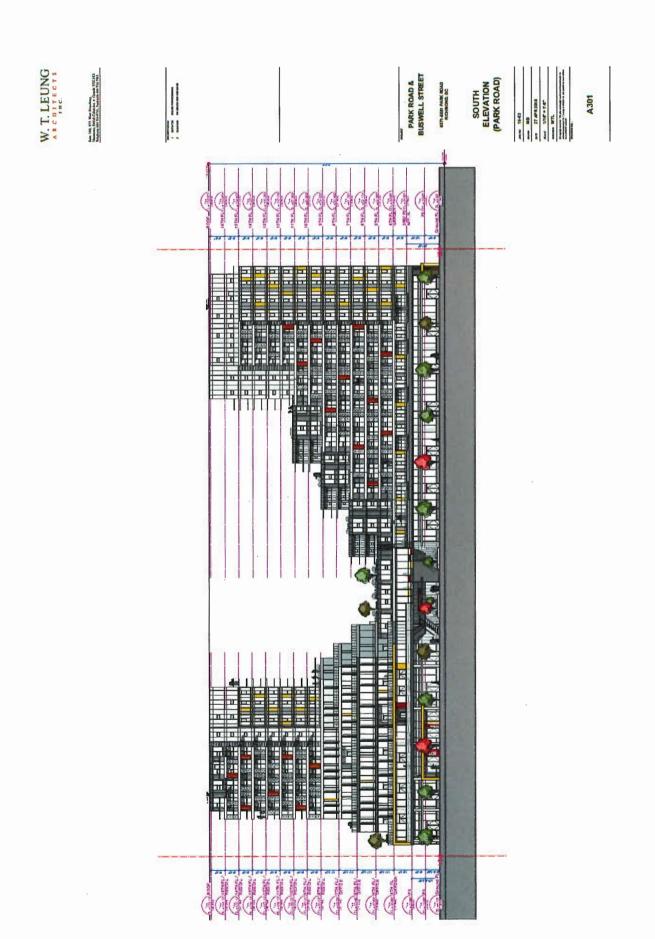




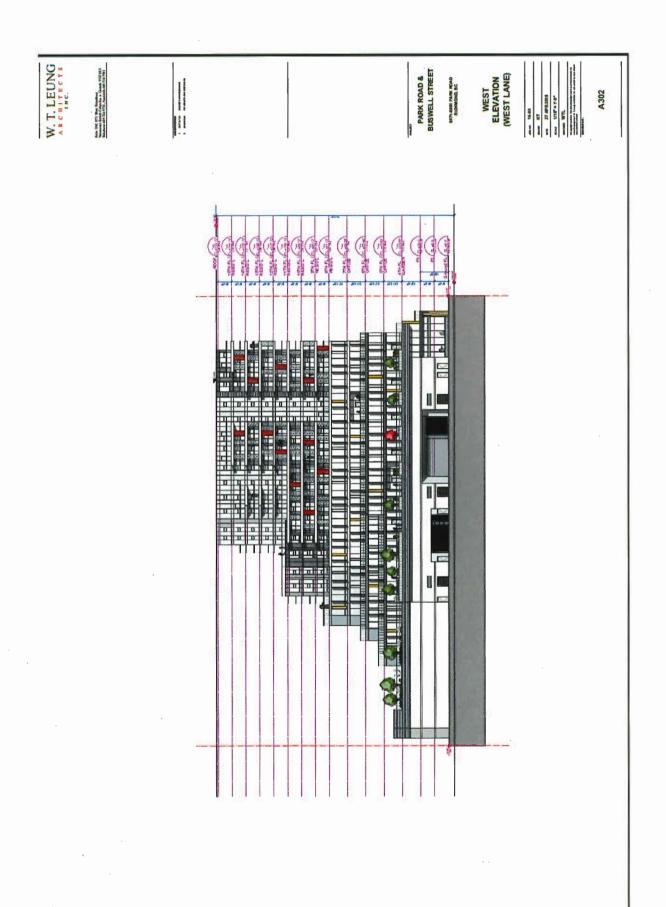
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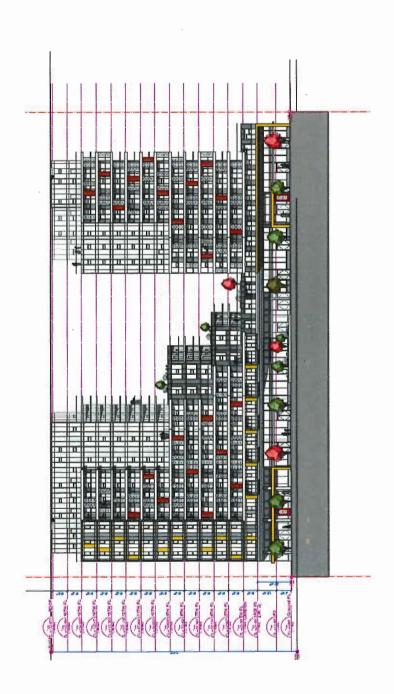
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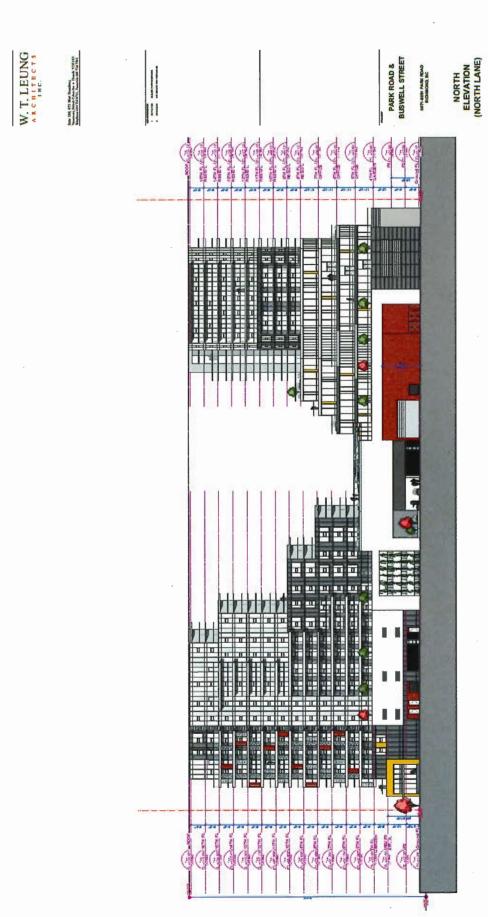


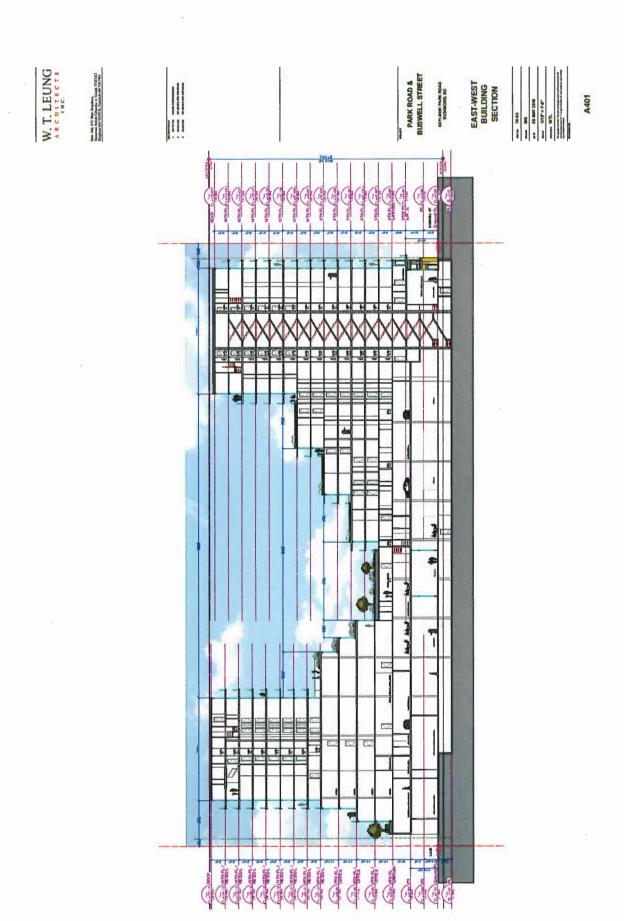
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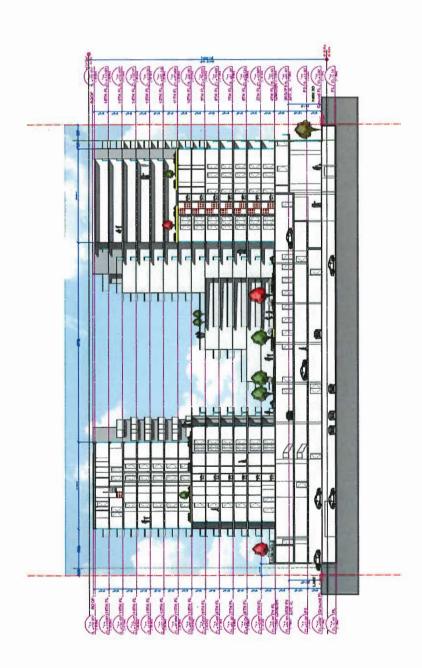




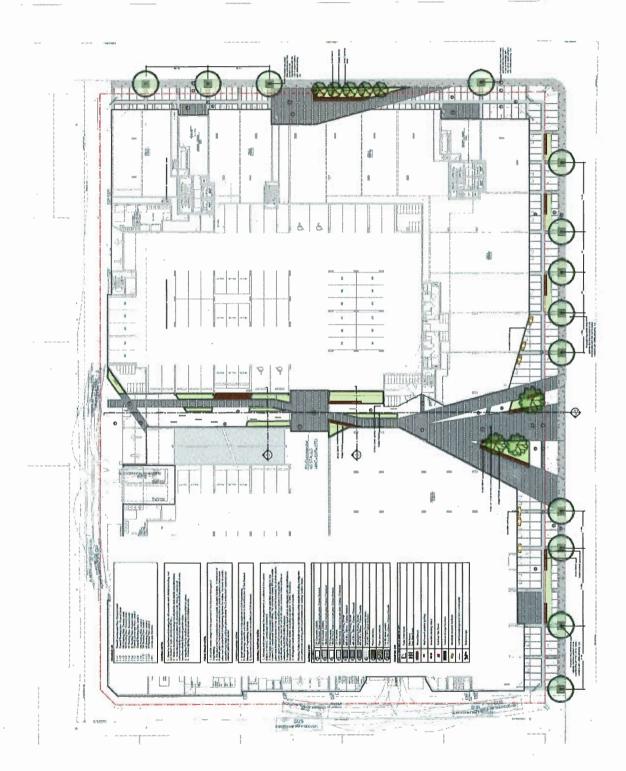




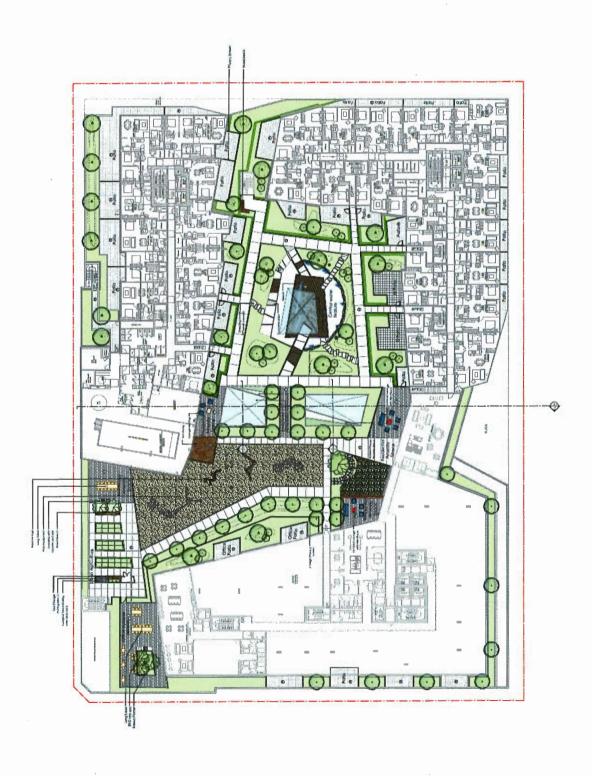














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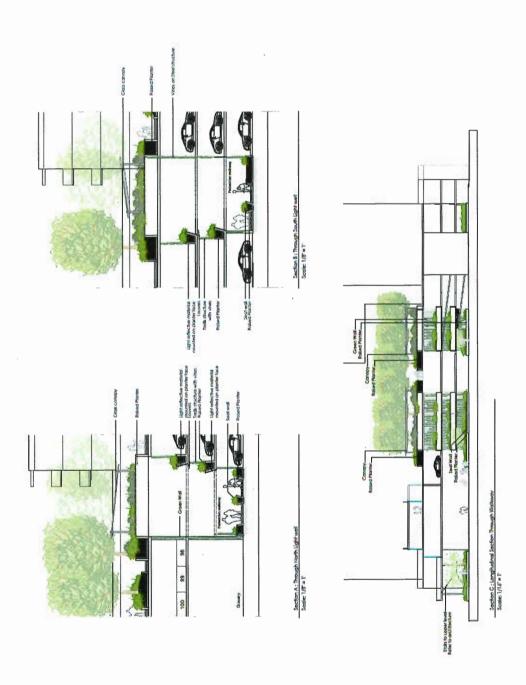






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# **Development Application Data Sheet**

**Development Applications Department** 

RZ 17-779229 Attachment 3

Address:

8071 and 8091 Park Road

W.T. Leung Architects, Inc. on behalf of Grand Long Holdings Canada Ltd. & Park

Applicant: Village Investments Ltd.

Planning Area(s): City Centre Area Plan (Brighouse Village)

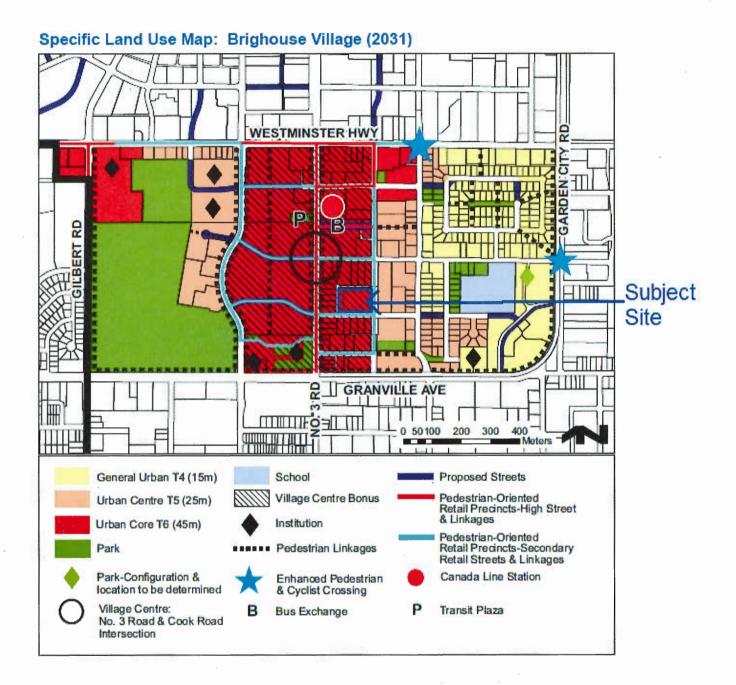
	Existing	Proposed
Owner:	Grand Long Holdings Canada Ltd. & Park Village Investments Ltd., Inc. No. BC1091629	Grand Long Holdings Canada Ltd. & Park Village Investments Ltd., Inc. No. BC1091629
Site Size (m²):	10,621.61 m² (114,333 ft²)	10,216 m² (109,969 ft²)
Land Uses:	Commercial, restaurant	Office, commercial, restaurant, residential
OCP Designation:	Downtown Mixed Use	Downtown Mixed Use
Area Plan Designation:	Urban Core T6 (45 m), Village Centre Bonus	Urban Core T6 (45 m), Village Centre Bonus
Zoning:	Downtown Commercial (CDT1)	High Density Mixed Use (ZMU39)  – Brighouse Village (City Centre)
Number of Residential Units:	0	Market housing: 318 residential units AH:21 Total: 339

On Future Subdivided Lots	Proposed ZMU39 Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	2.0 FAR increased to a higher density of 3.0 FAR conditional to complying with the City's affordable housing objectives  3.0 FAR increased to a higher density of 4.0 FAR conditional to the lot being located within a VCB designated area and complying with VCB terms	Net: 3.86 FAR Residential: 2.93 FAR Non-residential: 0.93	none permitted
Buildable Floor Area (m²):*	40,863 m² (439,846 ft²)	Total: 39,482 m² (424,980 ft²)  Residential: 29,970 m² (322,615 ft²)  Non-residential: 9,512 m² (102,397 ft²)	none permitted
Lot Coverage (% of lot area):	90% for buildings	62.7%	none

On Future Subdivided Lots	Proposed ZMU39 Bylaw Requirement	Proposed	Variance
Lot Size:	CCAP minimum: 4,000 m <sup>2</sup>	10,215 m² (109,969 ft²)	none
Lot Dimensions (m):	Width: 45 m Depth: 40 m	Width: 88 m Depth: 120 m	none
Setbacks (m):	<ul> <li>Park Road and Buswell Street: 3m minimum that may be reduced to 2.2m subject to conditions</li> <li>Rear: Min. 0 m</li> <li>Side: Min. 0 m</li> </ul>	<ul> <li>Park Road: Min. 3 m</li> <li>Buswell Street: Min. 2.2 to 3.0 m</li> <li>Rear (west): Min. 1.45 m</li> <li>Side (north): Min. 1.5 m</li> </ul>	none
Permitted setback projections:	<ul> <li>Balconies: 1/3 of required setback (0.73 m to 1.0 m)</li> <li>Architectural features: 0.6 m</li> <li>Awnings: to the property line (as approved through the DP)</li> <li>Cantilevered roofs: 1.2 m</li> <li>Above ground utilities: 0.6 m</li> </ul>	Balconies: Park Road: 0.72 m Buswell Street: 0.73 m Awnings: Park Road: 1.5 m Buswell Street: 1.52 m	none
Height (m):	47 m geodetic	Tower A: 46.93 m Tower B & C: 46.88 m	none
Parking Spaces – Total (Zone 1)	Total: 565  Residential: 337 Non-residential: -Commercial/restaurant: 153 (shared with residential visitors) -Office: 75	Total: 618  Residential: 343  Non-residential: -Commercial/restaurant: 191 (of which 153 are to be shared with residential visitors) -Office: 84	none
Parking Spaces – Residential (City Centre Zone 1) Applied rates: Residential:1/unit AH: 0.9/unit Shared visitor/commercial parking (no exclusive use)	Total: 337  Residential: 318 AH: 19 Visitor: 64 spaces shared with commercial	343 (no TDM relaxation requested or required)	none
Parking Spaces – Non-Residential Applied rates: 3.75/100m2 (on 1 <sup>st</sup> 2 floors) + [1.5/100m2 (above 1 <sup>st</sup> 2 floors) – 15%]	Total: 228  Commercial/restaurant: 153 (shared with residential visitors) Office: 75	Total: 275  Commercial/restaurant: 191 (shared with residential visitors) Office: 84 (no TDM relaxation requested or required)	no TDM relaxation requested or required
Tandem Parking	50% max for market residential spaces (maximum permitted: 159)	88 parking stalls in tandem arrangement (44 tandem stalls)	none

On Future Subdivided Lots	Proposed ZMU39 Bylaw Requirement	Proposed	Variance
Accessible Parking	2% of required parking spaces (12 stalls)	13 Commercial: 6 Residential: 7	none
Loading	6 shared medium truck loading spaces No large on-site truck (WB17) parking	6 shared medium truck loading spaces	none
Class 1 Bike Storage (Secure) Applied rates: Residential: (1.25/unit) Commercial: (0.27/100m² gross	Total:449  Residential: 424  Commercial: 25	Total:491 Residential: 425 Commercial: 66	none
leasable area greater than 100 m²)  Class 2 Bike Storage (Unsecure)  Applied rates:  Residential: (0.1/unit)  Commercial:(0.1/100m² gross  leasable area greater than 100m²)	Total: 44  Residential: 34  Commercial: 10	The location of 44 spaces to be determined through the DP review process.	none
Electric Vehicle (EV) Charging Equipment	All residential parking spaces (excluding) visitor parking spaces to feature energized outlet (minimum Level 2 charging)	Residential: 100% EV ready  Commercial/visitor parking spaces: 20% of stalls with 120 V electric vehicle charging receptacle 25% of stalls with roughed in conduit for future installation of charging receptacle	none
Amenity Space – Indoor:	2 m²/unit: 678 m² (ZMU39 permits 0.1 FAR additional floor area provided it is used entirely to accommodate indoor amenity space [1,078 m²])	Total: 1,078 m² (Residential: 804 m², Office: 274 m²)  Tower A: Residential: 145 m², Office: 804 m² Tower B: Residential: 519 m² Tower C: Residential: 139 m²  Amenity area exceeds Bylaw permitted exemption; therefore, 57 m² of indoor amenity is included in the proposed FAR)	none
Amenity Space – Outdoor:	OCP: Min. 6.0 m²/unit, including 600 m² for children's play space: 2,034 m² based on 339 units  CCAP: Min. 10% of net site: (1,021 m² based on 10,215 m²)	Total: 3,558 m <sup>2</sup> Office: 605 m <sup>2</sup> Residential: 2,953 m <sup>2</sup> , including 604 m <sup>2</sup> children's play area	none

<sup>\*</sup> Preliminary estimate, exact building size to be determined through zoning bylaw compliance review at Building Permit stage.



### Preliminary Sustainability Checklist



May 1, 2018

Project: Park Road & Buswell Street

Re: Green Building Components

The following list highlights the prominent sustainable features of the Park Road & Buswell Street project. Many of these features are a passive response to energy conservation, thermal comfort and protection or restoration of a more natural environment.

We have also provided a draft Sustainability Scorecard. The Scorecard shows the project is incorporating numerous sustainable strategies currently targeting 53 LEED points (50 points are required for Silver). Several more points are potentially available and will be confirmed, as the design is refined. These strategies are consistent with the City of Richmond requirements.

- SSp1 Construction Activity: An erosion and sedimentation control plan will be implemented to minimize erosion and sedimentation during demolition, site preparation and throughout construction.
- SSc2 Development Density & Community Connectivity: The project is located in downtown area with high density and close proximity to a variety of community services.
- SSc4.1 Access to Transit: The project location is situated in close proximity to the Canada Line station and numerous bus lines surround the site.
- SSc4.2 & 4.3 Alternative Transportation: The project will incorporate bicycle storage, changing rooms with showers and provide electric vehicle charging stations to further strengthen the use of alternative methods of transportations.
- SSc5.2 Open Space: The project will incorporate a significant amount of plantings and public open space.

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- SSc7.1 Heat Island Effect: Strategies such as minimizing asphalt roadway and placing 100% of parking under the building will help reduce Urban Heat Island Effect.
- WEc1 Water Efficient Landscaping: Landscaping will utilize drought tolerant plant material (tree shrubs, groundcover and ornamental grasses), and adaptive plants to reduce the reliance on irrigation.
- WEc1 Irrigation Efficiency: High efficiency irrigation system will include a central controller and soil/rain sensors. The irrigation system will include pressure-reducing nozzles to reduce and equalize water pressure at the nozzle locations to reduce misting. The optimized positioning of spray nozzles, appropriate selection of spray heads for precise coverage and water delivery, and elimination of turf grass will all enhance irrigation efficiency.
- WEc3 Water Efficiency: Low flow/flush plumbing fixtures, including toilets, showerheads, lavatory faucets and kitchen faucets will be provided. They will not only reduce water consumption but also reduce the amount of energy required to produce hot water.
- EAc1 Energy Efficiency: Energy efficiency measures are evaluated via a full building energy simulation.
- EAc1 Energy Efficiency: the HVAC and domestic hot water systems will be compatible with the future planned City of Richmond DES.
- EAc4 Refrigerant Management: Refrigerant with low ozone depletion and global warming potential will be selected for HVAC&R system to protect the environment.
- MRc2 Construction Waste Management: A construction waste management plan will be developed and implemented throughout construction with a goal of diverting over 75% of waste generated.
- MRc4 & 5 Building Materials: Many of the building materials will be selected based on recycled content and/or regional manufacturing.
- MRc4 GHG Reduction: Use of cement substitutes such as flyash will reduce the developments CO2 footprint.

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# KANECONSULTING

- EQc3.1 Indoor Air Quality: Best practices will be implemented during construction to optimize air quality and provide a clean and healthy building for the future residents.
- EQc4.1 & 4.2 Indoor Air Quality: Low VOC finishes including adhesives, sealants and paints.
- EQc4.3 Indoor Air Quality: Low emitting carpet and flooring systems will be sourced.

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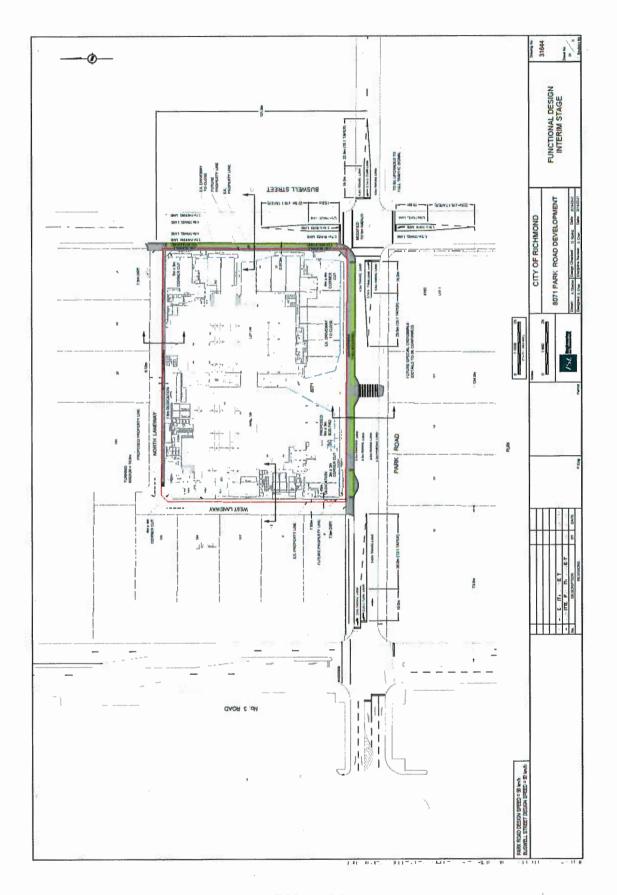
# Park Road & Buswell Street

Sustainability Progress Report Last update: May 1st, 2018

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KANECONSULTING

Sustainability Analysis by: Kane Consulting



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## Car Share Letter of Undertaking



May 29, 2018

Mr. Pally Zhong / Ms. Emily Yang Grand Long Poldings Canada Itd. #100 - 1525 West Bih Avenue Vancouver BC V6J 1T5

Alm: Mr. Pally Zhang and Ms. Emily Yang

Dear Emily and Pally:

Re: Carshare arrangements at 8071 Park Road, Richmond

This later will confirm that Mode sees the location of the proposed development at 8071 Park Road, Richmond as having good patential for carsharing. Under the following arrangements, Mode would be willing to error into a renewable three year agreement with Grand Long Holdings Canada Ltd. to provide carsharing services:

- Grand Long Holdings Canada Ltd. will provide, at no cost to Modo, two designated parking stalls at 8071 Park Road to be accessible to all Modo members on a 24/7/365 basis;
- 2. When final parking plan become available, Mado will review them to ensure that the stalls to be provided will be suitable for carsharing and consistent with the plan enclosed;
- Mode will provide two new corshore vehicles of makes and models mutually agreed between Grand long Holdings Conado Ltd. and Mode to be located at 80/1 Park Road, Mode recommend to budget \$25,000 plus GST per vehicle to ensure vehicle diversity and complementarity necessary to maximize service utilization;
- 4 Grand Long Holdings Canada Itd. will provide to Moda a one-time Project Fea equivalent to the purchase price (including GST) of the carshare vehicles to be located at 8071 Park Road;
- Mode will provide \$100 of driving credits to each occupant of the building laining Mode with an individual account;
- Modo will allow each commercial tenant of the building to open a Modo business and register their employees at no charge in order to gain access to Modo vehicles for their business needs;
- Z. Grand Long Holdings Canada ttd. will communicate the benefits of the carsharing services to prospective tenants and tenants of the building. This will be done through Grand long Holdings Canada ttd. communications channels, representatives and leasing agents with

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support as needed by Modo, with the intent to raise awareness and usage of the constraing services;

8. Mode will share data with the City of Richmond on the utilization of the onsire vehicles, including the ratio of hours booked by building occupants vs non-accupants.

As part of our commitment to provide more fuel efficient alactric and plugrin hybrid vehicles, the provision of parking stalls equipped with dectrical wiring for eventual installation of Level 2 EV charging station will be seen as a plus.

Mode's purpose is to transform communities by connecting people with places in a way that's affordable, convenient, inclusive and sustainable. We advocate for walking, cycling, using transit and, when the trip requires a vehicle, use of a shared one.

To maximize the impact of a carsharing TDM measure aimed at reducing personal vehicle ownership and use and parking demand from future occupants of the huilding at 8071 Park Road, Mode encourage Grand long Holdings Canada Ltd. and the municipality to integrate Mode in a comprehensive sustainable commuting pragram incentivizing active transportation, public transit and carpooling and disincentivizing personal vehicle use and single occupancy vehicle trips.

Mode is interested in working with Grand long Holdings Conada Ltd., and be part of the development located at 8071 Park Road whose occupants and nearby relighbours may no longer need to own a car (or a second one) of their own for their personal and business needs

Thank you for your support of carshoring in the City of Richmond.

Kegaras

Sylvain Celaire

Business Development Monagor

Fralesed:

Plan carshare parking spaces at parking PT of development project located at 8071-8091 Park Road, Richmond, B.C.

200 470 Granville Street

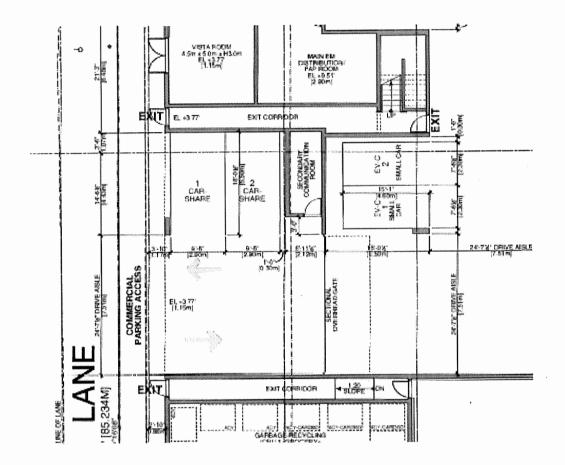
Voncouver, BC - V&C 1V5

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- info@mudo coop

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Parking spaces for carshare vehicles at 8071-8091 Park Road, Richmond, B.C. GROUND FLOOR/PARKING P1 FLR PLAN, Dated: 9 May 2018





## **Rezoning Considerations**

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

Address: 8071 and 8091 Park Road

File No.: RZ 17-779229

# Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9878, the developer is required to complete the following:

1. Lot Consolidation: Consolidation of all the lots into one development parcel.

- 2. <u>Road Dedications</u>: Generally as indicated on the proposed road functional plan subject to final dimensions established by the surveyor on the basis of functional road plans for all frontage and off-site works completed to the satisfaction of the Director of Transportation through the Servicing Agreement:
  - Buswell Street: 0.913 m
  - East/West Lane: 1.5 m along the north property line
  - North/South Lane: 1.45 m along the west property line
  - Corner cuts:
    - 4 m x 4 m at the southeast corner of the new intersection of the new east property line and the south property line
    - o 4 m x 4 m at the northwest corner of the new intersection of the new west property line and the north property line
    - o 3 m x 3 m at the northeast corner of the new intersection of the new north property line and the east property line
    - o 3 m x 3 m at the southwest corner of the new intersection of the new west property line and the south property line
- 3. Statutory Right of Way(s)\*: Provide publicly accessible open space to the City, generally as shown on the Sketch Plan A (attached). The ultimate configuration of the spaces is to be confirmed to the satisfaction of the City through the Development Permit\* review and approval process.
  - 3.1 <u>Park Road Plaza:</u> Approximately 368 m<sup>2</sup> located along the Park Road frontage and identified as Area 1 in Sketch Plan A, for the purpose of facilitating seamless linkages and public access to the building, the north/south pedestrian connection, and on-site commercial and residential uses. The statutory right of way (SRW) area will provide for:
    - 24 hour a day, universally accessible, public access and related landscape features for the use and
      enjoyment of pedestrians and cyclists, which may include, but may not be limited to, walkways, and
      plaza, lighting, furnishings, trees, planting, decorative paving, public art, and innovative storm water
      management measures, to the satisfaction of the City;
    - City utilities, traffic control (e.g. signals), and/or related equipment;
    - Emergency and service vehicle access, City Bylaw enforcement, and any related or similar City authorized actives;

- The owner's ability to close a portion of the right of way to public access to facilitate maintenance or repairs to the right of way provided that adequate public access is maintained and the duration of the closure is limited, as approved by the City in writing in advance of any such closure;
- Maintenance at the sole cost of the owner except as may be determined to the City's sole satisfaction via the Servicing Agreement (SA) review and approval processes (City infrastructure including by not limited to sidewalks, utilities, streetlights, furnishings and/or City trees);
- Building encroachment below finished grade (e.g. below grade parking structure)

The SRW will provide for the following, provided that public access is not impeded and the features enhance the intended public amenity and operation of the right of way area as specified in the DP. Building encroachments, provided any such encroachments are:

- For awnings, sunshades, and canopies, any such feature shall be located a minimum of 2.5 m clear above the right of way area and a minimum of 2.0 m from a property line abutting a public street;
- For a structural column, any such feature shall be located a minimum of 3.0 m from a property line abutting a public street;
- For habitable portions of the building, balconies, cantilevered roofs, eaves, and similar architectural appurtenances, any such feature shall be located a minimum of 5.5 m clear above the right of way area and a minimum of 3.0 m from a property line abutting a public street;
- Movable furnishing and planters;
- Retail display and sale of items sold on the premises;
- · Limited complimentary temporary uses, signage and related features; and
- Private utilities approved through a Servicing Agreement
- 3.2 North/South Pedestrian Connection: Approximately 455 m<sup>2</sup> through the building and identified as Area 2 in Sketch Plan A, for the purpose of providing a pedestrian connection between the Park Road Plaza and the east/west lane and access to the on-site parking. The SRW area will provide for:
  - Access during standard business hours, universally accessible, public access in the form of a combined walkway/off-street dismounted bike path and related landscape features, which may include, but not be limited to, lighting, furnishings, and landscape features for the use and enjoyment of pedestrians, to the satisfaction of the City;
  - Clearly visible signage that identifies the area as accessible to the public (i.e. not private space);
  - The owner's ability to close a portion of the right of way to public access to facilitate maintenance or repairs to the right of way provided that adequate public access is maintained and the duration of the closure is limited, as approved by the City in writing in advance of any such closure;
  - Maintenance at the sole cost of the owner;
  - Building encroachment below finished grade (e.g. below grade parking structure)

The SRW will provide for the following, provided that public access is not impeded and the features enhance the intended public amenity and operation of the right of way area as specified in the DP. Building encroachments, provided any such encroachments are:

- For habitable portions of the building and similar architectural appurtenances, any such feature shall be located a minimum of 5.5 m clear above the right of way area;
- Planters and related landscaping features and lighting;
- City and private utilities approved through a Servicing Agreement.

Initial:

<sup>\*</sup>Any works essential for public access within the required statutory right of way (SRW) are to be included in the Servicing Agreement (SA) and the maintenance and liability responsibility is to be clearly noted. The design must be prepared in accordance with City specifications and standards and the construction of the works will be inspected by

the city concurrently with all other SA related works. Works to be secured via SA and secured with a Letter of Credit, prior to final adoption of the Rezoning Bylaw.

- 4. <u>Car Share</u>: Registration of a restrictive covenant and statutory right of way on title, or alternative legal agreement, subject to the final approval of the Director of Transportation, securing the owner's commitment to provide car share space to a car share operator or the City, the terms of which shall be generally as follows:
  - A minimum of two car share parking spaces, along with pedestrian and vehicular access, designed, constructed, equipped and maintained by the owner, at the owner's cost. The car share space is:
    - o Located on-site and provision of space to maneuver on-site;
    - o Designed to increase the minimum stall width to 2.9 m;
    - o Designated to be safe, convenient and universally accessible;
    - Provided with design features, decorative finishing, lighting and signage, as determined through the Development Permit process; and
    - Accessible to all intended users (e.g. general public, car share operator personnel and car share operator members) at no added cost 365 days a year for a time period equalling the lengthiest combination of standard business hours and standard operating hours of local rapid transit.
  - Registration of a public right of passage statutory right of way, in favour of the City, to secure the car share spaces and the vehicular and pedestrian accesses, subject to the final dimensions established by the surveyor and to the satisfaction of the Director of Transportation, including provisions for:
    - The owner's ability to close a portion of the right of way to public access to facilitate maintenance or repairs to the right of way provided that adequate public access is maintained and the duration of the closure is limited, as approved by the City in writing in advance of any such closure;
    - Maintenance at the sole cost of the owner except as may be negotiated through a private agreement with the car share provider; and
    - o Building encroachment below finished grade (e.g. below grade parking structure)
  - In the event that the car share parking spaces are not operated for car share purposes as intended (e.g. operator's contract is terminated or expires), control is transferred to the City, at no cost to the City, with the understanding that the City, at its sole discretion, without penalty or cost, shall determine how the parking spaces shall be used going forward.
  - Submission of the following to the satisfaction of the Transportation Department:
    - A copy of the draft contract between the owners and the car share operator describing the terms of the provision of car sharing services (e.g. minimum contractual period for the provision of car share services from the first date of building occupancy, additional provisions as negotiated by the owners and car share operator including. maintenance, repair and replacement by car share vehicles by the car share operator), confirmation that a sum of \$25,000.00/stall (total \$50,000.00) has been provided to the car share operator for the provision of car share cars. Prior to Final Building Permit issuance, provision of a copy of the purchase receipt for the car share cars to the attention of the Transportation Department.
- 5. Air Craft Noise: Registration of the City's standard "mixed use" aircraft noise sensitive use covenant on title to the subject site, as applicable to sites with aircraft noise sensitive uses. The owner-developer shall notify all initial purchasers of the potential aircraft noise impacts. Furthermore, prior to Development Permit\* and Building Permit\* issuance the owner-developer shall submit a report(s) and/or letter(s) of assurance prepared by an appropriate registered professional, which demonstrates that the interior noise levels and thermal conditions comply with the City's Official Community Plan and Noise Bylaw requirements. The standard required for air conditioning systems and their alternatives (e.g. ground source heat pumps, heat exchangers and acoustic ducting) is the ASHRAE 55-2004 "Thermal Environmental Conditions for Human Occupancy" standard and subsequent updates as they may occur. Maximum interior noise levels (decibels) within dwelling units must achieve CMHC standards follows:

Portions of Dwelling	Units Noise Levels (decibels)
Bedrooms	35 decibels

Initial:

Living, dining, recreation rooms	40 decibels
Kitchen, bathrooms, hallways, and utility rooms	45 decibels

- 6. <u>View and Other Development Impacts</u>: Registration of a legal agreement on title that identifies the building as a mixed use building and stipulates that:
  - Residents may be impacted by nuisances related to commercial uses permitted within the building which may include but are not limited to noise, smells, etc.
  - Commercial and other non-residential uses are required to mitigate unwanted noise and demonstrate that the
    building envelope is designed to avoid noise generated by the internal use from penetrating into residential areas
    that exceed noise levels allowed in the City's Noise Bylaw and noise generated from rooftop HUAC units will
    comply with the City's Noise Bylaw.
  - The development is subject to potential impacts due to other development that may be approved within the City Centre including without limitation, loss of views in any direction, increased shading, increased overlook and reduced privacy, increased ambient noise and increased levels of night-time ambient light.

The owner is required to provide written notification of these potential impacts through the disclosure statement to all initial purchasers, and to erect signage in the initial sales centre advising purchasers of the potential for these impacts.

- 7. Flood Construction: Registration of a flood indemnity covenant on title identifying a minimum habitable elevation of 2.9 m GSC, or at least 0.3 m above the highest elevation of the crown of any adjacent parcel, or as exempted by Section 4.3 (a) of the Flood Plain Designation and Protection Bylaw No. 8204 for Area "A".
- 8. <u>Tandem Parking:</u> Registration of a legal agreement on title ensuring that where two parking spaces are provided in a tandem arrangement both parking spaces must be assigned to the same dwelling unit. (Parking spaces provided to satisfy Zoning Bylaw parking requirements for affordable housing and residential visitors cannot be provided in a tandem arrangement).
- 9. <u>Shared Parking</u>: Registration of a shared parking agreement on Title, subject to the final approval of the Director of Transportation, to ensure that 153 parking spaces are:
  - Shared between retail/restaurant uses and residential visitor uses;
  - Shared parking remains unassigned;
  - Shared parking spaces are identified with signage regarding the shared use; and
  - Shared parking spaces are fully accessible to all users during standard business operating hours (e.g. entry gates open) and are accessible to residential visitor users (e.g. buzz entry) during non-standard business hours
- 10. <u>Shared Commercial and Residential Truck Loading</u>: Registration of a shared commercial and residential truck loading agreement on Title, subject to final approval of the Director of Transportation, to ensure that all shared loading spaces:
  - Are shared between commercial and residential uses;
  - Remain unassigned and identified with signage and accessible to all users during standard business hours (e.g. entry gates open) and are accessible to all users (e.g. buss entry) during non-standard business hours.
- 11. <u>Truck Size</u>: Registration of a restrictive covenant on Title, subject to the final approval of the Director of Transportation, to secure the owner's commitment to ensure that the maximum truck size for any truck servicing the site is a medium size truck (e.g. SU9) (No WB-17 size trucks are permitted to service the site).
- 12. <u>Non-Conversion of Bicycle Parking</u>: Registration of a legal agreement on Title, subject to final approval of the Director of Transportation, to prohibit conversion of bicycle parking areas into habitable or general storage space and to secure all bicycle parking areas for shared common use for the sole purpose of bicycle parking.
- 13. <u>Bicycle End of Trip Facilities</u>: Registration of a restrictive covenant on Title, or alternative legal agreement, subject to the final approval of the Director of Transportation, to secure the owner's commitment to provide bicycle end-of-trip facilities within the development for the shared use of all non-residential users (e.g. commercial and office) including a minimum of one male facility and one female facility, designed, constructed, equipped and maintained by the owner, each of which shall:
  - Be fully accessible to all intended users;

- Be easily accessible from commercial Class 1 bicycle parking areas;
- Be accessible by those with mobility impairments;
- Accommodate two or more people at one time; and
- Include, at minimum, a change room and lockers, showers, a toilet, a wash basin and a grooming station (i.e. mirror, counter and electrical outlets).
- 14. <u>Bicycle Maintenance and Repair Facilities</u>: Registration of a restrictive covenant on Title, or alternative legal agreement, subject to the final approval of the Director of Transportation, to secure the owner's commitment to provide bicycle maintenance and repair facilities within the development for the shared use of all residential users (e.g. owners, renters and their guests) including a minimum of one bicycle repair and maintenance station for each residential tower, designed, constructed, equipped and maintained by the owner, each of which shall:
  - Be fully accessible to all intended users;
  - Be easily accessible from residential Class 1 bicycle parking areas;
  - Be accessible by those with mobility impairments; and
  - Include, at minimum, a bicycle repair stand with tools, a foot pump and a faucet, hose and drain for bicycle washing.
- 15. Affordable Housing: Registration of the City's standard Housing Agreement to secure twenty one affordable housing units, the combined habitable floor area of which shall comprise at least 5% 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 all on-site indoor and outdoor amenity spaces. 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 (in-stream AH criteria)	Maximum Monthly Unit Rent** (in-stream AH criteria)	Total Maximum Household Income** (in-stream AH criteria)
1 bedroom	9	49 m <sup>2</sup> (535 ft <sup>2</sup> )	\$950	\$38,000 or less
2 bedroom	7	80 m <sup>2</sup> (860 ft <sup>2</sup> )	\$1,162	\$46,500 or less
3 bedroom	5	91 m <sup>2</sup> (980 ft <sup>2</sup> )	\$1,437	\$57,500 or less

<sup>\*</sup> May be adjusted periodically as provided for under adopted City policy.

- 16. <u>Public Art</u>: City acceptance of the developer's offer to make a voluntary contribution towards public art, with terms that include the following:
  - a) The value of the developer's voluntary public art contribution shall be at least \$308,380.00 based on the minimum Council-approved rates for residential and non-residential uses and the maximum buildable floor area permitted under the subject site's proposed site specific zone, excluding affordable housing, as indicated in the table below.

Table 1

Use	Permitted Floor Area Under Proposed ZMU39 Zone	Affordable Housing Exemption	Min. Developer Contribution Rates	Min. Voluntary Developer Contribution
Residential	Maximum 30,647 m <sup>2</sup> (329,885 ft <sup>2</sup> )	1,536 m <sup>2</sup> (16,533 ft <sup>2</sup> )	\$8.93/m <sup>2</sup> (\$0.83/ft <sup>2</sup> )	\$ 259,961.00
Non- Residential	10,215 m <sup>2</sup> (109,953 ft <sup>2</sup> )	Nil	\$4.74 m <sup>2</sup> (\$0.44/ft <sup>2</sup> )	\$ 48,419.00
TOTAL	40,862 m <sup>2</sup> (439,834 ft <sup>2</sup> )	1,532 m <sup>2</sup> (16,494 ft <sup>2</sup> )	Varies	\$ 308,380.00

- b) Where the developer elects to provide public art on site as part of the subject development, prior to rezoning bylaw adoption, the developer shall submit a Public Art Plan for the subject site, which shall be:
  - Prepared by an appropriate professional;
  - Based on a contribution value of at least \$308,380.00;
  - Consistent with applicable City policy and objectives (e.g. the Richmond Public Art Program, City Centre
    Public Art Plan, and any relevant supplementary public art and heritage planning undertaken by the City
    for Brighouse Village), as determined to the satisfaction of the Director of Development and Director,
    Arts, Culture, and Heritage Services;

- Presented for review(s) by the Public Art Advisory Committee and endorsement by Council, as requested by the Director, Arts, Culture, and Heritage Services; and
- Implemented by the developer, as required by legal agreement(s) registered on Title prior to rezoning adoption.
- c) "No development" shall be permitted on the lot, restricting Development Permit issuance for any building on the lot, in whole or in part (excluding parking), until the developer to the City's satisfaction:
  - Enters into additional legal agreement(s), if any, required to facilitate the implementation of the City-approved Public Art Plan, which may require that, prior to entering into any such additional agreement(s), a Detailed Public Art Plan is submitted by the developer for the lot and/or an artist is engaged, to the satisfaction of the City (as generally set out in the legal agreement entered into and the Public Art Plan submitted prior to rezoning adoption); and
  - Submit a Letter of Credit or cash (as determined at the sole discretion of the City) with respect to the Plan's implementation, the value of which contribution shall be at least \$308,380.00.
- d) "No occupancy" shall be permitted on the subject site, restricting final Building Permit\* inspection granting occupancy of the building (exclusive of parking), in whole or in part, on the lot until:
  - The developer, at his expense, commissions an artist(s) to conceive, create, manufacture, design, and oversee or provide input about the manufacturing of the public artwork, and causes the public artwork to be installed on City property, if expressly permitted by the City and pre-approved by Council, or within a statutory right-of-way on the developer's lands (which right-of-way shall be to the satisfaction of the City for rights of public passage, public art, and related purposes, in accordance with the City-approved Public Art Plan and, as applicable, Detailed Public Art Plan);
  - The developer, at his/her expense and within thirty (30) days of the date on which the public art is installed, executes and delivers to the City a transfer of all of the developer's rights, title, and interest in the public artwork to the City if on City property or to the subsequent Strata or property owner if on private property (including transfer of joint world-wide copyright) or as otherwise determined to be satisfactory by the City Solicitor and Director, Arts, Culture, and Heritage Services; and

<u>NOTE</u>: It is the understanding of the City that the artist's rights, title, and interest in the public artwork will be transferred to the developer upon acceptance of the artwork based on an agreement solely between the developer and the artist. These rights will in turn be transferred to the City, subject to approval by Council to accept the donation of the artwork.

- The developer, at his/her expense, submits a final report to the City promptly after completion of the installation of the public art in respect to the City-approved Public Art Plan, which report shall, to the satisfaction of the Director of Development and Director, Arts, Culture, and Heritage Services, include:
  - o Information regarding the siting of the public art, a brief biography of the artist(s), a statement from the artist(s) on the public art, and other such details as the Director of Development and Director, Arts, Culture, and Heritage Services may require;
  - A statutory declaration, satisfactory to the City Solicitor, confirming that the developer's financial obligation(s) to the artist(s) have been fully satisfied;
  - o The maintenance plan for the public art prepared by the artist(s); and
  - o Digital records (e.g., photographic images) of the public art, to the satisfaction of the Director of Development and Director, Arts, Culture, and Heritage Services.
- e) Alternatively, the developer may offer to make a voluntary cash contribution of \$308,380.00 (to the Public Art Reserve 7600-80-000-90173-0000) in lieu of providing public art as part of the subject development, the value of the developer's voluntary public art contribution shall be consistent with Table 1 above. In this case, requirements b) to d) will not apply.

Initial:

- 17. Community Planning: City acceptance of the developer's voluntary contribution in the amount of \$114,220.00 (i.e. \$3.01/ m² (\$0.28/ft²) of buildable area, excluding affordable housing) to future City community planning studies, as set out in the City Centre Area Plan. (City Centre Community Planning and Engineering Account #3132-10-520-00000-0000).
- 18. Child Care and Community Facility: City acceptance of the developer's voluntary contribution of at least:
  - \$3,573,717.00 (5% of the Village Centre Bonus floor area calculated using the proposed floor area e.g. 0.05 x 10,215 m<sup>2</sup> x \$6,997/m<sup>2</sup>) towards the development of community facilities (Leisure Statutory Reserve Account #7600-80-000-90169-0000); and
  - \$2,036,915.00 (1% of the residential floor area, excluding affordable housing floor area, calculated using the maximum permitted floor area e.g. 0.01 x (30,647 m<sup>2</sup> 1,536 m<sup>2</sup>) x \$6,997/m<sup>2</sup>) 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 Reserve Account #7600-80-000-90159-0000).
- 19. <u>District Energy Utility (DEU)</u>: Registration of a restrictive covenant and statutory right of way and/or alternative legal agreement(s), to the satisfaction of the City, securing the owner's commitment to connect to District Energy Utility (DEU) and granting the statutory right of way(s) necessary for supplying the DEU services to the building(s), which covenant and statutory right of way and /or legal agreements(s) will include, at a minimum, the following terms and conditions:
  - a) No building permit will be issued for a building on the subject site unless the building is designated 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 Low Carbon Energy Plant District Energy Utility (LCDEU) service area bylaw which applies to the site has been adopted by Council prior to the issuance of the Development Permit for the subject site, no Building Permit will be issued for a building on the subject site unless:
    - i. The owner designs, to the satisfaction of the City and the City's DEU service provider, Lulu Island Energy Company Ltd. (LIEC), a low carbon energy plant to be constructed and installed on the site, with the capability to connect to and be services by a DEU; and
    - ii. The owner enters into an asset transfer agreement with the City and/or the City's DEU service provider on terms and conditions satisfactory to the City to transfer ownership of the low energy plant to the City or as directed by the City, including to the City's DEU service provider, at no cost to the City or City's DEU service provider, LIEC, on a date prior to final building inspection permitting occupancy of the first building on the site:
  - c) The owner agrees that the building(s) will connect to a DEU when a DEU is in operation, unless otherwise directed by the City and the City's DEU service provider, LIEC.
  - d) If a DEU is available for connection and the City has directed the owner to connect, no final building inspection permitting occupancy of a building will be granted unless, and until:
    - i. The building is connected to the DEU;
    - ii. The owner enters into a Service Provider Agreement for that building with the City and/or the City's DEU service provider, LIEC, executed prior to depositing any Strata Plan with LTO and on terms and conditions satisfactory to the City; and
  - iii. Prior to subdivision (including Air Space parcel subdivision and Strata Plan filing), the owner grants or acquires, and registers, all Statutory Right of Way(s) and/or easements necessary for supplying the DEU services to the building.
  - e) If a DEU is not available for connection, but a LCDEU service area bylaw which applies to the site has been adopted by Council prior to the issuance of the Development Permit for the subject site, no final building inspection permitting occupancy of a building will be granted unless and until:
    - . The City receives a professional engineer's certificate stating that the building has the capability to connect to and be serviced by a DEU;

- ii. The building is connected to a low carbon energy plant supplied and installed by the owner, at the owner's sole cost, to provide heating, cooling and domestic hot water heating to the building(s), which energy plant will be designed, constructed and installed on the subject site to the satisfaction of the city and the City's service provider, LIEC;
- iii. The owner transfers ownership of the low carbon energy plant on the site, to the City or as directed by the City, including to the City's DEU service provider, LIEC, at no cost to the City or City's DEU service provider, on terms and conditions satisfactory to the City;
- iv. Prior to depositing a Strata Plan, the owner enters into a Service Provider Agreement for the building with the City and/or the City's DEU service provider, LIEC, on terms and conditions satisfactory to the City; and
- v. Prior to subdivision (including Air Space parcel subdivision and Strata Plan filing), the owner grants or acquires, and registers, all additional covenants, statutory right of way(s) and/or easements necessary for supplying the services to the building and the operation of the low carbon energy plant by the City and/or the City's DEU service provider, LIEC.
- f) If a DEU is not available for connection, and the LCDEU service area bylaw which applies to the site has not been adopted by Council prior to the issuance of the Development Permit for the subject site, no final building inspection permitting occupancy of a building will be granted until:
  - 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; and
  - ii. The owner grants or acquires any additional statutory right of way(s) and/or easements necessary for supplying DEU services to the building, registered prior to subdivision (including Air Space parcel subdivision and strata plan filing).
- 20. The submission and processing of a Development Permit\* completed to a level deemed acceptable by the Director of Development.
- 21. Enter into a Servicing Agreement\* for the design and construction of works that include, but may not be limited to the following, all to the satisfaction of the City.

#### Water Works

- a. Using the Official Community Plan (OCP) Model, there is 161 L/s of water available at a 20 psi residual at the Park Road frontage. Based on your proposed development, your site requires a minimum fire flow of 220 L/s.
- b. The developer is required to, at the developer's cost:
  - 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.
  - As the available flows are not adequate to service the proposed development, the Developer is required to provide the following:
    - Provide approximately 190 m of 200 mm diameter watermain along Buswell Street from Park Road to Cook Road, tied-in to the existing watermains along Park Road and Cook Road.
    - Provide fire hydrants at Park Road and Buswell Street frontages to achieve maximum 75 m spacing.
    - Provide a cash-in-lieu contribution for the construction of a new 200 mm watermain via the capital project works that will front the development. Through its 2015 Capital Plan and subject to funding approval, the City is planning to replace the existing watermain along Park Road from No. 3 Road to Cooney Road. A voluntary cash in-lieu of construction contribution amounting to \$163,537.92 is required to pay for the cost of the watermain upgrade from the proposed site's west property line to the tie-in point at the required watermain along Buswell Street. The length of the watermain upgrade being charged to the developer is approximately 128 meters. Note, the \$163,537.92 cost stated above is the cost required for the construction of the watermain fronting the development and not the total cost of the system from No. 3 Road to Cooney Road. The cash in lieu contribution shall be deposited into the water utility account. Alternatively, if servicing is required prior to completion of the City's capital project

works, the Developer is required to provide approximately 128 m of 200 mm diameter watermain complete with fire hydrants (spaced as per City standards) along the Park Road frontage in place of the cash-in-lieu contribution specified above. The proposed watermain shall tie-in to the existing watermain at the proposed site's west property line and the proposed watermain along Buswell Street.

- Coordinate with the Fire department to confirm whether hydrants are required at the lane frontages. If required, provide 200 mm diameter watermains and hydrants that are spaced as per City standards at the proposed site's lane frontages.
- c. At the Developer's cost, the City is to:
  - Cut and cap all existing water service connections at the watermain along Park Road frontage.
  - Install a new water service connection along the Park Road frontage.

#### Storm Sewer Works

- a. The Developer is required to, at the developer's cost:
  - Upgrade the existing drainage sewers, Inspection Chamber(s) (IC) and manholes along the lane frontages, to meet current City standards. Tie-ins shall be to the storm sewers at Park Road and Buswell Street frontages and shall be via the use of manholes. Removal of the existing storm sewers in the lane frontages is required.
    - Provide a cash-in-lieu contribution for the portion of the new storm sewer (which will be constructed via the capital project works) that will extend approximately 42 meters past the development's west property line at Park Road frontage. Through its 2016 Capital Plan and subject to funding approval, the City is planning to replace the existing twin storm sewer system along Park Road from No. 3 Road to 105 m east. A voluntary cash in-lieu of construction contribution amounting to \$114,982.56 is required for the 42 meters of upgrade that will overlap the development's Park Road frontage, which the developer would be required to construct otherwise. Note that the \$114,982.56 cost stated above is the cost required for the construction of the portion of the storm sewer fronting the development and not the total cost of the system from No. 3 Road to 105 meters eastward. The cash in lieu contribution shall be deposited into the drainage utility account. Alternatively, if servicing is required prior to completion of the City's capital project works, the developer is required to upgrade the existing twin storm sewer at the Park Road frontage, approximately 42 metres in length, into a single storm sewer system in the middle of the street from the west property line to 42 metres east of the west property line in place of the cash-in-lieu contribution specified above. Tie-ins shall be via the use of manholes. Pipe sizing shall be determined via the SA review.
  - Upgrade the existing twin storm sewers at Park Road frontage, approximately 80 meters in length, into a
    single storm sewer system in the middle of the street from 42 meters east of the west property line to the
    existing storm sewer at Buswell Street. Tie-ins shall be via the use of manholes. Pipe sizing shall be
    determined via the SA review.
  - Remove the existing storm sewers along the north side of Park Road (at development's frontage only).
  - Upgrade the existing 375 mm diameter storm sewer to 600 mm diameter along Buswell Street from Park Road to the lane along the north property line. Tie-ins shall be via the use of manholes. A high point shall be created at the north end of the upgrade so flows will be directed to No. 3 Road via the new storm sewers at Park Road frontage.
- b. At the Developer's cost, the City is to:
  - Cut and cap all existing storm sewer service connections at all frontages of the proposed site.
  - Install a new storm service connection complete with an IC at Park Road frontage; right of way(s) may be required to accommodate IC.

#### Sanitary Sewer Works:

a. The Developer is required to, at the developer's cost:

- Redirect sanitary flows on the west side of the development to the new Buswell Street sewer (that the City is constructing via the Capital project works) by installing approximately 212 m of 200 mm sanitary sewer running south within the lane and east along Park Road to Buswell Street.
- Tie the new 200 mm sanitary sewer into the existing sanitary sewer within Park Road and reconnect the existing service connections to 6640, 6700, 6740 and 6760 No. 3 Road.
- Install a new sanitary service connection complete with IC at the middle of the frontage at Park Road.
- Abandon the existing sanitary sewer between Park Road and SMH839 by filling with low strength flowable concrete as per Master Municipal Construction Document (MMCD).
- Provide, if necessary, additional statutory right of way(s) (SRW), to be defined through the SA drawings.
- b. At the Developer's cost, the City is to:
  - Cut and cap all existing sanitary service connections and remove the existing ICs located along the lane frontage of the development site.
  - Complete the two proposed sewer tie-ins to the existing sanitary sewer on Park Road and the proposed sanitary sewer on Buswell Street.

#### Frontage Improvements:

- a. The developer is required to, at the developer's cost:
  - Coordinate with private utility companies to underground existing pole lines along the site's lane frontage, frontage along Park Road and frontage along Buswell Street.
  - If the development site requires soil densification and/or preload, coordinate with BC Hydro, Telus and Shaw to confirm clearance requirements between the preload and their pole lines along the frontages and identify and mitigate any impact.
  - Coordinate with BC Hydro to remove or relocate (inside the proposed development) the LPT on the east side
    of the property at Buswell Street.
  - To locate all above ground utility cabinets and kiosks required to service the proposed development within the development's site (see list below for examples). A functional plan showing conceptual locations for such infrastructure shall be included in the staff report and 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 and the locations for the above ground structures. If a private utility company does not require an above ground structure, that company shall confirm this via a letter to be submitted to the City. The following are examples of SRWs that shall be shown in the functional plan and registered prior to SA design approval:
    - 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 2mW X 1.5m (deep)
    - Traffic signal UPS 1mW X 1m (deep)
    - Shaw cable kiosk 1mW X 1m (deep) show possible location in functional plan
    - Telus FDH cabinet 1.1mW X 1m (deep) show possible location in functional plan
  - Pre-duct for future hydro, telephone and cable utilities along the Park Road and Buswell Street frontages.
  - Upgrade the site's entire lane frontage as required to meet City lane standards, to include new asphalt, roll over curb, drainage and lighting.
  - Provide dedication for any proposed lane widening.
- b. Other frontage improvements as per Transportation's requirements.

#### Streetlights

City Streets

- a. Buswell Street (West side of street)
- Pole colour: Blue
- Roadway lighting at back of curb: <u>City Centre Type Roadway/Pedestrian Luminaire Pole</u> (LED) Drawing L12.3 including 1 street luminaire, banner arms, 1 flower basket holder, and 1 duplex receptacle, but <u>excluding</u> pedestrian luminaires and irrigation.
- Pedestrian lighting: Not applicable (i.e. no stand-alone pedestrian poles)
- b. Park Road (North side of street)
- Pole colour: Blue
- Roadway lighting at back of curb: <u>City Centre Type Roadway/Pedestrian Luminaire Pole</u> (LED) Drawing L12.3 <u>including</u> 1 street luminaire, banner arms, 1 flower basket holder, and 1 duplex receptacle, but <u>excluding</u> pedestrian luminaires and irrigation.
- Pedestrian lighting: Not applicable (i.e. no stand-alone pedestrian poles)
- c. Lane
- Pole colour: Blue
- Roadway lighting at back of curb: <u>City Centre Type Laneway Luminaire Pole</u> (LED) Drawing L12.1, <u>excluding</u> duplex receptacle, flower basket holders, and irrigation.

Off-street Publicly-Accessible Walkways and Open Spaces
Not applicable

#### Traffic Signals

- Pole colour: Blue
- Style: To match <u>City Centre Type Roadway/Pedestrian Luminaire Pole</u> (LED) Drawing L12.3

#### General Items:

The Developer is required to, at the developer's cost:

- Provide, within the first SA submission, a geotechnical assessment of preload and soil preparation impacts on the existing utilities fronting or within the development site and provide mitigation recommendations.
- The site plan dated July 20, 2017 indicates the proposed building to be in close proximity to existing sanitary mains along the lane frontages and to the existing AC watermain and storm sewers at Park Road frontage. The required on-site works (e.g., soil densification, preloading, foundation works, building construction, etc.) for the proposed building may impact the existing sanitary mains, watermain and storm sewers. Prior to the rezoning bylaw adoption or prior to the start of site preparation works, whichever comes first, the developer is required to:
  - Obtain the services of a Geotechnical Engineer to provide a report indicating the following:
    - 1) Projected settlements to the existing sanitary lines along the lanes and the watermain and storm sewers along Park Road.
    - 2) Assess the settlement at the utilities identified with consideration of the size, age, and material of the utility, and the impact of differential settlement across the utility.
    - 3) Provide a plan on how settlement impact to the utilities will be mitigated. This may include performing mitigation measures prior to pre-load to ensure that the utilities operate normally during site preparation and building construction, monitoring of the utilities during pre-loading, and replacement of any utilities damaged by the pre-load after site preparation is finished. For example, if the pipes will settle uniformly with the building, how will the differential settlement at each end of the pipe be managed so that the pipes don't break and services are not disrupted?
  - Provide a pre-preload condition assessment of the surrounding utilities, including sanitary sewers, watermains, storm sewers, etc. A follow-up post-preload condition assessment of the utilities will be required

Initial:		

after site preparation is complete. Any utilities impacted by the site preparation shall be replaced at the Developer's cost.

• 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.

<u>Transportation</u>: The developer is required to enter into a Servicing Agreement (SA) for the design and construction of road widening and behind the curb frontage improvement works, including but not limited to the items listed below. The details of the SA works are subject to submission of a final functional road plan showing all frontage and off-site works completed to the satisfaction of the Director of Transportation through the Servicing Agreement.

All road and frontage improvement works are to be completed to the satisfaction of the City before the issuance of Final Building Permit. The overall road and frontage improvements have the following main components. The offsite frontage works will be based on the minimum works shown in the function road plan dated May 7, 2018 (Attachment 8) and will be confirmed through the detailed design of the Servicing Agreement.

The SA drawings will be required to detail all streetscape elements, including, but not limited to, a decorative pavement treatment and bollards required at the crosswalks at the Park Road and Buswell Street intersection and the Park Road and No. 3 Road intersection and at the midblock special crosswalk.

#### Park Road

Design and construction of the section of Park Road along the site's frontage between the lane and Buswell Street, including appropriate transitions to the existing frontage works west of the subject property. As well as intersection upgrades that include the intersection of Park Road and No. 3 Road, Park Road and Buswell Street, and a mid-block pedestrian actuated signalized crossing. Works to accommodate the cross section based on the function road plan dated May 7, 2018 include:

- Behind the existing north curb of Park Road:
  - 1.95 m boulevard (boulevard treatment to be determined through SA with Parks and Planning staff for decorative concrete and tree/landscaping details);
  - New 2.0 m wide concrete sidewalk at property line; and
  - Curb extensions along north side of curb.
- A pedestrian push button special crosswalk is required on Park Road aligned with the proposed north/south pedestrian connection.

#### Buswell Street

Road dedication: 0.913 m

Frontage upgrades behind existing west curb of road to include 1.5 m wide boulevard and 2.0 m wide sidewalk. Through the detailed functional road plan required as part of the SA, curb extensions may be required on Buswell Street.

#### East/West Lane

Road dedication: 1.5 m along north property line

Upgrade the existing east/west lane to City Centre standard with sidewalk and lighting. The sidewalk will extend to connect to the north/south lane. A raised crosswalk may be required to align with the proposed north/south pedestrian connection. Special design features for the lane are to be determined.

Initial:	

North/South Lane

Road dedication: 1.45 m along the west property line.

Upgrade the existing north/south lane to City Centre standard. All curb ramps to include tactile warning strips.

#### Traffic Signals

The developer is required to design and construct off-site traffic signal works including, but not limited to:

- Modify, relocate and/or replace traffic signal poles/bases, conduits, junction boxes, street light fixtures, cable
  and conductors;
- Modify, relocate and/or replace traffic signal equipment such as controller cabinet/base, Uninterrupted Power Supply (UPS) and service panel;
- · Modify vehicle/pedestrian detection and vehicle phasing including left turn arrows; and
- Modify, relocate and/or replace communications conduit, cable and junction boxes.

In addition to the general description of works listed above, the specific traffic signal related works include:

- No. 3 Road/Park Road Intersection: Signal improvements including new traffic signal poles, UPS battery backup system, LED street name signs, new standard APS push buttons, new standard traffic cabinet, traffic cameras with new conduit. Additional north bound and south bound travel lane arrows are required at the intersection.
- Park Road/Buswell Street Intersection: New traffic signal at the Park Road/Buswell Street intersection. The City has collected \$50,000.00 towards the upgrade of this intersection, which is the City's contribution towards the intersection upgrades. The developer is responsible for the design and construction of this traffic signal. Works shall include, but are not limited to the installation of conduits, junction boxes, traffic pole bases, traffic signal heads, illuminated street name signs, video detection, Accessible Pedestrian Signals (APS), UPS base and controller cabinet base. New communications conduit/cable are also required to tie in this traffic signal with the City owned communication network. A full set of traffic signal design drawings will be required. The developer may have to assign a statutory right of way for the placement of some of this equipment, which is to be identified through the SA phase of the project.
- Mid-block Overhead Pedestrian Actuated Special Crosswalk: to be installed.

## Prior to a Development Permit\* being forwarded to the Development Permit Panel for consideration, the developer is required to:

Complete an acoustical and mechanical a report and recommendations prepared by an appropriate registered
professional, which demonstrates that the interior noise levels and noise mitigation standards comply with the City's
Official Community Plan and Noise Bylaw requirements. The standard required for air conditioning systems and
their alternatives (e.g. ground source heat pumps, heat exchangers and acoustic ducting) is the ASHRAE 55-2004
"Thermal Environmental Conditions for Human Occupancy" standard and subsequent updates as they may occur.
Maximum interior noise levels (decibels) within the dwelling units must achieve CMHC standards follows:

Portions of Dwelling Units	Noise Levels (decibels)
Bedrooms	35 decibels
Living, dining, recreation rooms	40 decibels
Kitchen, bathrooms, hallways, and utility rooms	45 decibels

- 2. Submit a letter of confirmation from a surveyor confirming that the proposed building heights are in compliance with Transport Canada regulations.
- 3. Submission of a final LEED strategy report/summary confirming that the proposed development will achieve LEED Silver equivalency, to the satisfaction of the City.

4. As part of the permit drawings, submit a plan (drawings and related specifications) to the City's satisfaction, indicating waste management related facilities proposed on the subject site and compliance with City bylaws and policies, including but not limited to carts/bins (uses, types, numbers), waste/holding rooms (uses, location, sizes, clear heights), loading facilities (locations, sizes, clear heights), pedestrian/vehicle access (routes and vehicle turning templates) and related features as required (signage, janitor sinks, floor drains, ventilation, door/gate operations, etc.)

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

- 1. Submission of a Construction Parking and Traffic Management Plan to the Transportation Division for approval. The plan shall identify (if applicable, for each development phase): construction vehicle access, emergency response vehicle access, parking facilities for construction works, staging areas for constriction vehicles, areas for deliveries and loading, and application for any lane closures. The plan will require the use of proper construction traffic control procedures and certified personnel as per Traffic Control Manual for works on roadways (Ministry of Transportation and Infrastructure) and MMCD Traffic Regulation Section 01570.
- Incorporation of accessibility measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.
- 3. Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

#### Note:

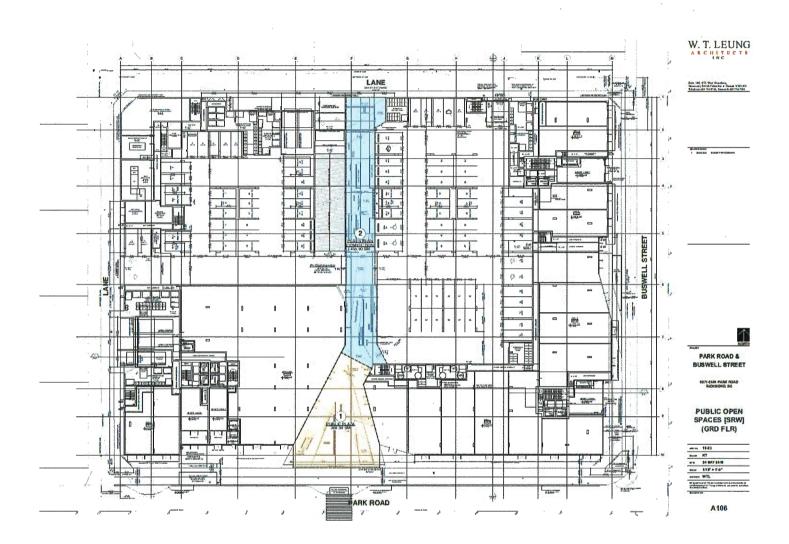
- \* This requires a separate application.
- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.
  - All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.
  - The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director of Development.
- 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 Perinits 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 (signed copy on file)	Date

Initial: \_\_\_\_\_

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#### Sketch Plan A





## Richmond Zoning Bylaw 8500 Amendment Bylaw 9878 (RZ 17-779229) 8071/8091 Park 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:
  - "20.39 High Density Mixed Use (ZMU39) Brighouse Village (City Centre)

#### 20.39.1 Purpose

The zone provides for a broad range of commercial, office, service, entertainment and residential uses typical of a City Centre. Additional density is provided to achieve, amongst other things, City objectives related to the development of affordable housing units, office uses and community amenities

#### 20.39.2 Permitted Uses

- amenity space, community
- animal day care
- animal grooming
- broadcasting studio
- child care
- community care facility, major
- community care facility, minor
- education
- education, commercial
- education, university
- emergency service
- entertainment, spectator
- government service
- health service, major
- health service, minor
- housing, apartment
- library and exhibit

- liquor primary establishment
- manufacturing, custom indoor
- microbrewery, winery and distillery
- neighbourhood public house
- office
- 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

Page 2

#### 20.39.3 Secondary Uses

#### 20.39.4 Additional Uses

district energy utility

- boarding and lodging
- home-based business
- home business

#### 20.39.5 Permitted Density

- 1. The maximum **floor area ratio** is 2.0 together with an additional:
  - a) 0.1 floor area ratio provided that the additional floor area is used entirely to accommodate indoor amenity space.
- Notwithstanding Section 20.39.5.1, the reference to "2.0" is increased to a higher floor area ratio of "3.0" if, at the time Council adopts a zoning amendment bylaw to create the ZMU39 zone and include the lot in the zone, the owner:
  - a) agrees to provide not less than twenty one (21) affordable housing units on the site and the combined habitable space for the affordable housing units is not less than 5% of the total residential floor area:
  - b) enters 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 to the City (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 (i) multiplied by the "equivalent to construction value" rate of \$6,997/sq. m., if the payment is made within one year of third reading of the zoning amendment bylaw, or (ii) thereafter, multiplied by the "equivalent to construction value" rate of \$6,997/ m² adjusted by the cumulative applicable annual changes to the Statistics Canada "Non-residential Building Construction Price Index" for Vancouver, where such change is positive.
- 3. Notwithstanding Section 20.39.5.1 and Section 20.39.5.2, the **density** is increased by an additional **floor area ratio** of "1.0" if, at the time **Council** adopts a zoning amendment bylaw to create the ZMU39 **zone** and include the **lot** in the **zone**, the **owner**:
  - a) agrees to use the "1.0" additional **floor area ratio** for non-residential **uses** only; and
  - b) pays a sum to the **City** (City Centre Facility Development Fund) based on 5% of the "1.0" additional **floor area ratio**, calculated using the "equivalent to construction value" rate of \$6,997/ sq. m., if the payment is made within one year of third reading of the zoning

amendment bylaw, or (ii) thereafter, multiplied by the "equivalent to construction value" rate of \$6,997/ m² adjusted by the cumulative applicable annual changes to the Statistics Canada "Non-residential Building Construction Price Index" for Vancouver, where such change is positive.

#### 20.39.6 Permitted Lot Coverage

1. The maximum **lot coverage** is 90% for **buildings**.

#### 20.39.7 Yards & Setbacks

- The minimum setbacks shall be:
  - a) for public road setbacks: 3.0 m, but this may be reduced to 2.2 m if:
    - i. a proper interface is provided at the sidewalk level as approved by the City;
    - ii. no driveways or loading areas are located along the public **road**.
  - b) for **side** and **rear yard**: 0 m.
  - c) for parts of a **building** situated below finished **grade**: 0 m.

#### 20.39.8 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.

#### 20.39.9 Subdivision Provisions/Minimum Lot Size

- 1. The minimum **lot width** is 45.0 m.
- 2. The minimum lot depth is 40.0 m.
- 3. The minimum **lot area** is 4,000 m<sup>2</sup>.

#### 20.39.10 Landscaping & Screening

1. **Landscaping** and **screening** shall be provided according to the provisions of Section 6.0.

#### 20.39.11 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, including the **City Centre** Parking Zone 1 standards set out in Section 7.9.
- 2. Notwithstanding Section 20.39.11.1:
  - a) the minimum number of truck loading spaces is 6.0 medium size truck spaces shared between non-residential and residential **uses**;
  - b) no large size truck spaces for residential **uses** and non-residential **uses** are permitted in this **zone**; and
  - c) the Class 2 bicycle parking requirement is:
    - i. Residential: 0.1/unit
    - ii. **General** and **Convenience Retail**, **Restaurant**, **Office**: 0.1 spaces per each 100.0 m<sup>2</sup> of gross leasable floor area greater than 100.0 m<sup>2</sup>

#### 20.39.12 Other Regulations

- 1. Signage must comply with the City of Richmond's *Sign Bylaw 5560*, as it applies to **development** in the Downtown Commercial (CDT1) **zone**.
- 2. **Telecommunication antenna** must be located a minimum 20.0 m above the ground (i.e., on a roof of a **building**).
- 3. In addition to the regulations listed above, the General Development Regulations in Section 4.0 and the Specific Use Regulations in Section 5.0 apply."
- 2. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning Bylaw 8500, is amended by repealing the existing zoning designation of the following parcels and by designating them HIGH DENSITY MIXED USE (ZMU39) BRIGHOUSE VILLAGE (CITY CENTRE):
  - P.I.D. 004-899-075 LOT 125 EXCEPT: PART ON PLAN WITH BYLAW FILED A3889, SECTION 9 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN 25523
  - P.I.D. 003-680-398 LOT 189 SECTION 9 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN 55701
- 3. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9878".

FIRST READING	JUN 1 1 2018	CITY OF RICHMOND
PUBLIC HEARING		APPROVED by
SECOND READING		APPROVED by Director or Solicitor
THIRD READING		- JA
OTHER CONDITIONS SATISFIED		
ADOPTED		_
		_
MAYOR	CORPORATE OFFICER	



### **Report to Committee**

To: Planning Committee Date: June 21, 2018

From: Wayne Craig File: TU 18-803320

Director, Development

Re: Application by YKLM Art Space Co. Ltd. for a Temporary Commercial Use Permit

at 4211 No. 3 Road

#### **Staff Recommendation**

That the application by YKLM Art Space Co. Ltd. for a Temporary Commercial Use Permit (TCUP) for property at 4211 No. 3 Road be considered at the Public Hearing to be held July 16, 2018 at 7:00 p.m. in the Council Chambers of Richmond City Hall; and that the following recommendation be forwarded to that meeting for consideration:

"That a Temporary Commercial Use Permit be issued to YKLM Art Space Co. Ltd. for property at 4211 No. 3 Road to allow 'Auction, Minor' as a permitted use for a period of three years."

Wayne Craig
Director, Development
(604-241-4625)

WC:jr Att. 4

REPORT CONCURRENCE

CONCURRENCE OF GENERAL MANAGER

#### **Staff Report**

#### Origin

YKLM Artspace Co. Ltd. has applied to the City of Richmond for a Temporary Commercial Use Permit (TCUP) to allow "Auction, Minor" as a permitted use at 4211 No. 3 Road on a site zoned "Auto-Oriented Commercial (CA)," to permit the sale of artwork on site. (Attachment 1). The applicant proposes to hold monthly art auctions to support existing art-related programming onsite, which includes art performances, art exhibitions, and artist studios.

If approved, the TCUP would be valid for a period of up to three years from the date of issuance, at which time, an application for an extension of the Permit may be made and issued for up to three additional years. Only one extension is permitted, after which a new application is required. The *Local Government Act* allows Council to consider TCUP issuance on its own merits and does not limit the number of TCUP issuances allowed on a site.

#### **Findings of Fact**

A Development Application Data Sheet providing details about the proposal is provided in Attachment 2.

#### **Surrounding Development**

The subject site is located in the City Centre planning area. Development immediately surrounding the subject site is as follows:

To the North: A quick service restaurant with a drive-thru, on a property zoned "Auto-Oriented Commercial (CA)".

To the South: A low rise commercial and industrial building on a property zoned "Auto-Oriented Commercial (ZC10) – Airport and Aberdeen Village".

To the East: Across No. 3 Road, low rise commercial buildings on properties zoned "Auto-Oriented Commercial (CA)", and the Aberdeen Canada Line station.

To the West: Across the River Park Way road right-of-way (ROW), low rise office and industrial buildings on lots zone "Industrial Business Park (IB1)".

#### **Related Policies & Studies**

#### Official Community Plan

The Official Community Plan (OCP) land use designation for the subject site is "Commercial."

The OCP allows TCUPs in areas designated "Industrial," "Mixed Employment," "Commercial," "Neighbourhood Service Centre," "Mixed Use," "Limited Mixed Use," and "Agricultural" (outside of the Agricultural Land Reserve, only), where deemed appropriate by Council and subject to conditions suitable to the proposed use and surrounding area.

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The proposed Minor Auction use is consistent with the "Commercial" land use designation in the Official Community Plan (OCP).

#### Richmond Zoning Bylaw 8500

The subject site is zoned "Auto-Oriented Commercial (CA)," which allows for a range of commercial uses. The applicant proposes to hold monthly auctions of artwork in the gallery space. Richmond Zoning Bylaw 8500 defines "Auction, Minor" as the sale of household goods and smaller equipment to the highest bidder. The attached Temporary Commercial Use Permit would limit the auction to the sale of artwork and household goods only, with no sale of motor vehicles, construction equipment, or industrial equipment permitted. The proposed auction use is consistent with the intent of the "Auto-Oriented Commercial (CA)" zone.

#### **Local Government Act**

The *Local Government Act* states that TCUPs are valid for a period of up to three years from the date of issue, and that an application for one extension to the Permit may be made and issued for up to three additional years. A new TCUP application is required after one extension.

#### **Public Consultation**

Should the Planning Committee endorse this application and Council resolve to move the staff recommendation, the application will be forwarded to a Public Hearing on July 16, 2018, 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**

The subject site is a former car dealership, which has been renovated to provide office and gallery space. The renovated building is approximately 2,008 m<sup>2</sup> (21,616 ft<sup>2</sup>).

The proposed auctions would take place in a 350 m<sup>2</sup> (3,767 ft<sup>2</sup>) gallery space. The applicant proposes to hold one auction per month, with bids made in person, online, and over the phone. The applicant intends to cap attendance at 100 guests, and anticipates that online and telephone bidding will reduce the number of guests in attendance. The attached Temporary Commercial Use Permit would limit the proposed auction use to this gallery space only.

No exterior renovations are proposed, except for improvements to the on-site landscaping. A Development Permit is not required for exterior alterations that cost less than \$75,000.

#### Landscaping

The subject site is largely paved, with a landscaped area between the building and the sidewalk. Concrete pavers flanking the landscaped area provide pedestrian access to the building. The landscaped area is currently planted with grass only. The applicant proposes to landscape a portion of this area with a variety of shrubs, flowers, and sculptures. The applicant's Landscape Architect has indicated that the basin containing this landscaped area is not deep enough to accommodate trees. Additional landscaping located in planting beds flanking each driveway are proposed to be retained.

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The applicant has provided a Landscape Plan showing the proposed improvements to the landscaped area (Attachment 4). Prior to issuance of the TCUP at the Public Hearing, the applicant is required to provide a Landscape Security based on the cost estimate of the Landscape Plan, plus a 10% contingency, to ensure that the agreed upon landscaping is installed.

#### Site Access and Parking

The applicant has provided a Traffic Impact Analysis (TIA) report to assess the capacity of surrounding streets to support the proposed new use. Transportation staff have reviewed the TIA report and are satisfied with its findings, with no upgrades to City infrastructure required.

Parking and loading must be provided consistent with the requirements of Richmond Zoning Bylaw 8500. Vehicle parking is required at a rate of 1 parking space per 3.5 seating spaces or 3.1 parking spaces per 10 m<sup>2</sup> of gross leasable floor area, whichever is greater, reduced by 15% based on the City Centre blended parking rates. The maximum occupant load of the gallery space is 190 persons, which would require 46 parking spaces. Based on the area of this gallery space, 92 parking spaces are required.

There are 168 parking spaces on-site. The TIA report indicates that 80 of the spaces are for the exclusive use of customers and staff of the businesses, including the applicant. The remaining 88 spaces are managed as a park and ride facility. The applicant has confirmed that customers will have access to a minimum of 12 park and ride spaces, in order to meet the minimum parking requirements of 92 spaces. These 12 spaces will be reserved on days that the proposed auctions take place.

Class 1 and Class 2 bicycle parking is required at a rate of 0.27 spaces per 100 m<sup>2</sup> of gross leasable floor area greater than 100 m<sup>2</sup>, for a total of one Class 1 and one Class 2 bicycle parking space. The site plan provided by the applicant shows six Class 1 and eight Class 2 bicycle parking spaces.

#### **Financial Impact**

None.

#### Conclusion

YKLM Art Space Co. Ltd. had applied to the City of Richmond for a Temporary Commercial Use Permit to allow "Auction, Minor" as a permitted use at 4211 No. 3 Road, zoned "Auto-Oriented Commercial (CA)," to permit the sale of artwork on site.

The proposed use at the subject property is acceptable to staff, on the basis that it is consistent with the land use designations in the Official Community Plan and is temporary in nature.

If endorsed by Council, the applicant is required to submit the two securities described in the attached Temporary Commercial Use Permit prior to consideration at the Public Hearing on July 16, 2018.

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Staff recommend that the attached Temporary Commercial Use Permit be issued to the applicant to allow "Auction, Minor" at 4211 No. 3 Road for a period of three years.

Pochhi

Jordan Rockerbie Planning Technician (604-276-4092)

JR:blg

#### Attachments:

Attachment 1: Location Map

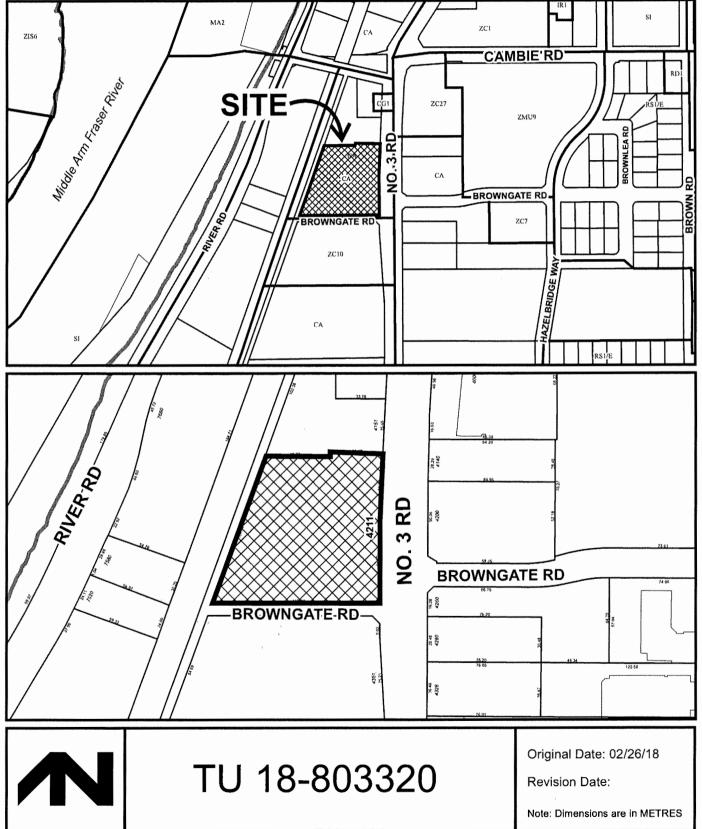
Attachment 2: Development Application Data Sheet

Attachment 3: Site Plan

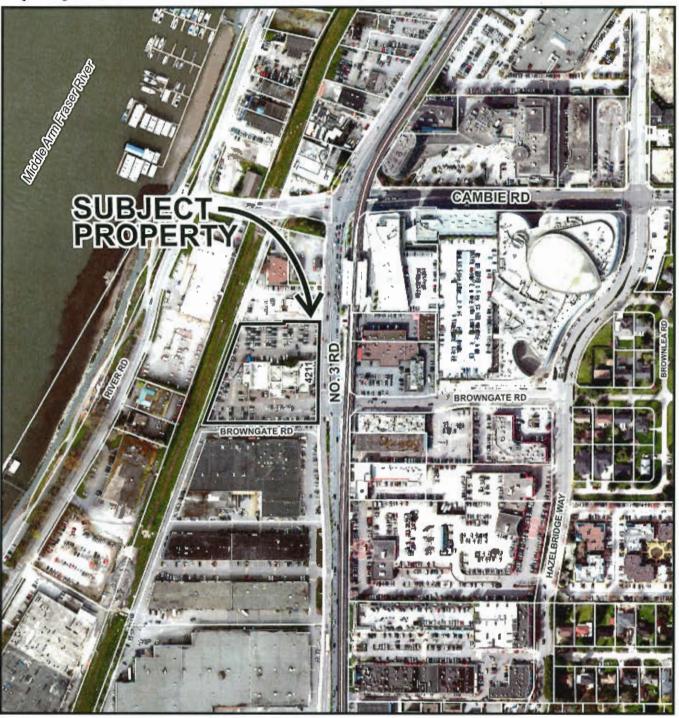
Attachment 4: Landscape Plan

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TU 18-803320

Original Date: 02/27/18

Revision Date:

Note: Dimensions are in METRES



## **Development Application Data Sheet**

Development Applications Department

TU 18-803320 Attachment 2

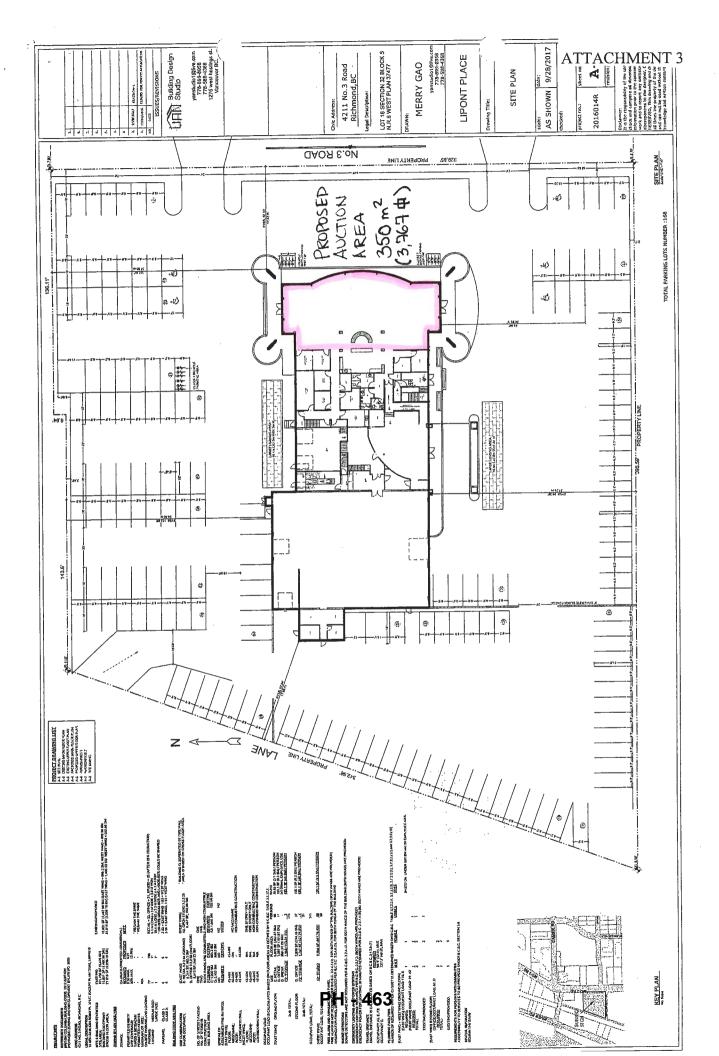
Address: 4211 No. 3 Road

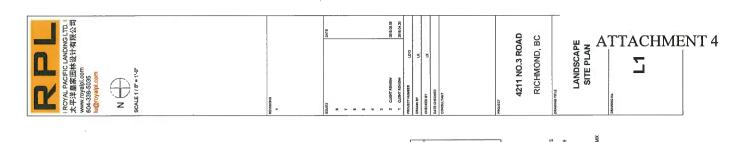
Applicant: YKLM Artspace Co. Ltd.

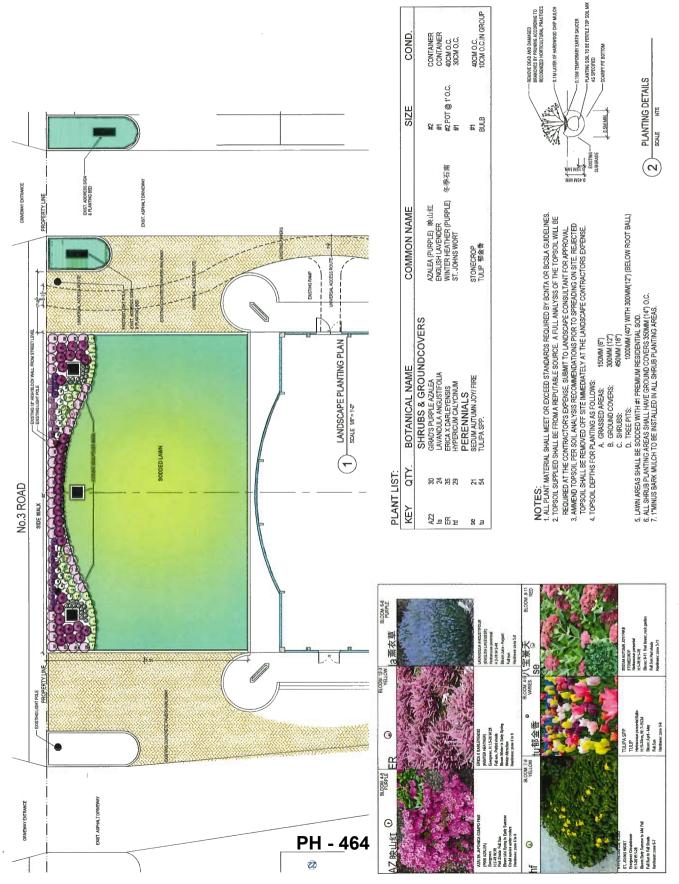
Planning Area(s): City Centre

	Existing	Proposed
Owner:	0977973 BC Ltd.	No change
Site Size (m²):	9,425 m <sup>2</sup>	No change
Land Uses:	Office	Office, Minor Auction
OCP Designation:	Commercial	No change
CCAP Designation:	Urban Centre T5	No change
Zoning:	Auto-Oriented Commercial (CA)	No change

On Development Site	Bylaw Requirement	Proposed	Variance
On-site Vehicle Parking:	92	168	None
On-site Bicycle Parking:	Min. 1 Class 1 Min. 1 Class 2	6 Class 1 8 Class 2	None









### **Temporary Commercial Use Permit**

No. TU 18-803320

To the Holder:

YKLM ARTSPACE CO. LTD.

**Property Address:** 

4211 NO. 3 ROAD

Address:

C/O SONNY LI

YKLM ARTSPACE CO. LTD.

4211 NO. 3 ROAD

RICHMOND, BC V6X 2C3

- 1. This Temporary Commercial Use Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
- 2. This Temporary Commercial Use Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and to the portion of the building shown cross-hatched on the attached Schedule "B".
- 3. The subject property may be used for the following temporary Commercial uses:

Auction, Minor

- 4. The permitted use shall be limited to the sale of artwork and household goods only, and shall not include the sale of motor vehicles, commercial equipment, or industrial equipment.
- 5. Any temporary buildings, structures and signs shall be demolished or removed and the site and adjacent roads shall be maintained and restored to a condition satisfactory to the City of Richmond, upon the expiration of this permit or cessation of the use, whichever is sooner.
- 6. As a condition of the issuance of this Permit, Council is holding the security set out below to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Holder if the security is returned. The condition of the posting of the security is that should the Holder fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder, or should the Holder carry out the development permitted by this permit within the time set out herein and comply with all the undertakings given in Schedule "C" attached hereto, the security shall be returned to the Holder.

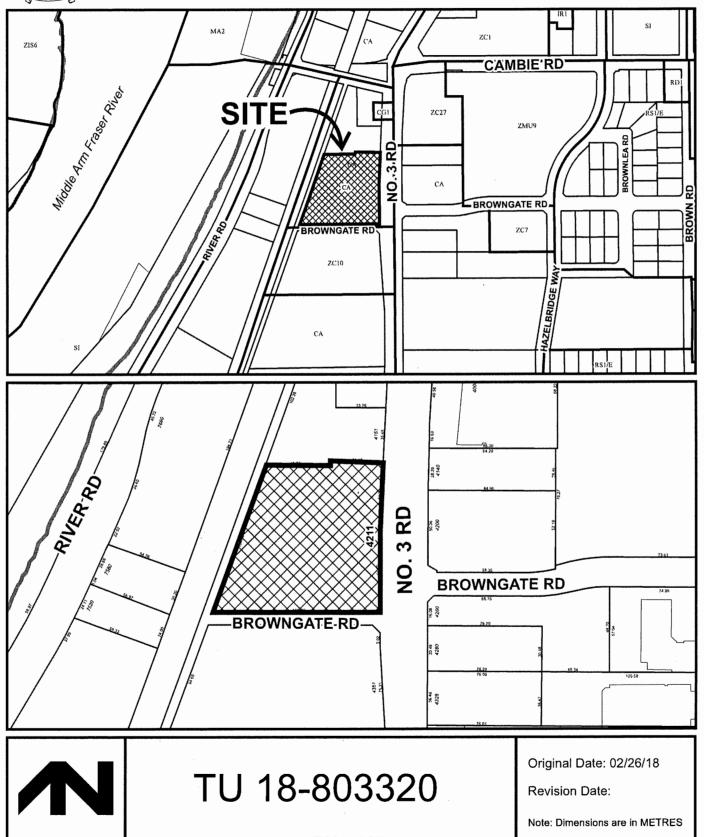
There is filed accordingly:

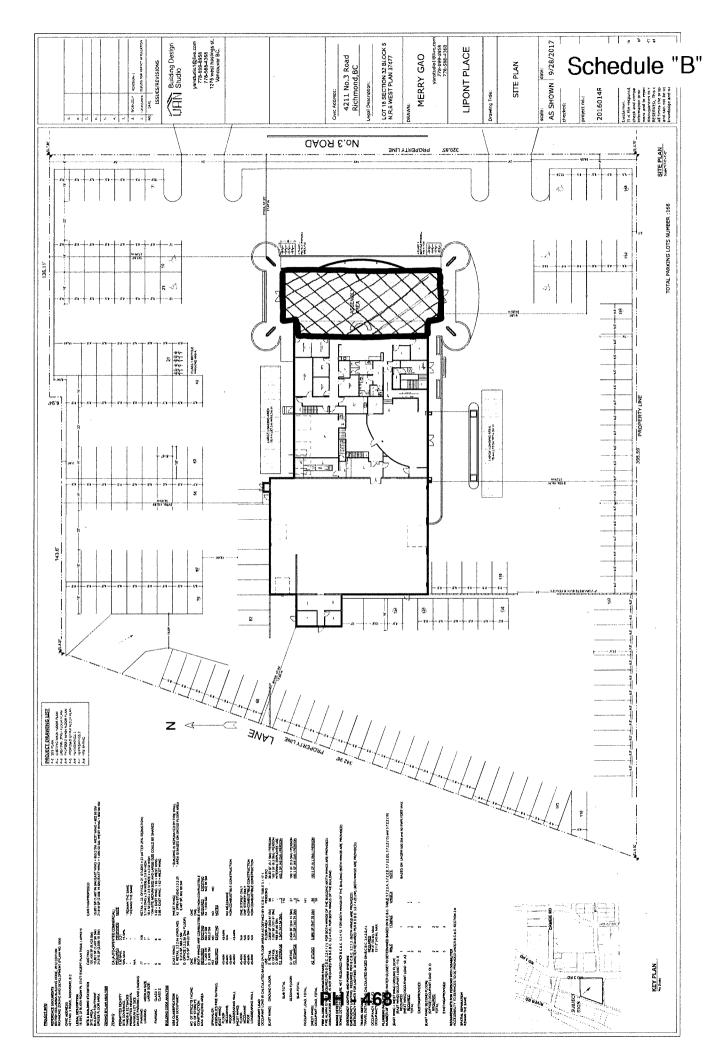
An Irrevocable Letter of Credit in the amount of \$2,000.00.

To the Holder:		YKLM ARTSPACE CO. LTD.			
Property Address:		4211 NO. 3 ROAD			
Address:		C/O SONNY LI YKLM ARTSPACE CO. LTD. 4211 NO. 3 ROAD RICHMOND, BC V6X 2C3			
7.	. As a condition of the issuance of this Permit, the City is holding a Landscape Security in the amount of \$2,723.05 for the landscape works described in Schedule "D". The City will release 90% of the security upon inspection, and 10% of the security will be released one year after the inspection to ensure that the agreed upon planting has survived.				
8.	The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.				
9.	If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.				
	This Permit is not a Build	ling Permit.			
AUTHORIZING RESOLUTION NO. ISSUED BY THE COUNCIL THE DAY OF ,					
DI	ELIVERED THIS D	OAY OF ,	•		
M	AYOR		CORPORATE OFFICER		

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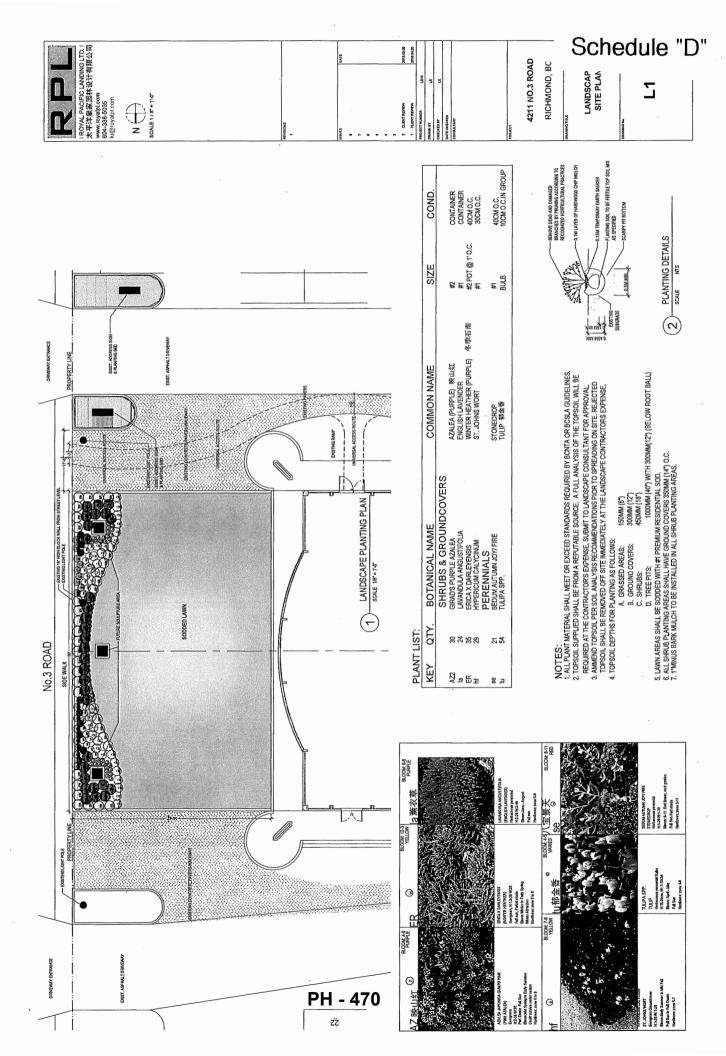






## Schedule "C"

Undertaking	
In consideration of the City of Richmond issuing the Temporary undersigned hereby agree to demolish or remove any temporary to restore the land described in Schedule A; and to maintain and condition satisfactory to the City of Richmond upon the expirat the permitted use, whichever is sooner.	buildings, structures and signs; I restore adjacent roads, to a
	YKLM Art Space Co. Ltd. by its authorized signatory





## **Report to Committee**

To:

General Purposes Committee

Date:

May 5, 2018

From:

Peter Russell

File:

10-6125-07-02/2017-

Vol 01

Senior Manager, Sustainability and District Energy

Victor Wei, P. Eng.

Acting Director, Building Approvals &

Director, Transportation

Re:

**BC Energy Step Code** 

#### Staff Recommendation

- 1. That the Building Regulation Bylaw No. 7230, Amendment Bylaw No. 9769, which adds Part 10 Energy Step Code, identified in the report titled "BC Energy Step Code" dated May 5, 2018, from the Senior Manager, Sustainability and District Energy, and Acting Director, Building Approvals, be introduced and given first reading;
- 2. That Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 9845, which amends Sections 3.4, 4.2.1, 4.3.3 and 4.4.1, identified in the report titled "BC Energy Step Code" dated May 5, 2018, from the Senior Manager, Sustainability and District Energy, and Acting Director, Building Approvals, be introduced and given first reading;
- 3. That Richmond Official Community Plan Bylaw No. 9000, Amendment Bylaw No. 9771, which amends Sections 12.4 and 14.2.10.A, identified in the report titled "BC Energy Step Code" dated May 5, 2018, from the Senior Manager, Sustainability and District Energy, and Acting Director, Building Approvals, be introduced and given first reading;
- 4. That Richmond Official Community Plan Bylaw No. 7100, Amendment Bylaw No. 9770, which amends Sections 2.2.3 and 2.5, identified in the report titled "BC Energy Step Code" dated May 5, 2018, from the Senior Manager, Sustainability and District Energy, and Acting Director, Building Approvals, be introduced and given first reading;
- 5. That Bylaw 9771 and Bylaw 9770, having been considered in conjunction with:
  - a. The City's Financial Plan and Capital Program; and
  - b. The Greater Vancouver Regional District Solid Waste and Liquid Waste Management Plans;

- are hereby found to be consistent with said programs and plans, in accordance with 477(3)(a) of the *Local Government Act*;
- 6. That Bylaw 9771 and Bylaw 9770, having been considered in accordance with Official Community Plan Bylaw Preparation Consultation Policy 5043, are hereby found not to require further consultation;
- 7. That the creation of a two year temporary full time Building Energy Specialist, partially funded by a \$100,000 contribution from BC Hydro, with remaining salary and benefits of \$130,000 fully recovered through building permit fees, be endorsed; and that the Chief Administrative Officer and General Manager, Engineering and Public Works be authorized to enter into a funding agreement with BC Hydro to support the Building Energy Specialist position;
- 8. That the creation of new Plan Reviewer and Building Inspector 1 positions, with total salary and benefits of \$200,000 fully recovered through building permit fees, be endorsed;
- 9. That the Consolidated 5 Year Financial Plan (2018-2022) be amended to include the temporary full-time Building Energy Specialist, Plan Reviewer, and Building Inspector 1 positions funded by an increase in grant revenue and building permit fees.
- 10. That the Energy Step Code training programs identified in the report titled "BC Energy Step Code" dated May 5, 2018, from the Senior Manager, Sustainability and District Energy, and Acting Director, Building Approvals, be approved with \$110,000 from the Carbon Tax Provision, as funded in the 2018 Operating Budget;
- 11. That for Part 3 and Townhouse developments, notwithstanding the adoption of Building Regulation Bylaw No. 7230, Amendment Bylaw No. 9769:
  - a. If a Development Permit has been issued prior to September 1, 2018, the owner may, while their Development Permit remains valid, apply for a Building Permit in compliance with the energy efficiency requirements applicable prior to the adoption of Bylaw 9769; and
  - b. If an acceptable Development Permit application has been submitted to the City prior to the adoption of Bylaw 9769, the owner may, until December 31, 2019, apply for a Building Permit in compliance with the energy efficiency requirements applicable prior to the adoption of Bylaw 9769.

Peter Russell Senior Manager, Sustainability and District Energy (604-276-4130) Victor Wei, P. Eng. Acting Director, Building Approvals & Director, Transportation (604-276-4131)

Att. 7

REPORT CONCURRENCE			
ROUTED TO:  Law Building Approvals Development Applications Policy Planning Finance	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
REVIEWED BY STAFF REPORT I AGENDA REVIEW SUBCOMMITTEE	Initials:	APPROVED BY CAO	

#### **Staff Report**

#### Origin

In May 2017, Council endorsed a stakeholder consultation program regarding how the BC Energy Step Code can be implemented in Richmond.

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

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

4.1. Continued implementation of the sustainability framework.

#### **Analysis**

#### Background

In 2010, Council adopted targets included 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. Richmond's 2014 Community Energy and Emissions Plan (CEEP) outlines strategies and actions for the City to take to reduce community GHG emissions, including:

Strategy 2: Increase Energy Efficiency in New Developments

- Action 4: Promote energy efficiency in all rezoning.
- **Action 5:** Develop incentives for new development to exceed the building code energy requirements.

Modeling undertaken as part of the CEEP indicates that in order for Richmond to meet its emissions targets, all new buildings will need to be constructed to achieve zero carbon emissions by 2025. Thus, pursuing Zero Carbon Buildings is one of the "Big Breakthroughs" called for in the CEEP.

Current policies support energy use and emissions reductions in new construction, including:

- The City Centre Area Plan's policy that new developments over 2000m<sup>2</sup> undergoing rezoning achieve LEED Silver, and
- The OCP's Townhouse Energy Efficiency and Renewable Energy policy.

When introduced, staff noted that revisions to these policies would come forward over time, recognizing changes in standards and construction practices.

#### Purpose and Rationale for the BC Energy Step Code

The BC Energy Step Code is the product of a multi-year collaboration between the Province, industry stakeholders, utilities and local governments. Adopted by the Province in April 2017, the Energy Step Code allows BC local governments to voluntarily reference a series of progressively more stringent energy performance "steps" in regulation. The Province has indicated that future iterations of the base BC Building Code will align with the Energy Step Code, and has committed that the BC Building Code will achieve "net zero energy ready" levels of performance by 2032, equivalent to the highest "step" of the Energy Step Code. Attachment 1 provides further background on the Energy Step Code, and the estimated costs to achieve different steps for different building types.

The Energy Step Code measures energy performance in a way that aligns with best practices from leading jurisdictions and standards used in Europe and, increasingly, North America. It is intended to result in better real world building performance. In brief, the BC Energy Step Code focuses on the following performance categories (more details are provided in Attachment 2):

- Building envelope performance This encourages high quality insulation and window systems, and good passive design practices, to minimize the heating energy required of buildings; and
- Energy efficient systems This encourages efficient heat delivery, cooling, ventilation, hot water, and lighting systems.

The Energy Step Code includes different sets of targets for both larger "Part 3" and smaller "Part 9" buildings (Figure 1).



Figure 1: Building types

#### Specifying Greenhouse Gas Performance

The BC Energy Step Code is widely viewed as a critical advancement in the regulation of energy performance in new buildings. It will reduce energy use and emissions, and increase comfort. However, it alone is unlikely to achieve widespread adoption of very low/zero GHG emissions new buildings, which will be necessary to achieve the City's emissions targets. The Energy Step Code does not currently directly measure GHG emissions from buildings. In contrast, some building performance standards do measure GHG emissions, such as the Canada Green Building Council's Zero Carbon Building Framework, and the City of Vancouver's Green Buildings Policy for Rezoning, and the City of Toronto's Zero Emissions Buildings Framework.

Specifying low carbon building energy systems in new developments will better achieve the low/zero carbon outcomes necessary to meet emissions targets, as well as to recognize the beneficial roles that district energy systems can play in delivering low carbon outcomes. Encouraging low carbon building energy systems accounts for the GHG intensity of different fuels, ensuring buildings achieve low levels of emissions. Implementing Step Code and low carbon building energy systems together can decrease energy use, costs, and emissions in a timely manner.

#### **LEED Rating System**

The Leadership in Energy and Environmental Design® (LEED) rating systems are used to measure and certify buildings' performance. LEED scoring involves projects achieving a certain number of credits across a range of different green building categories. First released in 1994, the LEED rating systems have been central to the growth and expansion of green building practices.

As noted above, the City Centre Area Plan established a policy that new developments greater than 2000m<sup>2</sup> achieve a level of performance equivalent to LEED Silver as a consideration of rezoning. This policy demonstrated Richmond's leadership in green buildings. However, there are issues with continuing to reference LEED:

- Staff estimates that approximately 80% of the credits necessary to achieve LEED Silver
  would now be implemented in new developments even without the existence of City's
  the LEED Silver policy, by virtue of most Richmond developments' location, applicable
  regulations, and the evolution of construction practices. This is partly because many best
  practices pioneered by LEED have spread throughout the industry and have increasingly
  been incorporated into local and provincial regulations.
- LEED measures energy performance in a way that differs from best practices reflected in the Energy Step Code. Energy Step Code establishes absolute targets for different building types. In contrast, LEED measures relative energy performance compared to baseline code-compliant building. The Energy Step Code means of measuring energy performance better rewards buildings designed to optimize form, orientation, and massing to minimize energy demand.

#### Townhouse Energy Efficiency and Renewable Energy Policy

In September 2014, Council adopted the City's Townhouse Energy Efficiency and Renewable Energy policy, requiring all new townhouse units resulting from rezoning applications to achieve an "EnerGuide 82" energy efficiency performance rating or better, and comply with the BC Solar Hot Water ready regulation, or alternatively, to connect to a renewable energy system<sup>1</sup>. In June 2015, this policy was amended to also reference Natural Resources Canada's "Energy Star for New Homes" program as a compliance pathway. As of January 2018, 862 townhouse units have been approved under this policy. In almost every case, applicants have chosen to design and build townhouse units to an EnerGuide 82 performance level or better.

An analysis of reports received to date indicates that townhouses approved under the City's existing policy are designed, on average to consume 14% less energy than equivalent townhouses built to minimum requirements under the existing building code, and would achieve Step 2 of the Energy Step Code (leaving aside the airtightness requirement). A significant number of townhouse units designed under the current policy are modelled as achieving EnerGuide scores of 83 or higher<sup>2</sup>. Many of these units would achieve Step 3 of the Energy Step Code (again, leaving aside the airtightness requirement).

In 2017, Natural Resources Canada introduced a new energy efficiency rating system for new homes, and plans to discontinue the 0-100 rating system on December 31<sup>st</sup> 2018, rendering the City's existing Townhouse Energy Efficiency and Renewable Energy Policy obsolete.

The Energy Step Code is intended to replace the current LEED in City Centre and townhouse energy efficiency requirements at rezoning. Adopting the Energy Step Code, and its broad applicability to all new construction across Richmond, will further the City's leadership on energy-efficient new developments, while also bringing the City's policies in line with stated industry preferences and provincial government policy objectives.

<sup>2</sup> Commonly middle units in row house buildings, where every unit receives the same energy efficiency upgrades.

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<sup>&</sup>lt;sup>1</sup> In July 2015, the policy was revised to allow townhouse units to achieve the Energy Star for New Homes standard and comply with the BC Solar Hot Water ready regulation an alternate compliance option.

#### Stakeholder Consultation

In May 2017, Council endorsed a stakeholder consultation program to inform implementation of the BC Energy Step Code. The City's consultation program consisted of:

- Three workshops with Part 9 (buildings 3 storeys or less and less than 600m² footprint) home builders in Richmond's community. Attendees included representatives of the Richmond Home Builders Group, the Greater Vancouver Home Builders Association, multiple builders involved in recent projects in Richmond, and Energy Advisors. 209 people participated in at least one workshop, with good attendance at all events. These sessions successively introduced the BC Energy Step Code and how it works, provided opportunities for feedback on how the City can ensure successful implementation, and provided an opportunity for members of Richmond's home builder community to make comment on Energy Step Code implementation.
- Four workshops with representatives of Richmond's Part 3 larger buildings development community, updates to the Urban Development Institute (UDI) Liaison Committee, and a presentation at a UDI Breakfast Seminar on the Energy Step Code to regional development community members.
- An update to the Advisory Committee on the Environment.
- Direct engagement with energy utilities, including BC Hydro, FortisBC and Lulu Island Energy Company.
- A multi-stakeholder workshop of building industry stakeholders to review draft recommendations and receive feedback.
- A workshop with Energy Advisors, who provide energy modeling and air-tightness testing services to help builders meet the requirements of the BC Energy Step Code.

Attachment 3 summarizes the feedback received during stakeholder consultations.

#### Recommended Energy Step Code Regulations and Policies Applicable to New Development

It is recommended that the Building Regulation Bylaw be amended to require new developments to adhere to the BC Energy Step Code. Amendment Bylaw 9769 proposes amendments to the Building Regulation Bylaw to establish requirements that new developments adhere to the Energy Step Code. The requirements apply to building permits received after September 1, 2018. These requirements vary for different building types, reflecting differences in the cost of achieving these steps defined in the code, and industry's readiness to deliver to different steps. Should the recommendations be endorsed, staff will monitor implementation and building performance under the new policies and bylaws. With successful progress it is anticipated that further steps can be advanced for consideration as per the timetable in Table 1 below.

**Table 1: Proposed BC Energy Step Code Requirements** 

	Approximate	<b>Building Perm</b>	it Applic	ation	
	Current Performance	Recommended		ated Timeta re Considei	
Smaller Part 9 Re	9 Residential September 1 2018 <sup>3</sup>		Jan 2020	Jan 2022	Jan 2025
Townhomes and apartments	~Step 2 (townhomes)	Step 3	Same as 2018	Step 4	Step 4 or Step 5
Single family, duplex and other residential	BC Building Code	Step 1	Step 3	Step 3 or Step 4	Step 4 or Step 5
Larger Part 3 dev	elopments				
Residential Concrete	~Step 2 (in City Centre) BC Building Code (outside CC)	Step 3, or OR Step 2 for buildings that implement low carbon building energy systems	Same as 2018	Step 3	Step 4
Residential Woodframe Low/Mid Rise	~Step 2 (in City Centre) BC Building Code (outside CC)	Step 3	Same as 2018	Step 4	Step 4
Office & Retail Buidlings	~Step 2 (in City Centre) BC Building Code	Step 2	Same as 2018	Step 3	Step 3

Amendment Bylaw 9769 proposes two compliance paths for residential concrete buildings. Such developments must achieve Step 3, or Step 2 if they implement a low carbon building energy system. Such low carbon systems can be achieved through connection to district energy, or through implementation of onsite low carbon energy systems, including air-source heat pumps, geo-exchange, waste heat recovery and solar as approved by the City. Lulu Island Energy Company and the City are working on an additional amendment to support onsite low carbon energy systems.

Additional bylaw amendments are proposed to support Energy Step Code implementation. These are summarized in Table 2 below.

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<sup>&</sup>lt;sup>3</sup> Projects with "in-stream" DP applications will have until December 31, 2019, to submit an acceptable Building Permit under previous requirements.

Table 2: Summary of Bylaw Amendments

#### **Purpose**

#### **Description**

Adjust calculation of floor area in the Richmond Zoning Bylaw to support more insulated walls and green building systems Amendment Bylaw 9845 proposes floor area calculation exclusions for projects implementing "beyond-Code" insulation, as well as low carbon green building systems that that can sometimes be larger than conventional mechanical systems. For all building types, exterior wall thickness in excess of 0.16 m (typical to meet the baseline BC Building Code) is excluded from floor area calculations, up to a maximum exclusion of 0.31 m, provided that the wall thickness is utilized for the provision of insulating materials. These amendments ensure those developments that provide greater insulation or green building features are not penalized through reduced living space.

Update existing
Official Community
Plan policies to reflect
implementation of the
Energy Step Code

Amendment Bylaws 9771 and 9770 comprise of amendments to the Official Community Plan (OCP) and the City Centre Area Plan (CCAP). They introduce relevant context about the importance of low energy and emissions in the built environment in both the OCP and CCAP. They remove reference to the Townhouse Energy Efficiency and Renewable Energy policy, and LEED Silver for building types to which the Energy Step Code applies; the CCAP will continue to reference LEED Silver for buildings over 2000m<sup>2</sup> for which the BC Energy Step Code applies to less than 50% of gross floor area.

Amendment Bylaw 9771 (OCP) also augments development permit guidelines to note that projects subject to the Energy Step Code will continue to comply with other development permit guidelines relating to building design and neighbourhood character.

As a housekeeping update, amendments to the CCAP will remove reference to particular performance standards for City facilities. The City's Sustainable "High Performance" Building Policy – City Owned Facilities (Policy 2307) continues to reference LEED Gold certification for new City owned buildings.

As a housekeeping update, Amendment Bylaw 9770 (CCAP) will clarify requirements for the City Centre Area Plan with regards to the commitment to connect to a district energy system or develop an onsite low carbon energy system.

Indicate anticipated future Energy Step Code and low carbon building requirements in the Official Community Plan Amendment Bylaw 9771 (OCP) establishes as policy the schedule of future changes to Energy Step Code requirements set out in Table 1. It also includes new policies that all developments be encouraged (but not immediately required) to achieve zero carbon operations.

The recommended amendments in this report:

- Support the attainment of high performance buildings on a timeframe consistent with meeting the City's emissions goals The CEEP suggests that for the City to achieve its GHG emissions reduction targets, all new construction would need to achieve near zero carbon emissions by 2025.
- Represent a cost effective means of achieving building performance The BC Housing costing study noted in Appendix 4 suggests that the costs to achieve the BC Energy Step Code are relatively modest. Lowest additional costs for compliance are typically less than 1.5% of the cost of construction for the proposed requirements beginning in 2018, while the proposed 2025 requirements and zero emissions rezoning considerations could be met with no more than a 2-4% increase in construction costs, assuming today's technologies and typical pricing. As such, the overall increase in total capital cost will only be a fraction of the percentages noted above. The incremental cost of construction will not only generate ongoing utility bill savings throughout the life cycle of the building, but result in a higher quality building product characterized by greater comfort for occupants, improved indoor air quality and improved durability against moisture buildup and damage. Future advances in technology and market transformation of low carbon building systems are expected to reduce these additional construction costs over time.
- Improve consistency A key desire expressed by the development and home building industries during consultations carried out for the BC Energy Step Code was consistency in the standards applied by local governments, to improve clarity and transferability of approaches between jurisdictions. Referencing the BC Energy Step Code will help achieve this consistency.
- "Telegraph" the requirements for new developments into the future Establishing BC Energy Step Code requirements for future years will help industry members plan for training and development of innovative building practices. Industry has noted repeatedly that providing this assurance into the future is necessary to plan investments in training and innovation, and to control costs.
- Support improved health, comfort and durability of new homes and buildings in Richmond As noted above, the performance requirements of the BC Energy Step Code will directly result in more airtight, less drafty buildings that provide improved indoor air quality, better thermal comfort, and more durable building envelopes.

#### **Ensuring Fairness for Smaller Homes**

As noted in Attachment 1, the potential increases in incremental costs for small homes (e.g. those approximately 1100 square feet) to meet Steps 2-5 of the BC Energy Step Code are projected to be higher than those anticipated for other building types. This is because these homes use more energy per square foot (though less total energy), and because they have a relatively higher ratio of wall and roof area to total volume than larger buildings, making building envelope performance measures relatively more difficult to achieve. Conversely, the percent increase in

incremental costs for very large homes to meet higher steps of the BC Energy Step Code is projected to be lower than that for an average-sized home. Since Step 1 is currently referenced, the City's initial Step Code standards will not entail any disproportionate impact to homes of smaller or larger size.

The provincial government has acknowledged this issue and is considering revisions to the Energy Step Code to provide a level playing field for smaller homes. If such revisions are not adopted, staff will bring forward recommendations for revisions to the City's requirements, to ensure that the construction of smaller homes is not disproportionately burdened.

#### Implementation

Building Regulation Bylaw 7230, Amendment Bylaw 9769 specifies that applicable Building Permit applications filed on or after September 1, 2018, will need to adhere to the BC Energy Step Code. In order to accommodate in-stream applications for Part 3 buildings and townhouse developments that may face greater difficulty adjusting their building systems to be able to achieve these new targets:

- Developments that have been issued Development Permits prior to the effective date, may apply for a Building Permit to construct in compliance with the previous requirements for duration of the time that their Development Permit is valid;
- Developments that have submitted acceptable Development Permit applications before
  the date of Council's adoption of Bylaw 9769 will have until December 31, 2019, to
  submit an acceptable Building Permit application in order to build under previous
  requirements.

Going forward, achieving the higher steps (e.g. Step 4 for Part 3 buildings and Step 4-5 for Part 9 buildings) of the Energy Step Code may impact the form and character of new construction. As such, staff may closely monitor building design trends and bring forward Richmond Zoning Bylaw amendments and design guideline amendments in the Official Community Plan that support implementation of the higher steps in Richmond. These amendments are not required for recommended starting levels applicable in 2018, but will support the widespread adoption of very low energy and emissions buildings in future years.

#### **Next Steps**

Staff are evaluating the viability of referencing low carbon building energy systems as part of the Building Regulation Bylaw and/or OCP for additional building types (i.e. other than residential "Part3" buildings with concrete construction) to achieve zero/low GHG emissions. Such a policy would be consistent with other leading jurisdictions, and with what Richmond's Community Energy and Emissions Plan indicates is necessary to be able to achieve the City's GHG reduction targets. Staff will also evaluate the need to introduce additional rezoning policy relating to health and other green building attributes as part of a more streamlined rezoning approach. Lastly, staff are evaluating updates to the Sustainable "High Performance" Building Policy – City Owned Facilities (Policy No. 2307), to introduce new energy performance options for leadership in corporate facilities.

#### **Building Energy Specialist Position**

BC Hydro offers \$100,000 over a two year term for a new staff position to support the implementation of the Step Code and related efforts to facilitate more energy efficient buildings. As such, it is recommended that a two year temporary full time Building Energy Specialist position be created. Key roles will include implementing BC Energy Step Code approvals processes; training staff; developing education and training opportunities for building industry stakeholders; and tracking results to support continuous improvement. The remaining costs will be fully funded through building permit fees.

#### **Building Approvals Resources**

Richmond is experiencing ongoing high levels of development. Endorsement of the Energy Step Code and its requirements will result in additional workload on Building Approvals staff at both the Plan Review and Inspection stages. Design criteria meeting the advanced energy conservation measures will require additional review of supporting documents as well as verification in constructed form during inspections. Additional efforts will also have to be made in order to integrate the results of performance testing of the buildings as required by the Step Code into the exiting inspection process. To support customer service excellence and reliable, timely building approvals, it is recommended that a new Plan Reviewer position and a new Building Inspector 1 position be created. These positions will be fully funded through building permit fees.

#### **Energy Step Code Training Programs**

To complement the introduction of the BC Energy Step Code, it is proposed that the following programs be funded from pre-existing resources in the 2018 Operating Budget:

- \$80,000 to expand the City's existing Air-Tightness Training Programs. Council approved implementation of this program on May 23, 2017. Accordingly, under this program, the City supports local builders, including their sub-trades and labourers, to gain expertise in building airtight homes in advance of regulatory requirements by funding:
  - o Attendance at a hands-on one-day Airtightness Techniques Course; and/or
  - Free pre-drywall blower door tests to directly measure the airtightness of new homes under construction in Richmond.
- \$15,000 to expand the very well attended City's Builders Workshop Series, presentations providing information about energy efficiency strategies.
- \$15,000 training for Part 3 (buildings greater than 3 stories or 600m<sup>2</sup> footprint) designers, contractors, and trades in air-tightness testing, energy modeling, and associated programming.

These programs will complement and leverage existing Energy Step Code training being offered by BC Housing, BCIT, the Greater Vancouver and Canadian Home Builders Associations, Architectural Institute of BC, Engineers and Geoscientists of BC, and other providers.

#### **OCP Consultation Summary**

Staff have reviewed the proposed 2041 OCP Amendment Bylaws with respect to the *Local Government Act* and the City's OCP Bylaw Preparation Consultation Policy No. 5043 requirements. The table below clarifies this recommendation. Public notification for the public hearing will be provided as per the *Local Government Act*.

OCP Consultation Summary				
Stakeholder	Referral Comment (No Referral necessary)			
BC Land Reserve Commission	No referral necessary.			
Richmond School Board	No referral necessary.			
The Board of the Greater Vancouver Regional District (GVRD)	No referral necessary.			
The Councils of adjacent Municipalities	No referral necessary.			
First Nations (e.g., Sto:lo, Tsawwassen, Musqueam)	No referral necessary.			
TransLink	No referral necessary.			
Port Authorities (Vancouver Port Authority and Steveston Harbour Authority)	No referral necessary.			
Vancouver International Airport Authority (VIAA) (Federal Government Agency)	No referral necessary.			
Richmond Coastal Health Authority	No referral necessary.			
Stakeholder	Referral Comment			
Community Groups and Neighbours	No referral necessary.			
Utilities	The proposed amendments were referred to BC Hydro and FortisBC.			
Home builders and developers	The proposed amendments were referred to the Richmond Home Builders Group, the Greater Vancouver Home Builders Association, and the Urban Development Institute.			
All relevant Federal and Provincial Government Agencies	No referral necessary.			

Richmond Official Community Plan Bylaw No. 9000, Amendment Bylaw No. 9771, and City Official Community Plan Bylaw No. 7100 (CCAP), Amendment Bylaw No. 9770, having been considered in accordance with OCP Bylaw Preparation Consultation Policy 5043, do not require further consultation.

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

#### **Financial Impact**

BC Hydro will support the Building Energy Specialist position with \$100,000 funded over two years. The Building Energy Specialist position will result in approximately \$130,000 in total salary and benefits impacts to the operating budget over a two-year period, after support by BC Hydro. These funds will be sourced from building permit revenue.

New Building Approvals department positions will result in approximately \$265,000 in additional salary and benefits annually. These funds will be sourced from building permit revenue. Based on the trend for increasing development as experienced in the past several years and current and projected activity into the foreseeable future, staff anticipate that the revenue derived from building fees will be sufficient to fund the proposed 2 full time and 1 temporary building energy specialist position.

Energy Step Code training programs will cost \$110,000. These funds are approved as part of the 2018 Operating Budget funded by the carbon tax provision.

#### Conclusion

The BC Energy Step Code, and associated policies to support low carbon emissions in new developments, are critical elements to the City pursuing its GHG reduction goals. This report recommends referencing the BC Energy Step Code as requirements in the Building Regulation Bylaw; updating policies in the Official Community Plan to encourage zero emissions development and identify planned future Step Code considerations; creating a Building Energy Specialist position to support BC Energy Step Code implementation; creating a new Plan Reviewer position and Building Inspector 1 position; and implementing training programs to assist the homebuilding and development industry.

Brendan McEwen Sustainability Manager (604-247-4676)

Nicholas Heap Sustainability Project Manager (604-276-4267)

#### BM:bm

- Att. 1: Background on the BC Energy Step Code
  - 2: Summary of BC Energy Step Code Technical Requirements
  - 3: Energy Step Code Consultation Feedback
  - 4: Building Regulation Bylaw No. 7230, Amendment Bylaw No. 9769
  - 5: Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 9845
  - 6: Richmond Official Community Plan Bylaw No. 9000, Amendment Bylaw No. 9771
  - 7: Richmond Official Community Plan Bylaw No. 7100, Amendment Bylaw No. 9770

#### Attachment 1: Background on the BC Energy Step Code

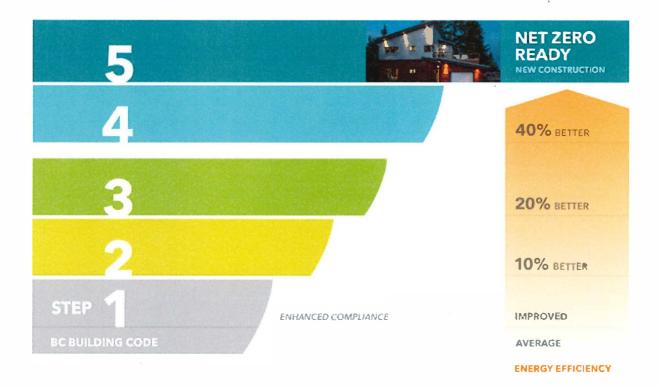
#### The BC Energy Step Code

The BC Energy Step Code is a provincial standard that provides a series of incremental steps to achieve progressively more energy-efficient buildings than delivered by the base BC Building Code. The BC Energy Step Code is a provincial building regulation that adds new compliance pathways to the energy sections of the BC Building Code. The Province has added the BC Energy Step Code to the unrestricted matters list in the BC Building Act General Regulation, thereby allowing local governments to establish the Energy Step Code as requirements in bylaws.

The BC Energy Step Code is largely a product of the multi-stakeholder "Stretch Code Implementation Working Group" (SCIWG), which the Province convened in the spring of 2016. A variety of stakeholders were represented in the SCIWG, including the Urban Development Institute, Canadian Home Builders Association, Greater Vancouver Home Builders Association, BC Hydro, FortisBC, Architectural Institute of BC, the Association of Professional Engineers and Geoscientists of BC, BC Housing, the Local Government Management Association, and other local governments. City of Richmond staff participated on the SCIWG. This group deliberated on the development of the BC Energy Step Code, and the Province released the consensus recommendations of the SCIWG in November 2016.

The Province enacted the BC Energy Step Code in April 2017, and published a "Provincial Policy: Local Government Implementation of the BC Energy Step Code" document, outlining expectations for local governments' application of the Energy Step Code consistent with the recommendations of the SCIWG. In August 2017, the Province released a more detailed "Best Practices Guide for Local Governments" to support the BC Energy Step Code's implementation. The SCIWG has now been renamed the "Energy Step Code Council," and will continue to advise the provincial government on the further development of, and revisions to, the Energy Step Code going forward. A City staff person is on the Energy Step Code Council.

The Energy Step Code comprises of a series of graduate performance Steps. There are five Steps for "Part 9" residential buildings (i.e. buildings less than 4 stories and 600m² building footprint); four Steps for larger "Part 3" residential buildings; and three Steps for "Part 3" office, institutional and retail buildings. Attachment 2 summarizes the technical requirements. The Figure below, showing Part 9 Energy Step Code targets, illustrates the BC Energy Step Code's basic structure of progressively more stringent steps.



In addition to energy and emissions savings, the BC Energy Step Code can deliver other benefits, including:

- **Comfort** Buildings with high performance building envelopes typically are more comfortable, being less drafty and warmer near exterior windows and walls.
- Quiet Well insulated buildings better attenuate sound, resulting in quieter indoor conditions. This can help achieve the City's Aircraft Noise policy requirements for achieving CMHC noise standards and ASHRAE internal building thermal comfort levels.
- Indoor air quality Constructing high performance systems requires greater attention to building ventilation. Typically, high performance residential buildings will use either direct to unit ventilation, or suite-by-suite heat recovery ventilation. These systems can better deliver fresh air than is typical of other common ventilation practices, improving indoor air quality.
- Simple building systems and ease of maintenance Low thermal energy demand can allow for relatively simple building heating strategies. This can reduce the operations and maintenance, as well as the potential for expensive repairs, which are often associated with more complicated mechanical systems. Moreover, attention to quality building envelop construction can increase building durability.
- **Regional economic development** The Step Code encourages high performance building envelopes. Insulation, windows and wood framing components tend to be manufactured locally, supporting local economic development.

• Climate change adaptation – The better building envelope design associated with the proposed approach can help ensure that buildings remain comfortable in the warmer climates anticipated in the future.

#### **BC Energy Step Code Costs**

In August 2017, BC Housing released the results of a study of the costs associated with constructing new buildings to the BC Energy Step Code. The study assessed the costs of achieving different Steps, for a range of different building types and uses. The table below summarizes the study's findings for select building archetypes in Climate Zone 4, where Richmond is located. It notes that estimated construction cost premium for the lowest cost building strategies to achieve a given Step. These costs represent only the cost of construction, and do not account for the cost of land, developer profit, nor any design fees, which together make up the majority of the cost of housing in Richmond.

Table 1: Estimated construction cost premiums for different building types to achieve different Steps of the BC Energy Step Code. Sources: BC Housing 2017 & City of Richmond Analysis.

	_			
Part 3 Buildings	Step 1	Step 2	Step3	Step 4
High Rise Multifamily (concrete)	<0.1%	0.4%	0.8%	2.4%
Low Rise Multifamily (woodframe)	<0.1%	0.5%	0.6%	2.6%
Office	<0.1%	0.1%	0.1%	N/A
Retail	<0.1%	0.9%	2.1%	N/A
Part 9 Buildings	Step 1	Step 2	Step3	Step 4
10 unit multifamily apartment	0.1%	0.3%	0.3%	0.7%
6 unit row house	0.1%	0.4%	1.0%	1.9%
Quadplex	0.3%	1.3%	2.2%	3.5%
5500 square foot single family	0.2%	0.6%	1.4%	1.4%
2600 square foot single family	0.2%	0.6%	1.6%	2.7%
1100 square foot single family	0.5%	4.0%	7.4%	10.1%

For most building types, construction cost premiums are modest at Steps 3 and below, typically about 1.6% or less for the residential building typologies common to Richmond. The exception is for small single family homes, for which it is more costly to achieve the Energy Step Code as currently designed (based on the outcomes of this study, there is a proposal before the Energy Step Code Council to recommend amendments to the Energy Step Code that would relax requirements for small homes to provide a more level playing field. Staff will track the outcomes of this proposal, and recommend any appropriate adjustments to City policy in the future, to ensure a level playing field for smaller homes).

These costing values were derived from data from Natural Resources Canada's LEEP program which tracked the costs of more efficient projects from real construction projects across the country, and have been extensively vetted with industry. As such, they represent the anticipated costs for builders with a good understanding of energy efficiency strategies. Staff note that

training will be required for some builders to improve understanding of energy efficient construction practices, and reduce the costs associated with learning and capacity development.

The study noted above did not allow for optimization of passive design strategies that can lower energy use such as form, massing, and glazing area. Many projects will be able to optimize for these considerations, and should thus face lower cost premiums.

#### **Attachment 2: Summary of Energy Step Code Technical Requirements**

#### Part 3 Construction

The Energy Step Code for large "Part 3" buildings (e.g. buildings that are 4 or more stories and greater than 600m<sup>2</sup>) involves a number of technical requirements, including:

#### Steps 1 to 4 - Adherence to an "Enhanced Compliance Package", involving:

- Energy modeling for all projects. All projects will be required to produce an energy model of the building to confirm that it exceeds minimum energy and emissions targets. The Step Code references Energy Modeling Guidelines outlining standardized assumptions, acceptable modeling software, and processes. These Guidelines ensure a fair "apples to apples" evaluation of building performance. Energy models will be professionally signed and sealed. Submission of an energy model to the City is already required as part of district energy connection approvals, and a large percentage of buildings undertake energy modeling for LEED and/or Building Code compliance.
- Whole building air-tightness testing. Developments will be required to conduct a test of their air-tightness. At first, testing will be used to baseline performance. Various jurisdictions already have mandatory air tightness testing, including the City of Vancouver, the State of Washington, and many European countries.
- **Building energy reporting.** While not a part of the Energy Step Code, it is proposed that as an administrative procedure, the City specify that developments create an Energy STAR Portfolio Manager account used to track energy performance. This will facilitate future evaluation of buildings' energy performance. The Portfolio Manager tool is widely used and considered the *de facto* energy reporting and benchmarking system, with over 20% of commercial floor space in Canada using the tool, and over 40% in the USA.

Steps 2 to 4 - Exceeding minimum energy performance targets. In addition to the "enhanced compliance package" noted above, developments will be required to exceed minimum energy performance targets. Different performance targets exist for different building types, including residential, office, and retail. Performance targets for mixed use buildings are pro-rated based on floor area. Targets include:

- Thermal energy demand intensity (kWh/m²/year) The annual modeled thermal energy required to provide space heating for a development. This target encourages energy efficient building envelope and passive design features, to limit heating requirements.
- Total energy use intensity (kWh/m²/year) The total annual modeled energy demand of a development. This target encourages all building systems to be energy efficient.

Energy Step Code performance levels are summarized in the tables below. The specific targets cited in the Energy Step Code may be adjusted over time, as additional information becomes available, notably the BC Housing study now underway.

**Energy Step Code Performance Levels for Residential Occupancies** Building Envelop – Maximum Equipment and Systems – Maximum Total Energy Use Intensity Thermal Energy Demand Intensity  $(kWh/m^2/yr)$  $(kWh/m^2/yr)$ Step 1 Step 2 130 45 30 120 Step 3 Step 4 100 15

**Energy Step Code Performance Levels for Business** and Personal Services or Mercantile Occupancies

	und i ersonar services or	Wierement Seed punctes
	Equipment and Systems – Maximum	Building Envelop – Maximum
	Total Energy Use Intensity	Thermal Energy Demand Intensity
	(kWh/m²/yr)	(kWh/m²/yr)
Step 1		
Step 2	170	30
Step 3	120	20
Step 2		

#### Part 9 Construction

All five steps of the Energy Step Code for Part 9 construction require two basic "Enhanced Compliance" measures, which are not required under the BC Building Code:

- Energy modeling of the building is required at the design stage, in order to confirm that the structure as designed will achieve the Step Code targets.
- "Air-tightness" testing is required once the building has been constructed, in order to measure uncontrolled flows of heat and moisture<sup>4</sup> in and out of the building.

Beyond this, each tier of the Part 9 Energy Step Code sets out three performance targets:

- The air-tightness of the completed building air-tightness is typically measured in terms of air changes per hour when the building is pressurized and depressurized by a defined amount (50 Pascals of air pressure).
- **Mechanical energy performance** The energy model for the building must meet performance thresholds for one of the following two metrics:
  - o Mechanical Energy Use Intensity (MEUI) of the building.
  - Percentage reduction in total energy use relative to the same home built to BC Building Code minimum standards, as measured by the EnerGuide Rating System's reference house.
- **Building envelope performance** The energy model for the building must meet performance thresholds for one of the following two metrics:
  - Thermal Energy Demand Intensity (TEDI) which measure annual energy demand for heating a space.
  - Peak Thermal Load (PTL) which measure peak heat loss through the building envelope.

The table below summarizes Part 9 Energy Step Code requirements for Climate Zone 4, which includes Metro Vancouver.

<sup>&</sup>lt;sup>4</sup> Mostly as water vapour

Part 9 Step Code Requirements for Climate Zone 4 (Lower Mainland and southern Vancouver Island)

	Airtightness (Air changes per hour at 50 Pa Pressure Differential)	Performance Requirements for Building Equipment and Systems	Performance Requirements for Building Envelope
Step 1	NA	not less than 0% lov	han EnerGuide Reference House: wer energy consumption - or - subsection 9.36.5.
Step 2	≤3.0	EnerGuide Rating % lower than EnerGuide Reference House: not less than 10% lower energy consumption - or - mechanical energy use intensity ≤ 60 kWh/m²·year	thermal energy demand intensity ≤ 45 kWh/m2·year - or - peak thermal load ≤ 35 W/m²
Step 3	≤ 2.5	EnerGuide Rating % lower than EnerGuide Reference House: not less than 20% lower energy consumption - or - mechanical energy use intensity ≤ 45 kWh/m²·year	thermal energy demand intensity ≤ 40 kWh/m²·year - or - peak thermal load ≤ 30 W/m²
Step 4	≤1.5	EnerGuide Rating % lower than EnerGuide Reference House: not less than 40% lower energy consumption - or - mechanical energy use intensity ≤ 35 kWh/m² year	thermal energy demand intensity ≤ 25 kWh/m2·year or peak thermal load ≤ 25 W/m²

			mechanical energy use	thermal energy demand intensity ≤ 15 kWh/m2·year
Step 5	$\leq 1.0$	21	intensity	or
			≤25 kWh/m2 year	peak thermal load
				$\leq 10 \text{ W/m}^2$

Viewed together, the five Steps of the Step Code span the large performance gap between current BC Building Code minimum requirements and the highest levels of building energy performance yet achieved in British Columbia.

- Step 1 is quite literally intended to be a "first step" on the road to improved building energy efficiency performance, for communities and/or segments of the building market with limited previous requirements for building energy efficiency. Step 1 energy performance targets are modest, requiring only that that building achieve the same energy performance as the intended performance of a building built to minimum BC Building Code requirements. As noted above, however, achieving this target requires builders to do energy modeling, and to install the building's air-barrier in an effective manner, skills that are essential to achieving success at higher levels of the Step Code.
- Step 2 calls for homes only 10% more efficient than that expected with Building Code minimum requirements, and a required air-tightness of 3.0 ACH50. Step 2 is best characterized a half-step relative to the larger jumps in performance between higher tiers.
- Step 3 entails an overall energy performance 20% better than Building Code minimum requirements, and an airtightness of 2.5 ACH. The overall energy target for this Step is a close match to two of the four available options under the City's existing townhouse energy efficiency policy. Based on modeling information available to date, townhouses in Richmond designed to achieve an EnerGuide 82 rating are, on average, 13% more efficient than those built to code minimum requirements, while homes built to the Energy Star for New Homes standard are expected to be 22% more energy efficient than a minimally code compliant home.
- Step 4 is comparable to the energy performance of a home to Natural Resources Canada's R-2000 ® standard. Homes meeting this standard would use 40% less energy than the expected performance of a minimally code compliant home, and have an airtightness of 1.5 ACH50 or better less than a third of the average new home built to minimum building code requirements
- Step 5 approaches the performance required by the stringent "Passive House" standard, and broadly matches the level of energy performance that the Climate Leadership Plan has committed to for new construction in 2032. Homes achieving Step 5 would use less than half of the energy of a minimally code compliant home, and an airtightness level of just 1.0 ACH<sub>50</sub>. Homes with this level of performance can achieve "net-zero energy ready," in if onsite renewable energy such as solar panels are implemented they can be capable of generating as much energy on an annual basis as they consume. At present, achieving this level of energy performance is exceptional.

#### **Attachment 3: Energy Step Code Consultation Feedback**

#### What we heard...

#### Staff response

Members of the development and homebuilding industries expressed that training pertaining to the BC Energy Step Code, especially regarding air-tightness for contractors and trades, and energy efficient design training, would be valuable.

Staff have implemented the City's Airtightness Training Program in September 2017 for local Part 9 builders, providing free tuition to a one-day airtightness training course, and free predrywall blower door tests for houses and townhouses under construction. The City is also hosting training on building to Step 3 of the BC Energy Step Code. Staff propose to maintain these existing programs and expand the City training programs, to complementing existing training being made available by BC Housing, BCIT, home builders associations, product suppliers, and other providers.

Development industry members noted the importance of avoiding impacts to development approvals timelines, and of the need for energy efficient form and character choices to be encouraged.

In consultation with stakeholders, staff have developed approvals processes for the BC Energy Step Code that complement existing development and building approvals processes.

Development industry stakeholders suggested that developments that have proceeded through a significant process of design iteration anticipating previous requirements (for instance, had a concept endorsed by the Development Permit Panel) would face a hardship if they are required to adhere to the BC Energy Step Code, as building massing and systems design decisions impact the energy efficiency of buildings.

Staff recommend that projects developments that have been issued Development Permits prior to the effective date, may apply for a Building Permit to construct in compliance with the previous requirements for duration of the time that their Development Permit is valid. Furthermore, developments that have submitted acceptable Development Permit applications before the date of Council's adoption of Bylaw 9769 will have until December 31, 2019, to submit a complete Building Permit application in order to build under previous requirements.

Members of the development and homebuilding industries expressed a desire for low/zero carbon technologies to be recognized as valuable. They further requested that the City consider implementing a GHG intensity compliance option instead of more aggressive Energy Step Code implementation.

The BC Energy Step Code currently does not award projects for realizing zero GHG emissions. As part of its engagement with the Energy Step Code Council, staff are pursuing the recognition of onsite renewable energy and GHG reductions, to complement the valuable metrics already referenced in the BC Energy Step Code.

	The proposed Building Regulation Bylaw amendments specify a low carbon compliance option for larger concrete building. Staff are evaluating options to implement a similar requirement for other forms of development.
It is important that the City "telegraph" future requirements, so that the development industry can plan for future requirements.	The proposed regime includes future targets, to provide greater certainty for industry.
Representatives of the development and homebuilder industries expressed appreciation for the City's thorough consultation process	Staff appreciate the productive engagement of the development and homebuilder industry representatives.
City's district energy provider, Lulu Island Energy Company (LIEC), noted that their analysis showed that with the adoption of the BC Energy Step Code, implementation of the low carbon energy sources for the district energy systems could potentially be delayed; however, combined implementation of BC Energy Step Code and low carbon district energy systems is the path to achieving the largest greenhouse gas emissions reductions.	Staff will continue to work closely with LIEC to explore solutions to best manage impacts created by adopting BC Energy Step Code and implement low carbon energy sources for the district energy systems as soon as possible.



## Building Regulation Bylaw No. 7230, Amendment Bylaw No. 9769 (BC Energy Step Code Implementation)

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

1. Building Regulation Bylaw No. 7230, as amended, is further amended by adding the following as a new Part Ten and renumbering the remainder of the bylaw:

#### "PART TEN: ENERGY STEP CODE

#### 10.1 Energy Step Code Requirements

10.1.1 Part 3 and Part 9 **buildings** and **structures** must be designed and **constructed** in compliance with the applicable step of the **energy step code**, as set out in the schedule below:

Building Type	Building permit application filed on or after September 1, 2018		
Buildings subject to Part 9 og	f the Building Code		
Townhomes and apartments	Step 3		
Single family, duplex and other dwelling units	Step 1		
Buildings subject to Part 3 of the Building Code			
Group C Residential occupancies greater than 6 stories or non-combustible construction (not including hotel and motel occupancies)	Step 3 OR Step 2 for buildings that implement a low carbon building energy system.		
Group C Residential occupancies 6 stories or less and combustible construction (not including hotel and motel occupancies)	Step 3		
Group D Business and personal services occupancies or Group E mercantile occupancies	Step 2		

10.1.2 For a Part 9 building or structure that is designed in compliance with the applicable step of the energy step code but where the constructed building or structure does not meet the performance requirements of the applicable step of the energy step code, after all reasonable mitigation measures are implemented to the satisfaction of the building inspector, the building inspector may issue an inspection notice for provisional occupancy, or final, of the building or structure if it is constructed in compliance with alternative energy efficiency performance or prescriptive requirements set out in the building code for Part 9 construction, as applicable.

#### 10.2 Requirement for Energy Advisor

- 10.2.1 With respect to a **building permit** for a **building** or **structure** that falls within the scope of Part 9 of the **building code**, the **owner** must provide, to the satisfaction of the **building inspector**, the all the materials and documentation required by the **energy step code**, prepared and signed by an **energy advisor**, and such other reports and materials as required by the **building inspector**.
- 10.2.2 The **energy advisor**, providing the required materials and documentation set out in the **energy step code**, must provide evidence to the **building inspector** that he or she is an energy advisor registered and in good standing with Natural Resources Canada in accordance with the EnerGuide Rating System Administrative Procedures and adheres to the technical standards and procedures of the ERS.

#### 10.2.3 Prior to:

- (a) the issuance of a **building permit**; and
- (b) the provisional occupancy of a building or structure,

in respect of which a **building inspector** has required the materials and documentation set out in the **energy step code**, the **owner** must submit written confirmation of insurance coverage of the **energy advisor** in the form specified by the **City**.

10.2.4 For certainty, and notwithstanding section 10.2.1 above, where a registered professional is required under section 5.13.1 of this bylaw, in respect of a building permit for a building or structure that falls within the scope of Part 3 or Part 9 of the building code, the professional design and field review shall include the materials and documentation required by applicable step of the energy step

code, and such other reports and materials as required by the building inspector.

2. Building Regulation Bylaw No. 7230, as amended, is further amended at Part Fifteen [Interpretation] by adding the following definitions in alphabetical order:

"APARTMENT

means apartment housing as defined in the zoning bylaw.

BUSINESS AND PERSONAL SERVICES OCCUPANCY means a business and personal services occupancy as defined in the **building code**.

COMBUSTIBLE CONSTRUCTION

means combustible construction as defined in the **building** code.

**DUPLEX** 

means two-unit housing as defined in the zoning bylaw.

**DWELLING UNIT** 

means a dwelling or dwelling unit as defined in the **building** code.

**ENERGY ADVISOR** 

means a person is registered as an energy advisor, and in good standing, with Natural Resources Canada, and who conducts EnerGuide home evaluations on behalf of service organizations licenced by Natural Resources Canada.

**ENERGY STEP CODE** 

means the requirements set out in Sections 10.2.3 and 9.36.6 of the **building code**, and includes Step 1, Step 2, Step 3, Step 4 and Step 5.

GROUP C RESIDENTIAL OCCUPANCY means a residential occupancy as defined in the **building** code.

GROUP D BUSINESS AND PERSONAL SERVICE OCCUPANCIES means business and personal services occupancies as defined in the **building code** 

**GROUP E** 

means a mercantile occupancy as defined in the building

# MERCANTILE OCCUPANCY

code.

#### LOW CARBON BUILDING ENERGY SYSTEM

means a **building**'s space heating, cooling and domestic hot water heating mechanical system that is supplied energy through:

- a) a connection to a **City** owned district energy utility system; or
- b) on-site energy supply equipment designed to meet a minimum 70% of the **building**'s annual heating, cooling and domestic hot water energy demand from a renewable energy source, approved by the **City**'s Director of Engineering. Applicable renewable energy source technologies include, but are not limited to, air and ground source heat pump systems, waste heat recovery systems, solar collectors, or other systems as approved by the **City**'s Director of Engineering. The **building**'s energy system must be designed and constructed such that it is ready to connect to a future **City** owned district energy utility system.

# NON-COMBUSTIBLE CONSTRUCTION

means non-combustible construction as defined in the building code.

#### **SINGLE FAMILY**

means single detached housing as defined in the zoning bylaw.

#### **TOWNHOUSE**

means town housing as defined in the zoning bylaw."

3. This Bylaw may be cited as "Building Regulation Bylaw No. 7230, Amendment Bylaw No. 9769".

FIRST READING	JUN 2 5 2018	CITY OF RICHMOND
SECOND READING	JUL 0 9 2018	APPROVED by
THIRD READING	JUL 0 9 2018	APPROVED by Manager or Solicitor
ADOPTED		- [Jb]
MAYOR	CORPORATE OFFICER	



# Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 9845 (Floor Area Exclusion for Additional Insulation and Green Building Features)

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 [Use and Terms Definitions] by adding the following definition in alphabetical order:

# "Green building system

#### means:

- a) equipment that converts, stores, or transfers energy from a renewable energy source. This includes equipment used to support solar collectors, small wind energy systems, air or ground source heat pump systems, waste heat recovery systems, and biomass systems; or
- b) equipment that stores and treats rainwater, grey water, or both."
- 2. Richmond Zoning Bylaw 8500, as amended, is further amended at Section 4.2 [Calculation of Density in All Zones] by inserting the following as new subsection 4.2.1 (c):
  - "c) exterior wall thickness in excess of 0.16 m, up to a maximum exclusion of 0.31 m, provided that the wall thickness is utilized for the provision of insulating materials."
- 3. Richmond Zoning Bylaw 8500, as amended, is further amended at Section 4.3 [Calculation of Density in Single Detached Housing, Agriculture and Two-Unit Housing Zones] by:
  - (i) deleting the words "item is" from section 4.3.3 and replacing them with the words "items are"; and
  - (ii) inserting the following as new subsections 4.3.3(b):
    - "b) up to a maximum of 2.35m<sup>2</sup> per **dwelling unit** for **floor area** occupied by those components of a **green building system** constructed or installed within the **principal building**."
- 4. Richmond Zoning Bylaw 8500, as amended, is further amended at Section 4.4 [Calculation of Density in Town Housing Zones] by inserting the following as new subsections 4.4.1(e):
  - "e) up to a maximum of 2.35m<sup>2</sup> per **dwelling unit** for **floor area** occupied by those components of a **green building system** constructed or installed within the **principal building**."

5. This Bylaw is cited as "Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 9845".

FIRST READING	JUN 2 5 2016	CITY OF RICHMOND
PUBLIC HEARING		APPROVED by
SECOND READING		APPROVED by Manager or Solicitor
THIRD READING		JA -
ADOPTED		<b></b>
MAYOR	CORPORATE OFFICER	



### Richmond Official Community Plan Bylaw No. 9000, Amendment Bylaw No. 9771 (Energy Step Code)

The Council of the City of Richmond enacts as follows:

1. Richmond Official Community Plan Bylaw 9000, as amended, is further amended at Schedule 1, Section 12.4 by deleting the "Overview" subsection and replacing it with the following:

#### "OVERVIEW:

The City has adopted greenhouse gas reduction targets of 33% below 2007 levels by 2020 and 80% by 2050. On July 26, 2010, Council endorsed the Corporate Sustainability Framework, Energy Strategic Program, which called for the development of a Community Energy and Emissions Plan (CEEP), and included a target "to reduce energy consumption in the Richmond community by at least 10% from 2007 levels by 2020". On January 27th, 2014, Council approved Richmond's CEEP.

The CEEP includes a range of strategies and actions to reduce emissions from Richmond's community's buildings, transportation, and waste sectors. The CEEP also identifies "Breakthrough Opportunities", which can drive the deeper emissions reductions needed to achieve the City's 2050 emissions reduction goal. These "Breakthroughs" include a wide-spread switch to zero emissions vehicles by the 2040s; all new buildings achieving zero carbon emissions by 2025; and deep energy upgrades to most of Richmond's existing building stock. Richmond cannot achieve these breakthroughs alone. All levels of government, the private sector, and members of Richmond's community will need to act together to realize these reductions.

The objectives and policies below focus on reducing energy use and emissions from buildings, while those relating to transportation and waste management are located in other sections of the Official Community Plan.

The City of Richmond is a leader in corporate energy management of its own facilities. The City has been recognized by BC Hydro as a Municipal Power Smart Leader (the highest recognition BC Hydro gives to organizations) several years in a row due to its outstanding efforts to incorporate new and alternative technologies into its energy system, and improve its corporate energy management program. The experience and knowledge which the City has gained through its energy

management initiatives informs its community-wide energy use and emissions reduction efforts.

Nearly two-thirds of energy consumed in Richmond occurs in commercial buildings and residences. The BC Energy Step Code was established in 2017 by the province of British Columbia; it is a standard that local governments can choose to reference that requires improved energy performance from new construction over and above what is required by the BC Building Code. There is a need to improve the performance of new buildings using tools such as the BC Energy Step Code, as well as speed the adoption of energy upgrades and renovations to existing buildings. Doing so will not only help the City achieve its emissions goals, but can also improve indoor environmental quality, health, productivity, and foster economic opportunity and jobs.".

2. Richmond Official Community Plan Bylaw 9000, as amended, is further amended at Schedule 1, Section 12.4 by deleting "Objective 3" and replacing it with the following:

#### "OBJECTIVE 3:

Improve the energy efficiency and greenhouse gas emissions performance of new construction.

#### **POLICIES:**

- a) incrementally increase energy efficiency and greenhouse gas emissions performance requirements for new construction over time.
- b) use the BC Energy Step Code, district energy utility connection, and other tools, to demonstrate Richmond's leadership on construction of energy-efficient, low-carbon buildings. The BC Energy Step Code is anticipated to be implemented according to the schedule in the table below:

	<b>Building Permit Application</b>					
Building Type	Estimated Timetable for F Consideration					
Smaller Part 9 Residential	September 1, 2018	Jan 2020	Jan 2022	Jan 2025		
Townhomes and apartments	Step 3	Same as 2018	Step 4	Step 4 or Step 5		
Single family, duplex and other residential	Step 1	Step 3	Step 3 or Step 4	Step 4 or Step 5		
Larger Part 3 developments						
Residential Concrete Towers	Step 3 or Step 2 for buildings with low carbon energy system	Same as 2018	Step 3	Step 4		
Residential Woodframe Low/Mid Rise	Step 3	Same as 2018	Step 4	Step 4		
Office & Retail Buildings	· Step 2	Same as 2018	Step 3	Step 3		

- c) all new construction is encouraged to achieve zero GHG emissions from operations.
- d) the City will explore strategies to enable development of energy efficient, zero GHG new buildings, including low carbon district energy utility system development.".
- 3. Richmond Official Community Plan Bylaw 9000, as amended, is further amended at Schedule 1, by deleting Section 14.2.10.A [Energy Efficiency] and replacing it with the following:

#### "14.2.10.A Low Carbon, Energy Efficient Buildings

- a) As required in the Building Regulation Bylaw, applicable new developments will be designed and constructed to meet the BC Energy Step Code to support more energy efficient development.
  - Compliance with a given Step of the BC Energy Step Code shall not compromise any of the other Development Permit guidelines contained in Schedule 1 or Schedule 2 of the OCP.
  - In the event that a new building must take remedial actions to achieve compliance with the applicable Step of the BC Energy Step Code and therefore change building systems or components included in the original design of the building, these changes shall not compromise the intent of other development permit guidelines applicable to the development.
- b) New construction encouraged to be designed to achieve low or zero greenhouse gas emissions in their operations.".
- 4. This Bylaw is cited as "Richmond Official Community Plan Bylaw No. 9000, Amendment Bylaw No. 9771".

FIRST READING	JUN 2 5 2018	CITY OF RICHMOND
PUBLIC HEARING		APPROVED for content by originating
SECOND READING		Division
THIRD READING		APPROVED for legality by Solicitor
ADOPTED		At .
MAYOR	CORPORATE OFFICER	



## Richmond Official Community Plan Bylaw No. 7100, Amendment Bylaw No. 9770 (Energy Step Code)

The Council of the City of Richmond enacts as follows:

1. Richmond Official Community Plan Bylaw 7100, as amended, is further amended at Schedule 2.10 (City Centre Area Plan), Section 2.2.3(a) "Office Friendly Checklist" by deleting item "7. Green Building Design" and replacing it with the following:

#### "7. Green Building Design

BC Energy Step Code required typically.".

- 2. Richmond Official Community Plan Bylaw 7100, as amended, is further amended at Schedule 2.10, Section 2.5 (Ecology & Adaptability) by:
  - (a) deleting the final paragraph in the "VISION MANDATE" section and replacing it with the following:
    - "The City has established sustainability as a corporate priority. As well, it has established a Sustainability Office to lead the City in establishing policies to address the many complex issues. These issues include improved eco-regeneration; connectivity; improved ecological services and functions; green, energy efficient buildings and built environment; a triple bottom line; a multi-objective development approach and adapting to climate change. Policies and actions regarding these issues continue to be developed, and the City, developers and community stakeholders are encouraged to address these issues innovatively.";
  - (b) deleting the policies listed in section 2.5.2 [Greening the Built Environment] of the "POLICIES" table, and replacing them with the following:

#### "2.5.2 Greening the Built Environment

- a) Reduce per Capita Resource Demands & Strengthen Ecological Base
  - Optimize the use of existing infrastructure through compact land use and transit-oriented development policies.
  - Private developments:
    - as specified in the *Building Regulation Bylaw*, new developments are subject to the BC Energy Step Code;

- new developments are encouraged to achieve zero GHG emissions from operations;
- for new developments to which the BC Energy Step Code applies to less than 50% of gross floor area, LEED Silver will be required for all rezonings of private developments over 2,000 m<sup>2</sup>;
- new developments are subject to commitment to connect to the district energy system or have on-site low carbon energy system.
- City of Richmond development:
  - City facilities will be developed and operated in accordance with the City's High Performance Building policy;
  - demand-side management and an *Eco-Plus*+ (see below) approach will be adopted for all City servicing (e.g., park management, transportation planning, engineering servicing.).

#### b) Reduce Greenhouse Gas Emissions

- Transportation need and automobile reliance will be reduced through compact land use and transit-orientated development practices.
- Corporate and community-wide greenhouse gas emissions reduction targets and strategies are included in the City's 2014 Community Energy and Emissions Plan.
- Economic policies which support the transition to a low carbon economy continue to be explored and implemented.";
- (c) deleting the "Proposed Strategy" subsection in section 2.5.2 [Greening the Built Environment" and replacing it with the following:

#### "Strategy

To:

- encourage zero carbon new buildings, a "breakthrough" strategy identified in the Community Energy and Emissions Plan as necessary to achieving the City's greenhouse gas emissions reduction targets;
- require adherence to *High Performance building standards* (BC Energy Step Code, LEED, Passive House, or other equivalent) for all City facilities and larger developments;
- continue advancement of district energy systems;
- encourage an "*Eco-Plus*+" approach aimed at maximizing environmental returns during development."; and
- (d) deleting the "High Performance Building Standards About LEED" subsection in section 2.5.2 and replacing it with the following:

#### "High Performance Building Standards

The BC Energy Step Code is a consistent, provincially-endorsed tool that BC local governments can use to support healthier, comfortable, energy efficient, lower emissions buildings. It is the product of a multi-year collaboration between local governments, industry stakeholders, the provincial government, and utilities.

Projects not covered by the BC Energy Step Code, are expected to adhere to the Leadership in Energy and Environmental Design (LEED) rating system. LEED was developed by the US Green Building Council as a means to evaluate the degree to which buildings meet high performance standards. Buildings are evaluated based on factors pertaining to site selection, water and energy efficiency, material use and indoor air quality. To achieve a specific level of certification, buildings must meet certain requirements (prerequisites) and gain a certain number of credits."

3. This Bylaw is cited as "Richmond Official Community Plan Bylaw No. 7100, Amendment Bylaw No. 9770."

FIRST READING	JUN 2 5 2018	CITY OF RICHMOND
PUBLIC HEARING		APPROVED for content by originating
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