
8570 RIVERGRASS DRIVE (COMPLETE APPLICATION)
DP-2016-00090 - CD-1

AWM/VK/LEB/MS/LM

DEVELOPMENT PERMIT STAFF COMMITTEE MEMBERS

Present:

J. Greer (Chair), Development Services
C. Joseph, Engineering Services
D. Naundorf, Housing Policy and Projects

Also Present:

A. Moorey, Urban Design & Development Planning
N. Standeven, Urban Design & Development Planning
V. Kopy, Development Services
M. So, Development Services

APPLICANT:

Wesgroup Properties
910-1055 Dunsmuir St
PO Box 49287 Stn Bental Centre
Vancouver BC V7X 1L3

PROPERTY OWNER:

EFL Developments Ltd.
910-1055 Dunsmuir St
Po Box 49287 Stn Bental Centre
Vancouver BC V7X 1L3

EXECUTIVE SUMMARY

- **Proposal:** To develop this site with a multiple dwelling development containing two 16-storey towers, one 5-storey and one 6-storey mid-rise building containing a total of 372 dwelling units over two levels of underground parking, accessed from the new road, Rivergrass Drive.

See Appendix A Standard Conditions

Appendix B Standard Notes and Conditions of Development Permit

Appendix C Plans and Elevations

Appendix D Landscape Plans

Appendix E Applicant's Design Rationale

● **Issues:**

1. Tower locations
2. Pedestrian connection between Rivergrass Drive and Avalon Park
3. Density transfer
4. Road Improvements

- **Urban Design Panel: Support**
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DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATION: APPROVE

THAT the Board APPROVE Development Application No. DP-2016-00090 submitted, the plans and information forming a part thereof, thereby permitting the development of a multiple dwelling development containing two 16-storey towers, one 5-storey and one 6-storey mid-rise building containing a total of 372 dwelling units over two levels of underground parking, subject to Council's approval of the Form of Development and the following conditions:

1.0 Prior to the issuance of the development permit, revised drawings and information shall be submitted to the satisfaction of the Director of Planning, clearly indicating:

- 1.1 Design development to emphasize the slender vertical proportions of the assembled slab massing of the north tower elevation to match the success of the south elevation;

Note to Applicant: Consider increasing the extent of sliding in order to distinguish the building faces along the north elevation to equal that of the south elevation.

- 1.2 design development to enhance solar penetration and reduce shadow impact on internal courtyard space.

Note to Applicant: Consider similar articulation of the southwest tower 'crown' to mirror that of the southeast tower. Introduction of a similar shoulder setback on the east building face would reduce shadowing on the courtyard.

- 1.3 design development to enhance the legibility of the east entry to the pedestrian mews that crosses the site east/west; and

Note to Applicant: Increase the width of entry to better equal that on the west side

- 1.4 design development to enhance the pedestrian experience along the 4.92 ft. (1.5 m) walkway adjacent to the Avalon Park water feature.

- i. introduce marker or gate element to signify entry at the head of the walkway north/south;
- ii. introduce periodic expanded open spaces to moderate pedestrian experience and provide respite over the 492 ft. (150 m) length of the walkway. Integrate bench seating to allow pause to view the water feature and planting while maintaining a clear unobstructed 4.92 ft. (1.5 m) wide pathway; and
- iii. ensure integrated provision of low-level ambient and intermittent high level security lighting along walkway.

- 2.0 That the conditions set out in Appendix A be met prior to the issuance of the Development Permit.

- 3.0 That the Notes to Applicant and Conditions of the Development Permit set out in Appendix B be approved by the Board.

• Technical Analysis:

Technical Analysis										
	Technical review for:					8570 Rivergrass		DP-2016-00090		
	Permitted:					Proposed				
Site Size ¹						Irregular				
Site Area ¹		96,368.00			ft ²	96,368.00 ft ²				
Use						residential				
FSR ²	3.56					3.59				
Floor Area ²	Park Precinct Area:		673,929.00		ft ²	Related parcel 43 total:		237,622.00		ft ²
	Parcel 43 Specific Area:		342,680.30		ft ²	Affordable Housing rqmt:		93,433.80		ft ²
	sub total:		331,248.70		ft ²	Parcel 43 total:		331,055.80		ft ²
	*carried over floor area:		11,624.50			Parcel 20/21 total:		346,116.00		ft ²
	Parce 20/21 specific area:		342,873.20			Parcel 20, 21 & 43 run total:		677,171.80		ft ²
	*Note: 11,624.5 ft ² carried over from Parcel 43					Precinct Overage:		3,242.80		ft ²
	Max open balcony (8%)		27,689.28		ft ²	Open balcony (6.7%)		23,208.00		ft ²
	Max. Encl. Balcony		n/a		ft ²	Encl. Balcony		-		ft ²
	Max. Amenity Area		32,292.80		ft ²	Amenity		8,979.00		ft ²
Height ³	Parcel 20		173.88		ft	Height For Towers		165.07		ft
	Parcel 21		114.83		ft	Height For 6 storey		66.23		ft
	# of Storeys (parcel 20)		16					16		
	# of Storeys (parcel 21)		10					6		
Parking ⁴	Residential:					Residential:				
	Min.		465			Standard		407		
	Max.		570			Small		81		
	Disability		14			Disability		22		
	Max. Small car (25%)		116			Visitor:				
	Visitor:					Standard		?		
	Min.		37			Small		0		
	Max.		74			Disability		0		
	Car Share: Vehicles:		1			Car Share: vehicles:		0		
	Required spaces:		2			Spaces Proposed:		0		
						Total:		510		
Loading	Class	A	B	C			A	B	C	
	Residential		2				0	2	0	
	Total		2					2		
Bicycle ⁵	class	A			B	Class	A			B
		min.	Max.	Min.			min.	Max.	Min.	
		H	V	L			H	V	L	
	Residential	233	140	93	6	Residential	255	124	94	12
	Total	465			6	Total	473			12
Unit Type ⁶						parcel	20	21	tot.	%
						1 bedroom	78	36	114	31%
						2 bedroom	121	56	177	48%
						3 bedroom	40	41	81	22%
						Total	239	133	372	100%

Notes:

¹ **Note on Site Size and Site Area:** This irregular site has two of the three parcels in the East Fraser Lands Park Precinct; Parcel 20 and 21 are defined by Marine Way to the north, East Kent Avenue to the south and proposed roads to the west (Sawmill Crescent and Rivergrass Drive) with Avalon Park proposed to the east. Standard condition A.2.1 requires subdivision and a road dedication for this site.

² **Note on FSR and Floor Area:** The combined floor area allowed for Parcels 20, 21 and 43 is 673,929 sq. ft. (62,608 m²). The maximum permitted for Parcel 20 and 21 is 342,873 sq. ft. (31,852.9 m²) which includes 11,624.5 sq. ft. (1,080 m²) carried over from Parcel 43. The running total for Parcel 20, 21 and 43 including the affordable housing reserve is exceeding the allowed FSR by 3,242.8 sq. ft. (301.3 m²). The proposed floor area carried over is 15,327.0 sq. ft. (1,423.9 m²) which is not accounted for at this point. Guest suites shall be considered in the CD-1 By-law as permitted exclusions under amenity. Also, the towers each have a communal covered deck located on the 9th and 11th storey and these will be defined as amenity area. An area of 1,032 sq. ft. (95.9 m²) has been added to amenity area. Standard Conditions A.1.2 and A.1.3 seek compliance.

³ **Note on Height:** Building grades have not been submitted at this point; however, the building height, taken from existing surveyed grades, is below the required for both the towers and the low-rise buildings. Standard Condition A.1.11 requires submission of the Official Building Grades and Standard Condition A.1.12 requires correction in building height calculation.

⁴ **Note on Parking:** Parking is within the minimum and maximum requirements for this site except that two (2) car share spaces are required (See Standard Conditions A.1.8 and A.2.16). Calculations provided will require to be revised as unit counts are not correct in the submitted drawings. Standard Condition A.1.6 requires a 21.67 ft. (6.61 m) maneuvering aisle or wider parking stalls.

⁵ **Note on Bicycles:** There are inconsistencies with the bicycle space count. Lockers should be better illustrated on the plans as the drawing scale is small. The required bicycle count is required to be updated with the updated unit count. There are multiple rooms that propose more than 40 spaces per room. Standard Condition A.1.10 seeks compliance with Section 6.3 of the Parking By-law.

⁶ **Note on Unit Type:** At least 88 dwelling units are to be designed for affordable housing dwelling units to meet the "High Density Housing for Families with Children Guidelines". 35% of the units must also be suitable for family housing containing at least 2 bedrooms. Currently they are proposing 258 units out of 372 with more than 2 bedrooms (70%). Standard Conditions A.1.4 and A.1.5 request correction and clarification of unit types and counts.

• **Legal Description** (subdivision pending)

Lot: 31
District Lot: 331
Plan: EPP31354

• **History of Application:**

16 05 17 Complete DE submitted
16 07 13 Urban Design Panel
16 07 27 Development Permit Staff Committee

Note: This is the current legal description, subject to change after subdivision to create the development parcel and road dedication.

• **Site:** The site is known as Parcel 20/21 within the Area 1 ‘Park Precinct’ of the East Fraser Lands (EFL), now commonly known as the ‘River District’. The River District is located in the SE corner of Vancouver between Kerr St. and Boundary Road, Marine Way and the Fraser River. North of the River District and Marine Way, the topography slopes upward to several existing townhouse developments, Champlain Heights, and Everett Crowley Park. There are over 130 acres (52.6 ha) of land, and one mile of riverfront associated with the River District. Ultimately, there will be over 25 acres (10.1 ha) of park, over 7 million sq. ft. (650,300 m²) of residential development, 250,000 sq. ft. (23,225 m²) of retail, a community centre, a school, and several childcare centres. There are three residential neighbourhoods, shaped by two green corridors that extend back from the continuous public shoreline and park. Parcel 20/21 is adjacent to one of these corridors, with a north/south watercourse and the proposed Avalon Park flanking the east property line. The future Avalon Park Corridor will provide a visual and physical extension of green from the river to the uplands of Champlain Heights.

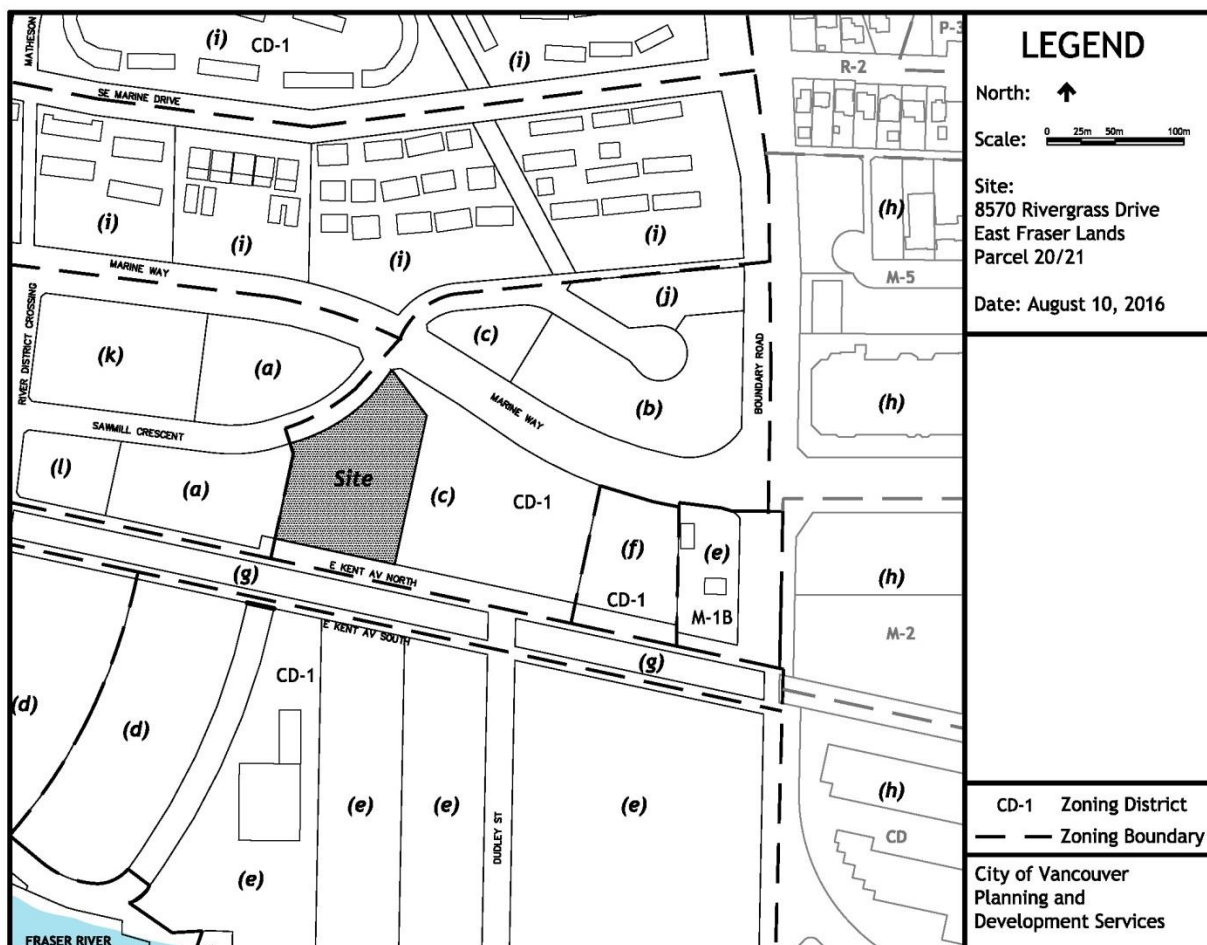
Development Permits for significant developments (Parcels 15, 16.1, 17, and 18.1) that will form the heart of the mixed use central neighbourhood were approved by the Development Permit Board in January 2015. Parcel 20/21 is located to the east of these ‘Town Square’ projects, on the south side of Marine Way. The site is intended to perform a transition in scale from the greater height, higher density form of development Town Square projects to Avalon Park. The ODP Design Guidelines describes the urban design role of this parcel as follows:

“High exposure of all frontages along Sawmill Crescent, Avalon Park, Kent Avenue and Rivergrass Drive calls for a dignified residential character appropriate to this very public position at east entry to the Town Square precinct.”

The site acts as a gateway for entries to the River District off of Marine Way along Sawmill Crescent to the north, and from the eastern approach to the site from Kent Avenue North. The site is bound by Marine Way to the north, the future Avalon Park to the east, Kent Avenue North to the south and Sawmill Crescent and Rivergrass Drive to the west.

• **Context:** Significant adjacent development includes:

- (a) Future mixed-use developments in the Town Square precinct
- (b) 3699 Marine Way (recently approved rental housing)
- (c) Future park space including a lit synthetic turf field
- (d) Future mixed-use development in the Waterfront precinct
- (e) Future residential development and park identified in the East Fraser Lands ODP
- (f) Potential school site
- (g) CP Rail Line
- (h) Industrial development in Burnaby
- (i) Existing town house developments
- (j) Future affordable housing site
- (k) 8538 River District Crossing (recently approved mixed use building)
- (l) 8580 River District Crossing (recently approved mixed use building)



- **Background:**

Area One was rezoned in 2008, and was intended to be the first phase of the development. However, the economic conditions of 2008 did not support the construction of higher density mixed use developments envisioned for this area. Subsequently, Area Two or the western neighbourhood was rezoned in 2010 to enable lower density, and in particular, wood-frame developments to proceed.

In 2014, Wesgroup / Park Lane initiated development of the Area One mixed use central neighbourhood with the four projects and associated public realm which formed the Town Square. During the same time, Wesgroup / Park Lane proposed the development on Parcel 43 (3699 Marine Way). These five developments have since been approved and are currently under construction.

Although the Official Development Plan had envisioned the next phase of development to occur south of the Town Square leading to the Fraser River, Wesgroup / Park Lane requested the development east of the Town Square. The intent is to build out the area connecting the Town Square to Parcel 43 thereby bringing a diversity of construction into the area. As well, it is anticipated that further planning and design south of the Town Square adjacent to the Fraser River is needed to respond to current issues.

The guidelines suggest a 16-storey tower located on the southwestern corner of the Parcel 20 /21 site, with another 10-storey tower located mid-site facing the park. Development of the road design and prior subdivision to create Sawmill Crescent made it difficult to locate the tower as proposed in the Guidelines. The approved alignment of Sawmill Crescent created a 'pinched' condition, narrowing the desired courtyard against the 10-storey tower located mid-site. The response was to shift the eastern tower further south, and pair it with the southwest tower. The benefits of relocating the tower are:

- expands the open area of an internal courtyard;
- improves livability of the second tower by locating it further away from the acoustic impact of traffic on Marine Way;
- improves the gateway character of the south-eastern corner of site and approach to River District from East Kent Ave North; and
- provides a more balanced massing facing Avalon Park, with the tower now in the southeastern corner of the site balanced by a longer, more horizontal building form along the park edge.

The EFL CD-1 allows for the re-allotment of density between development sites. In addition to the impact of the reduced site boundaries that resulted from changes to the road alignment of Sawmill Crescent, 11,624.5 sq. ft. (1,080 m²) of additional density from Parcel 43 has been allotted to this site. With the allotted density and reduced site area, the subsequent redistribution of density resulted in the following:

- an increase in the height of the east mid-rise building from 5-storeys to 6-storeys; and
- an increase of the east tower from 10-storeys to 16/14-storeys.

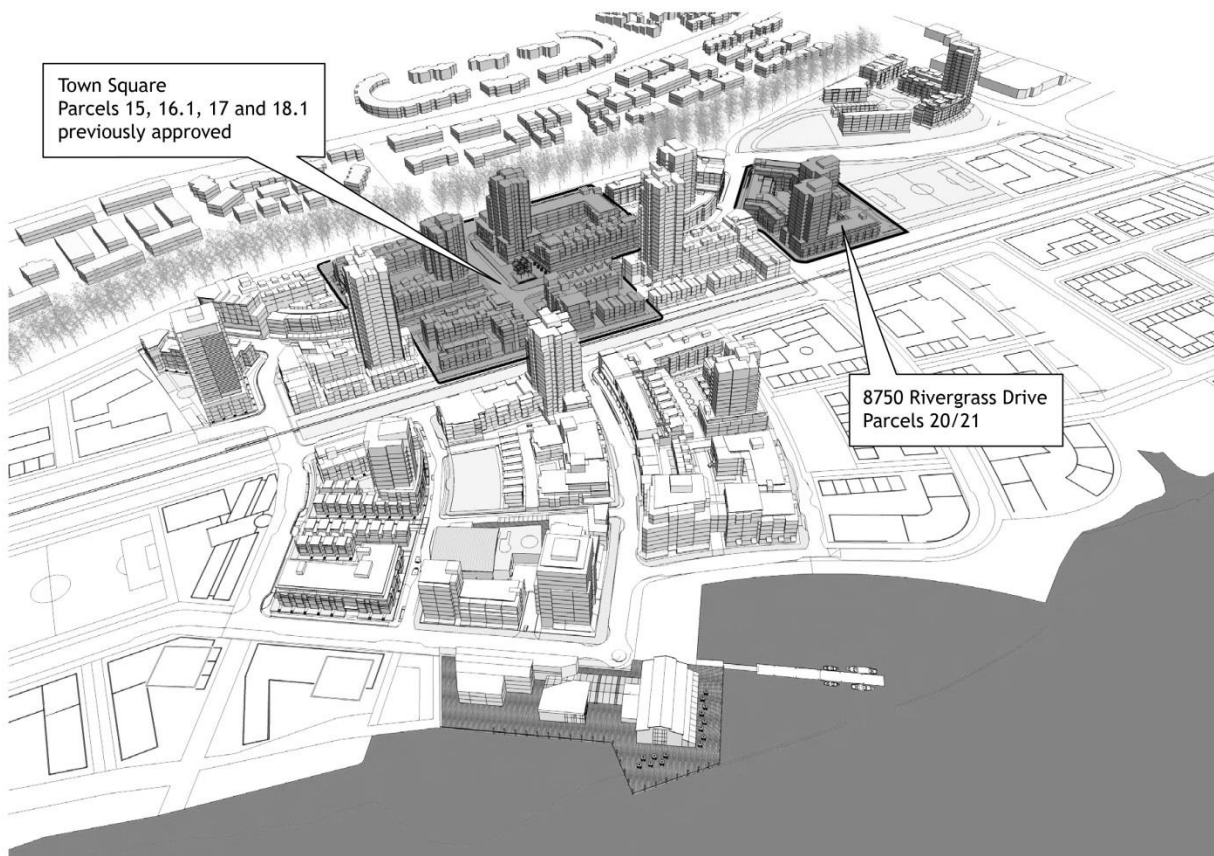


Figure 1: Illustrative Massing of Area One

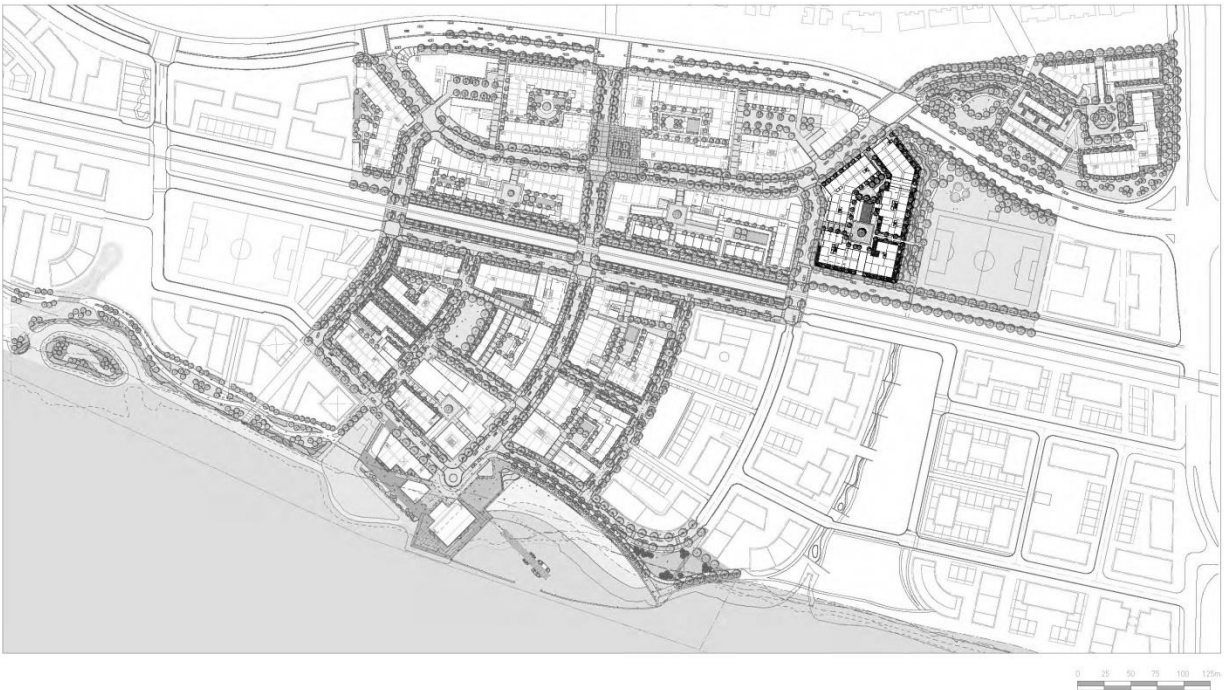


Figure2: Illustrative Public Realm Plan Area One

- **Applicable By-laws and Guidelines:**

CD-1 (565) East Fraser Lands Area One, Park Precinct

Uses: Multiple dwelling is a permitted use in the CD-1 Zone.

East Fraser Lands CD-1 Guidelines for Area One

1. Guidelines call for “high exposure on all frontages” speaking directly to Sawmill Crescent, Avalon Park, East Kent Avenue North and Rivergrass Drive, as well as a “dignified residential character”, appropriate to this very public position at the east entry to the Town Square precinct.
2. Guidelines outline the following:
 - Townhouse forms must be “at grade, giving strong legibility and character to the street wall on all sides of this block”;
 - Frontage on Sawmill Crescent and Rivergrass Drive is “more urban in character with modest setbacks from the property line, a small planting area and steps up to a recessed entry”;
 - Deeper setbacks create a more relaxed, residential character at the East Kent Avenue North Greenway; and
 - Additional density in frontage on the park/play field creates a higher 5-storey base for the small, 10-storey tower centered on this facade to create a “visual anchor” for the expansive open space.

3. A 16-storey tower at the SW corner of Parcel 21 marks the west end of the Park Precinct and the route to the Crescent along Road “D,” corresponding to tower at Parcel 13.
4. “Large, mid-block garden court offers generous green overlooks for surrounding buildings”.
5. “Generous garden terraces for ground floor units face onto the park to the east of the site offering animation and eyes on adjacent public and private walkways; a watercourse between the walks serves as both a visual amenity for residents and a buffer between public park and semi-private terraces.”
6. “An important public view to Mount Baker from Everett Crowley Park will be maintained across the development site.”
7. “Emergency access to the eastern tower provided by hard surface auto court.”

Section A - Public Realm Plan

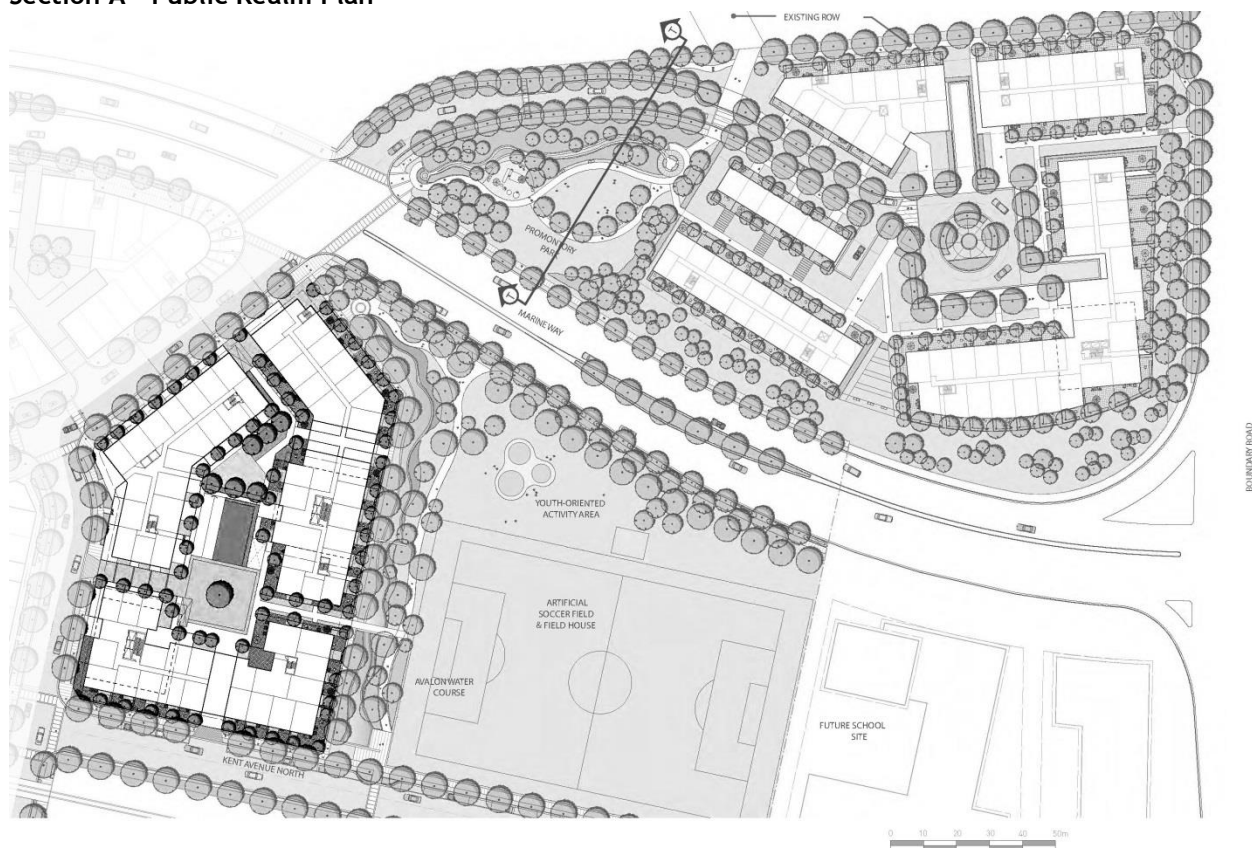
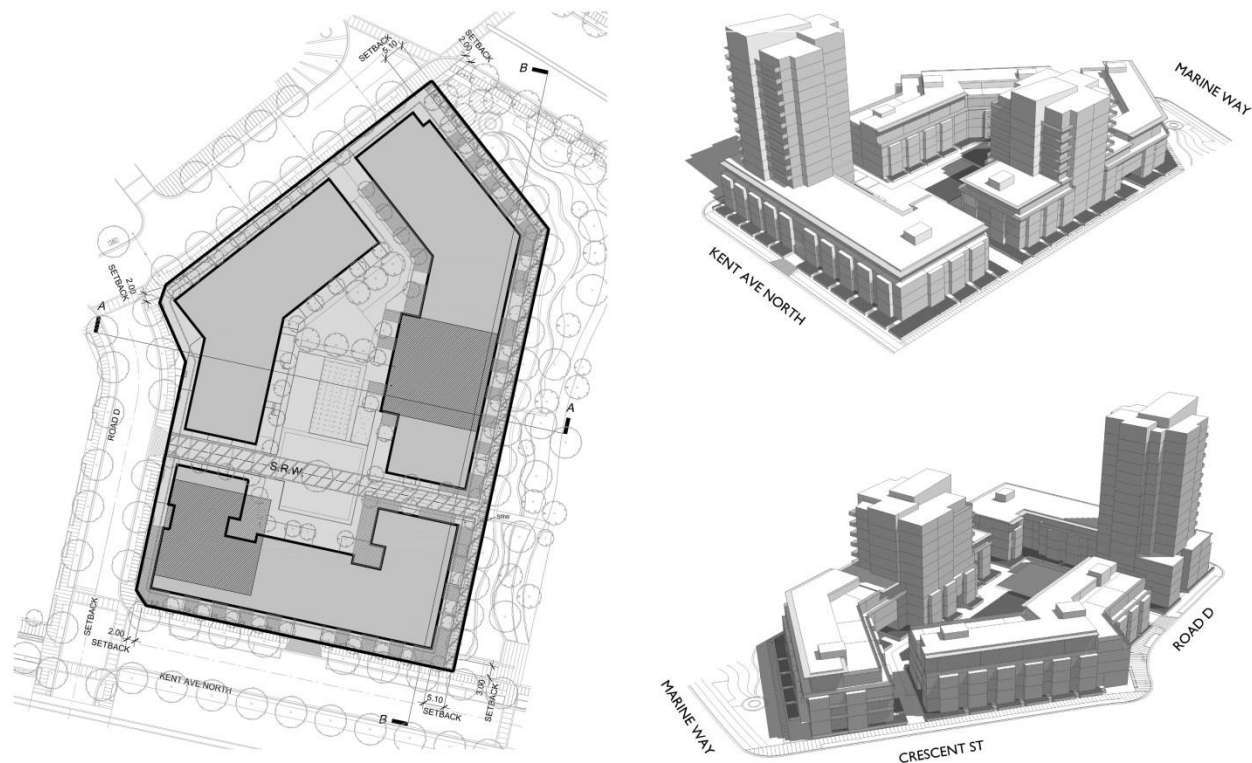


Figure 3: Illustrative Park Precinct Concept Plan from Design Guidelines



The Guidelines contain an illustrative form of development for each parcel that demonstrates form and density. The guidelines state that the 3D illustrative built form is intended as a guide and modification will result from further design development during the development permit process. The guideline allocation of floor space for Parcel 20/21 is 331,248 sq. ft. (30,773 m²) of residential.

Parcel 20/21 Urban Design Role:

- High exposure of all frontages - Crescent, Avalon Park, Kent and Road 'D' (Rivergrass Drive) - calls for a dignified residential character appropriate to this very public position at east entry to the Town Square precinct.

- townhouse forms at grade giving strong character and legibility to the street wall on all sides of this block; frontage on Crescent and Road 'D' is more urban in character with modest setbacks from the property line; a small planting area and steps up to a recessed entry offer additional separation from the street on Road 'D', deeper setbacks create a more relaxed, residential character at Kent Ave Greenway; additional density in frontage on the park/play field creates a higher 5 storey base for the small 10 storey tower centered in this façade - a visual anchor for the expansive open space;
- a 16 storey tower at the SW corner of Parcel 21 marks the west end of the Park Precinct and the route to the Crescent along Road 'D', corresponding to tower at Parcel 13;
- large mid-block garden court offers generous green overlooks for surrounding buildings; welcome refuge from Marine Way activity and noise; and good potential for garden plots; pedestrian/vehicular access between Parcels 20 and 21 creates a direct connection to the play

field across the parcel with a central, hard-surfaced court allowing vehicular access to underground parking ramp for Parcel 20 and loading for Parcel 21; underground access for Parcel 21 located centrally in East Kent Avenue North frontage - two storey trough opening offers views to mid-block garden. Public Right-of-Way (ROW) to maintain through block connection from Road D to Avalon Park North;

- generous garden terraces for ground floor units face onto the park to the east of the site offering animation and eyes on adjacent public and private walkways; a watercourse between the walks serves both as visual amenity for residents and buffer between public park and semi-private terraces;
- an important public view to Mount Baker from Everett Crowley Park will be maintained across the development site. Refer to maximum elevations indicated on Ground level plan;
- emergency access to the eastern tower provided by hard-surfaced auto court; and
- the 3D illustrative built form is intended as a guide, and modification will result from further design development during the development permit process. Refer to the rezoning report for design development conditions.

Section C: Character and Expression

This section of the guidelines sets the direction for the architecture and landscape of the development parcels in EFL.

Section 1.0 - Historical Character sets the historical context of EFL. The historic aspects of the White Pine Mill, industrial installations and structures, and elements of the working river provide references for developing memorable architectural character for EFL. The guidelines direct that building design draw from these references and reflect them with a fresh contemporary west coast expression.

Section 2.0 - References the green building approach and compliance strategy for Area One, which includes targeting performance equivalent to LEED gold or Built Green Gold depending on building construction type.

Section 3.0 - Architecture begins with principles for Architectural Design, and then provides guidelines for the various building typologies in Area One. Guidelines for multi-family residential buildings emphasize ground-orientation where appropriate, articulation of building frontages to mitigate scale and provide visual interest, and setbacks at upper floors to mitigate the scale of the streetwall. Interesting roof shapes are encouraged to enrich the overall texture and visual amenity of the development.

Transparency and legibility of interior public spaces such as lobbies and amenity rooms is emphasized, providing visual connections between these spaces and the exterior. Reference is made to the simple, strong sculpting and clean expression of elements associated with northwest modernist design, and to the use of deep overhangs, extensive balconies, wall planes and selected areas of glazing to balance sustainable design and access to daylight and views. Upper level terraces and sculpting is encouraged to create architectural interest and contribute to skyline.

Guidance is provided regarding a palette of materials and elements that capture industrial, contemporary west coast, and river in character and expression.

The following are the 10 Principles for Architectural Design:

1. Rich architectural diversity within a cohesive urban fabric.
2. An unique architecture that captures the history of the site.
3. A contemporary architecture with a high degree of livability and acknowledgement of place.
4. A legible sustainable architecture that addresses the social as well as the environmental aspects of building design.

5. An expressive and permeable architecture that enhances the legibility of the urban structure and facilitates connectivity of retail, residential and community facilities.
6. A distinctive character for each of the three precincts in Area 1.
7. An architecture that enhances the pedestrian experience and supports the walkability of the community.
8. Landscape treatments that give individual parcels their own identity while integrating them with the framework of the public realm.
9. An approach to lighting design that creates nighttime legibility to reinforce the distinctive character of precincts, public spaces and parcels and places priority on pedestrian comfort.
10. Integration of site-wide ecological initiatives.

With respect to landscape design, emphasis is placed on the public/private interface of residential frontages along the wide variety of street types in Area One, including direction regarding privacy and neighbourliness, usable outdoor space, changes in grade and visual connections. Further guidelines address the usability, visual enjoyment, and contribution to sustainability goals of common garden courts and roof gardens.

Response to Urban Design and Landscape Rezoning Conditions of Approval:

Uses: The proposed multi-family residential use and amenity space are consistent with the CD-1 Bylaw.

Conditions of Use: The proposal complies with the requirements for family oriented units with 81 three bed and 177 two bed units for a total of 70 % of units. Amenities and children's play areas proposed are consistent with the High Density Housing for Families with Children Guidelines.

Density: The permitted total floor area for the Park Precinct consists of the recently approved rental residential building at 3699 Marine Way (Parcel 43), the future affordable housing site on Parcel 43A and this project site. Within the Policy Guidelines, Parcel 43 was originally envisioned to contain an 18 storey tower and Parcel 43A would be allotted a minimum of 93,433.8 sq. ft. (8,680 m²). Despite the original intent, 3699 Marine Way was approved for a 6 storey building which left 11,624.50 sq. ft. (1,080 m²) to be utilized by the remaining Park Precinct sites.

Staff notes that flexibility is built into the guidelines to allow some reallocation of floor space between parcels, provided the intent of the guidelines is met. Staff recommends support for the additional remaining floor area afforded to the proposed development on Parcel 20/21 given the effective distribution of density and the resulting high performing form of development.

Building Heights: The proposed building heights and number of storeys generally comply with the CD-1 By-law. With the additional density re-allotted to Parcel 20/21, the anticipated building heights vary from the illustrative form of development outlined in the guidelines by the following;

- the mid-rise building located in the northwest corner of the site increases from 5 to 6-storeys
- the tower located in the southeast corner increases from 10 to 16/14-storeys

Measures taken to shape the increased massing moderate any negative impacts. A substantial 5-story shoulder setback is introduced over the full length of the east mid-rise, flanking the park. This shoulder aspect is reinforced by expansive Level 6 setbacks to accommodate roof decks at the north/south building ends. These gestures assist in transitioning height. The southeast tower (increased from 10-storeys illustrated in the guidelines) is reduced from 16 to 14-storeys to create a pronounced east facing shoulder setback. This sculpting of the tower crown moderates shadow impact on the park.

Public Realm:

The Guidelines recommend a “Large, mid-block garden court offering generous green overlooks for surrounding buildings”. Conflicting programmatic need for a hardscaped court to accommodate circulation for cars, firefighter access, parkade entry ramps, and loading bays could result a space that minimizes the potential for landscaping and creates ground level that front onto a vehicular court. The proposed development elevates the courtyard above the ground level, creating a more usable outdoor space for residents above the service-oriented ground level. In this way, vehicular parking is covered and separated from the large, usable outdoor space above. To unify the entire parcel, the elevated courtyard spans an east/west pedestrian mews with two bridges to create a continuous outdoor space at the 2nd floor level. The pedestrian mews at grade serves a connectivity function providing public access across the site between Rivergrass Drive and Avalon Park to the east. These bridge elements frame an expansive opening in the courtyard that allows solar penetration to the pedestrian mews below. Generous landscaping in the courtyard above and along the pedestrian mews visually draws the park beyond onto the site creating a transition between the more urban Town Center to the west, and the Avalon Park to the east. The benefits of this strategy are clear:

- improved solar access to the courtyard and refuge for residents from vehicular activity (see Recommended Condition 1.2);
- enhanced livability of townhouse units at grade oriented outwards, fronting adjacent streets and park instead of frontage onto the parkade entry or a hardscaped vehicle court (see Recommended Condition 1.3); and
- generous garden terraces for ground floor units face onto the park to the east of the site offering animation and eyes on adjacent public and private walkways. The adjacent watercourse serves both as a visual amenity for residents and buffer between the park and semi-private terraces (see Recommended Condition 1.4).

An important public view to Mount Baker from Everett Crowley Park is maintained across the development site. Despite the increased height as a consequence of the re-allotment of density from Parcel 43, all buildings are beneath the maximum height established for the site. Moreover, by relocating the east tower to the southeast corner of the site, it is clear of the Everett Crowley Park - Mount Baker View Cone.

Built Form and Architectural Expression:

The proposed development is comprised of four buildings. Two mid-rise buildings define the northwest/east end of the site. A 5-storey building presents frontage along Sawmill Crescent to the west, while a 6-storey building flanks Avalon Park to the east. Paired towers complete the configuration along East Kent Avenue North to the south. A 16-storey tower is located in the southeast corner of the site at Rivergrass Drive and East Kent Avenue North. In the southeast corner of the site is another 16-storey tower with a pronounced 14-storey shoulder against Avalon Park. This sculpting of the tower crown moderates the shadow impact on the park. While there is limited shadowing on the park in the late afternoon it is confined to the swale that accommodates the water-feature. The playing field east of the water course remains shadow free throughout the day. The proposed towers assume an elongated slab form oriented on a north/south axis to reduce the impact of mid-day shadows on a proposed courtyard between. In addition, the towers are staggered to reduce the possible monolithic appearance of a simply paired, symmetrical configuration. Further articulation of each tower results a series of three lesser slab forms, arranged in shifted juxtaposition to emphasize slender vertical proportions and enhance visual interest (see Recommended Condition 1.1). A framework of balconies and planters characterize the outside west and east elevations. This framework operates over the entire building face, creating a large grid element that helps to reinforce the simple building volume. At the same time, the frame creates an armature that gathers balconies, double-height balconies, and planters that will provide greenery over the face of the towers.

The inside faces of the towers are much quieter. Balconies on the inside face of the towers are minimized to preserve the clarity of space between each. Large-scale, 3-storey voids located mid-way up the inside face of each tower create 'vertical courtyards'. Replete with landscaping and feature trees these spaces provide common access outdoor space for residents. The south elevations of the towers are characterized by efforts to control solar heat gain. Large deep balconies and shading devices highlight these efforts. The Guidelines designate Sawmill Crescent as having a more 'urban character' with modest setbacks. The urban character is emphasized with a strong 5-storey street-wall that is aligned to reinforce the curve of Sawmill Crescent. At the ground floor a row of townhouses creates an active streetscape and strong rhythm that relates to the pedestrian scale. The 6-storey mid-rise fronting Avalon Park is characterized by a very simple building volume. The simple massing is articulated by timber posts spanning between Levels 2 and 5 supported by concrete columns below. These column elements establish a grid that organizes random balconies with having a varying treatment of clear and fritted glass guards. The resulting framework shares a dialogue with those present on the east elevation of the tower and reference the industrial mill heritage of the site.

A notable feature of the proposed development is an expansive landscaped courtyard space oriented north/south. At Level 2, the elevated courtyard accommodates an east/west pedestrian mews below that serves a connectivity function, providing public access across the site between Rivergrass Drive and Avalon Park to the east. Oriented outwards, 2-storey townhouse units line all sides of the ground plane. Behind these, the mews is a shared space for residents and the public providing vehicular access to parking as well as, pedestrian passage through the site. Primary entry to the mews is from Rivergrass Drive to the west. Over a continuous paved surface, separation between vehicular traffic and pedestrians is provided by bollards and paving patterns. An expansive opening in the courtyard above allows solar penetration to the pedestrian mews below. Generous landscaping in the courtyard above and along the pedestrian mews visually draws the park beyond onto the site. The mews space is activated by residential lobbies, amenity rooms and landscaping along its length. This ensures that the mews will be a vibrant space. The amenity areas and entry lobby plazas are designed so that they can spill out into the mews during private special events to add further activity.

● **Response to Applicable By-laws and Guidelines:**

Rezoning Condition 1: Design development to reduce tower floorplates above the 9th storey to a maximum of 605 m², including all interior floor space but excluding exterior balconies, except, at the discretion of the Director of Planning, an increase to 650 m² may be considered where the proposed building demonstrates all of the following:

a) exceptional green building design, particularly in the area of energy performance. Exceptional green building design and energy performance will be assessed relative to evolving city standards at time of each development permit application.

b) exceptional architectural design. While all buildings at EFL are expected to achieve a high standard of quality, materiality and architectural design, taller, larger buildings should be exceptional. Particular emphasis should be placed on articulation to de-emphasize perceived building mass; and

c) contextually appropriate massing. An increase in building floorplate should be suitable to the localized urban design condition and the role of the building within the overall plan. It should not adversely affect sun on public places, or the perceived scale of buildings adjacent to important public places.

Note to applicant: It is anticipated that there will be a variety of tower floorplate sizes in response to the unique conditions, placement, and role that each tower plays. Consideration should be given to relocating building floor space to mid-rise massing that further enhances definition and overlook of the street and public places. Allowance must be made at upper levels for reduced floorplate sizes to enable useable outdoor space, and sculpting and capping of tower elements.

Applicant Response: Tower floorplates are consistent with the 650 m² which has been supported by staff based on green building design standards, exceptional architectural design and appropriate urban design

Staff Assessment:

The proposed development on Parcel 20/21 features a wide range of high performance sustainable design strategies. These including a high quality envelope with a reduced window wall ratio utilizing high performance glazing, solar shading strategy implementing the strategic placement of shading devices and balcony/frame assemblies on those building faces vulnerable to solar heat gain. Supplementing these measures is an efficient mechanical system designed, to integrate with the River

District Energy community energy system for building heating and domestic hot water. The result is an exceptional green building design, featuring a strong response to energy performance standards.

The proposed towers assume an elongated slab form oriented on a north/south axis to reduce the impact of mid-day shadows on a proposed courtyard between. In addition the towers are staggered to reduce the possible monolithic appearance of a simply paired, symmetrical configuration. Further articulation of each tower results a series of three lesser slab forms, arranged in shifted juxtaposition to emphasize slender vertical proportions and enhance visual interest.

In a contextual response to Avalon Park, the massing of one of these lesser slab components, on the southeast tower, is reduced from 16 to 14-storeys to create a pronounced shoulder. This sculpting of the tower crown moderates shadow impact on the park. While there is limited shadowing on the park late afternoon it is confined to the swale that accommodates the water-feature. The playing field east of the swale remains shadow free throughout the day. At select locations on both towers the height is reduced to create 14-storey shoulders to enhance daylighting and solar penetration. The result an assembly of slender formal elements, having a dynamic form with a clear expression of tower body and building crown. Staff is satisfied this condition has been met.

Rezoning Condition 2: *Design development to ensure that enclosed balconies fronting Marine Way and Boundary Road, in the opinion of the Director of Planning, meet the intent of the City's approved Balcony Enclosure Guidelines and are:*

- *clearly expressed on the exterior of the building;*
- *project somewhat from the main façade;*
- *highly glazed, with transparency and openness at corners; and*
- *expressed as open balconies that have been enclosed.*

Note to applicant: Enclosed balconies may be permitted on the first nine storeys of units with exposure to Marine

Applicant Response: Only a small component of the project is directly fronting Marine Way. The design includes a generous setback of 40' from the edge of patios to Marine Way. No enclosed balconies are proposed.

Staff Assessment:

With the realignment of Sawmill Crescent and redistribution of density on the site, the length of the building face flanking Marine Way is reduced from that proposed at rezoning. Moreover, the building is now setback 39.4 ft. (12 m) from Marine Way. The building setback is supplemented by street trees, feature landscaping and watercourse. These measures greatly reduce the visual and acoustic impact of vehicular traffic on Marine Way. This condition has been met.

***Rezoning Condition 3:** Design development to provide SRWs to secure public access to the secondary system of paths that create permeability and connectivity of the block system, generally as illustrated in the East Fraserlands Design Guidelines (see Appendix J), to the satisfaction of the Director of Planning, City Engineer and Legal Services;*

Note to applicant: The precise location, width, and functionality of the SRWs are to be determined at Development Permit. SRWs are to be:

- accessible, and comfortable for pedestrians;
- safe, secure, well-lit, ungated and welcoming;
- overlooked by active, inhabited space;
- typically provide visibility and permeability through the block;
- align and connect directly with public routes and streets (in Parcels 20/21, align with the bridge over the water course in Avalon corridor).

Applicant Response: Public access will be secured over Parcel 20/21 to connect Road to Avalon Park on alignment with the proposed bridge over the water course in Avalon Corridor

A 5 ft. (1.5 m) sidewalk has been included on the east side of the site, from the NE corner of the site at Sawmill Crescent and Marine Way to Kent Avenue North.

Staff Assessment:

As expressed in the applicant response, the designated 4.92 ft. (1.5 m) SRW provided along the east property line accommodates a sidewalk that provides north/south access between Marine Way and East Kent Avenue North. This walkway is flanked to the west by buffer landscaping and raised terrace space for ground level townhouses. These units are oriented to the walkway and park beyond. They provide 'eyes on the street' and are afforded a strong visual connection to the generous landscaping and water-feature that defines the western boundary of Avalon Park. This provides overlook security that addresses crime prevention (CPTED) issues and affords enhanced residential livability. Supplementing this is the need to ensure integrated low-level ambient and intermittent high-level lighting. Staff supports the design intent with consideration given Recommended Condition 1.4 (iii) and associated Standard Condition A.2.13.

***Rezoning Condition 4:** Design development to ensure residential street frontages are primarily comprised of two storey townhouse units with:*

- a) active uses such as living rooms and kitchens, on the main level frontage, not bedrooms;
- b) a main level raised above grade to create a sense of privacy and a comfortable relationship of dwelling to street; and

c) useable private outdoor space adjacent to the street or other private outdoor space directly accessible from the more active living spaces of the unit (ie roof decks, balconies off living areas, circulation spaces and courtyards).

Applicant Response: Street frontages are activated with townhouse units with active uses such as living rooms and kitchens on the main level. The main level is raised above great to provide additional privacy. Private outdoor space is provided for adjacent to the street.

Staff Assessment:

Townhouses form a strong foundation for the streetwall along Sawmill Crescent, the east building frontage along Avalon Park, and mid-building along the East Kent Avenue North frontage. Setbacks respond to the specific frontage, and character of adjacent streets or park. With the slope of the site towards the south and the minimum ground floor established by the floodplain, the ground level units provide vertical separation above adjacent streets. This is supplemented by buffer landscaping ensuring enhanced privacy for residents. The result meets the objectives of the East Fraserlands Design Guidelines.

• **Conclusion:**

Staff considers this application to be of a high standard and supports the increase in and redistribution of density. The reconfigured form of development, while a departure from the Official Development Plan (ODP), results in a development proposal that will provide high density living in compliance with the CD-1 policy and is consistent with the objectives of the East Fraserlands Guidelines. Staff recommends approval of this development application subject to the conditions noted in this report.

URBAN DESIGN PANEL

The Urban Design Panel reviewed this application on July 13, 2016, and provided the following comments:

EVALUATION: SUPPORT (7-0)

- **Introduction:** Allan Moorey, Development Planner, introduced the project as a DE application which is part of the build-out of the East Fraser Lands Site parcels 20 and 21. Consideration for this application should be given to the isometric 3D and storey height of the surrounding context.

Parcels 20 and 21 are located on the eastern edge of the River District. The site is bounded by Marine Way to the north, a future park (Avalon Park) to the east, Sawmill Crescent to the northwest and North Cape Avenue along the south.

The guidelines call for a high exposure on all frontages, and additional guidelines call for a dignified character appropriate to the site. Mr. Moorey went over additional aspects drawn from the guidelines including setback prescriptions, form, character, overlook and configuration. There was also a requirement called for a large courtyard with opportunities for planting.

During development a number of moves impacted the site boundaries. A greater radius was required along Sawmill Crescent which took a significant bite out of the site.

There is an allowance within the Official Development Plan (ODP) for density transfers between parcels, so 15,000 sq. ft. was transferred from parcel 43 to this site. That resulted in an additional storey in height being added to one of the buildings, and an additional six storeys being added to the tower.

On the site two 16-storey elements exist. The building adjacent to the park drops to a 14 ft. shoulder, which alleviates some of the shadow impact on the park, and a four-storey podium is between the two buildings.

The site is irregularly shaped with a 135 ft. frontage along the north edge, 225 ft. along the west edge, and 255 ft. along Kent Avenue. There are two-storey townhouse units along Kent Avenue, and single-storey unit access off a public walkway provided along the western edge of the water element for Avalon Park. On the western edge there is a 6 ½ ft. setback to allow for a buffer of planting. A more expansive setback of 16ft. is afforded along the eastern face.

The elevated courtyard at the centre allows for pedestrian and auto access off of Rivergrass Drive into an auto court below, which is hemmed by parking and townhouse units. An opening to the plaza at the elevated level allows sunlight into the courtyard and mews, and facilitates north to south movement across the elevated courtyard.

There is 90 ft. being provided between the two primary towers, and 35 ft. between buildings.

Advice from the Panel on this application is sought on the following:

1. Could the panel comment on the effectiveness of the proposed pedestrian link between Rivergrass Drive and Avalon Park?
 2. Could the panel comment on the relocations of the two residential towers from that illustrated in the ODP?
 3. Could the panel comment on the clarity of the on-site public access that provides unit entry along the western edge of the Avalon water feature?
- **Applicant's Introductory Comments:** The applicant team started by highlighting the revisions to the plans with respect to the guidelines. After a section of the site was lost to the road a pinch point was created, so the tower was shifted towards the south moving the towers and apartments further away from the road. This created a more interesting relationship between the two towers.

Another change from the guidelines was the raised courtyard. It was supposed to be all at grade but the proposal is to create a decked level of parking which allows all of the units facing the court to look into a greenspace. It also allows for good solar penetration as the 'ground' is now higher relative to the enclosing walls.

There are very different frontages all the way around the site. The one to the east was an interesting opportunity for a large-scale element and gesture. On the west side there is more of an urban character to the streetwall, and to the south there is a linear series of open spaces which front towards a future development.

On the eastern frontage the approach was to do things with simple gestures at a larger scale which read well with the foreground of the park, with the buildings as a backdrop. Since the eastern frontage is a gateway to the site it attempts to refer to the heritage and history of the site through simple forms, punched windows and industrial materials. A grid of Glulam timbers is also being proposed which speak to the mill heritage of the site in a modern context. The west has a warmer material palate with brick, transitioning to metal panels.

There are wood-frames, but only at the first level as they tie into the concrete.

On the south façade verticality and slenderness of the towers have been emphasized, and a smaller grained skyline has been created through staggered planes. Where the form ties into the ground it reads as strong and clear to further emphasize the verticality.

The mews was an interesting challenge due to the elevation changes. An approach was taken to create open space and planting which brings people's eyes up into the space connecting the upper and lower levels. The bridges which connect the internal courtyards are meant to connect the spaces and merge them into one.

The window to wall ratio on the tower has been brought down to 46%, and thermal bridging has been minimized. Large balconies are used to provide shading on the south and west sides.

On the interior of the towers the space is kept clean and uncluttered to keep it readable and singular.

With landscaping, the north and south corners of the park are being extended into the property to provide a 'public' feeling. A 5 ft. wide walkway adjacent the park provides access to the units which face the park, with a rain garden infiltration trench along the park property edge and bridge connections across the trench connecting the park and the walkway.

At the mews the paving pattern has been differentiated for pedestrians and cars, but at points they are combined in a Granville Island model with a pedestrian hierarchy. The landscape from the podium folds down into the mews to open up the mews and provide places for people to linger. A lot of amenities are tucked into the spaces around the mews and the lobby is glazed to provide good oversight.

The podium has all the amenities of a single family home, including a place to play and outdoor amenities for residents throughout the garden. A water feature has been introduced flowing down to street level to the north as a way to deal with the parking garage wall that is above grade and provide white noise. There is also another small water feature which pays homage to the infiltration trench.

The applicant team then took questions from the panel.

- **Panel's Consensus on Key Aspects Needing Improvement:**

- The pedestrian link could have more definition between the car and pedestrian areas; or maybe opened up on the park side with a wider bridge;
- The western tower does not express the shifting in height and mass as well as the eastern one;
- The 5 f.t walkway adjacent the park would be better if it was wider, and have some stopping points; there could be conflicts between bikes and pedestrians along this walkway;
- Support for access to the raised courtyard (and also for it remaining secure); but it should be more child friendly;
- Consider making the materials less complex while maintaining the diversity;

- **Related Commentary:** The panel stated that because all of the big moves seem to be done right, the comments are really about the details of the project.

Everyone is fine with the location of the two residential towers. However, on Kent Avenue the two towers sandwich a mid-block building, and this lacks clarity in relation to everything else on the site. In addition, the east and west elevations of the towers appear to be quite busy. Consider editing the finishing a bit to make the project stronger.

The upper level courtyard is not very good looking and could be developed into something beautiful. Part of the courtyard is that it is meant to be intimate, so attention should be paid to ensuring that there is good lighting at night and that there is an intimate relationship with the water. There could also be an opportunity to make the courtyard more child-friendly or add public art into it. While it would be nice if there were more access points into the courtyard, the panel understands that there may be security issues with this.

The panel was split on the materiality. While some members thought that there were too many materials, others thought that reducing the number of materials might cheapen the development.

One panel member hoped that some of the collected stormwater could be reused.

- **Applicant's Response:** The applicant team noted that they appreciated the comments as they which will improve the project. Luckily they are also working on the park development together with the City.

ENGINEERING SERVICES

The recommendations of Engineering Services are contained in the prior-to conditions noted in Appendix A attached to this report.

This application is part of the Park Precinct in East Fraserlands Area 1, while being on the eastern edge of the Town Square Precinct. The first four Town Square Development Permits were reviewed by Development Permit Board in early 2015; these developments are responsible for producing the majority of the new infrastructure works required to service the Town Square Precinct and Park Precinct. There are several outstanding servicing obligations that this development application will be responsible for completing in order to complete links to the surrounding community. This application will be responsible for completing Sawmill Crescent east of Rivergrass Drive, and performing upgrades to Marine Way and East Kent Ave North to connect the Town Square Area to Boundary Road. See Standard Condition A.2.5 to secure these obligations.

Avalon Park North is adjacent to this development site; the East Fraserlands Guidelines show this park featuring a watercourse that conveys drainage from the Avalon Ponds to the Fraser River. This development, in consultation with the Board of Parks and Recreation and Engineering Services, will be required to progress design development of the adjacent park to interface with the development site and ensure feasibility of the guideline requirements. The development will be obligated to secure storm crossings with Canadian Pacific Rail (CPR) in favour of the City to ensure the water course will continue through the future EFL Area 3 to the Fraser River.

HOUSING POLICY & PROJECTS

AMENITY ROOMS AND PLAY AREAS

The proposed development includes a total of 258 units with two or more bedrooms (70% of total units - comprised of 177 2 bedroom units and 81 3-bedroom units) which may be suitable for families with children. The High Density Housing for Families with Children Guidelines are therefore applicable to the plans for this development.

Consistent with the guidelines, a multi-purpose amenity room with kitchenette, storage closet and accessible washrooms with baby change table is proposed.

Also consistent with the Guidelines a common outdoor amenity area is provided on level 2. It includes a children's sand play area with timber log table and chairs and landscaping suitable for creative play activity is proposed, a lawn and soft surface area with spinner toy and balancing logs and boulders are also proposed, all which provide a range of opportunities for creative and motor skills developing play for children. Plans for the outdoor common amenity area also include an outdoor dining table and BBQ.

URBAN AGRICULTURE

The City of Vancouver Food Policy identifies environmental and social benefits associated with urban agriculture and seeks to encourage opportunities to grow food in the city. The "Urban Agriculture Guidelines for the Private Realm" encourage edible landscaping and shared gardening opportunities in private developments, and seek the necessary supporting infrastructure.

Consistent with these Guidelines, Plans include planters which provide opportunities for urban agriculture on Level 2. Design development is needed to include the infrastructure necessary to support urban agricultural activity by residents, including, tool storage bin or closet, a potting bench, a compost bin for yard waste, and to clarify hose bib locations. (See Standard Condition A.1.24).

PARKS BOARD

Park Board anticipates that the Avalon Corridor will be a fully functioning ecological system that is fully integrated into the contextual landscape and provides uninterrupted connectivity between the Fraser River and Everett Crowley Park. The corridor should provide habitat for terrestrial and aquatic vertebrates and invertebrates and be holistically integrated into the design of the adjacent park with its synthetic turf field. On this note, the Park Board and the master developer, Wesgroup Properties, are in the process of developing a Park Development Agreement for the development of the synthetic turf field as well as the Parcel 43 Promontory Park. It is expected that the northern Avalon watercourse will need to be designed in tandem with the synthetic turf field in order that the projects are functionally integrated.

Through the Park Development Agreement, Wesgroup Properties will commission the necessary consulting and contracting services to deliver the agreed parks to the satisfaction of the Vancouver Park Board and with all necessary consultation and collaboration throughout the process. All servicing and grading considerations, as well as vegetation removal, should be addressed in advance of the park development process, but where this is not possible, letter of credits will be collected by the Park Board as an assurance that obligations will be met, as per existing legal agreements Park Precinct Parks Agreement and Town Square Precinct Parks Agreement.

ENVIRONMENTAL PROTECTION BRANCH

Environmental Protection indicates that the Final Determination dated September 4, 2007 (Site ID: 10341) was received for the lands identified and located at 3520 to 3680 Marine Way. The lands identified met the Contaminated Sites Regulation prescribed standards for residential land and urban parkland soil use and freshwater aquatic life water use.

BUILDING REVIEW BRANCH

This Development Application submission has not been fully reviewed for compliance with the Building By-law. The applicant is responsible for ensuring that the design of the building meets the Building By-law requirements. The options available to assure Building By-law compliance at an early stage of development should be considered by the applicant in consultation with Building Review Branch staff.

To ensure that the project does not conflict in any substantial manner with the Building By-law, the designer should know and take into account, at the Development Application stage, the Building By-law requirements which may affect the building design and internal layout. These would generally include: spatial separation, fire separation, exiting, access for physically disabled persons, type of construction materials used, firefighting access and energy utilization requirements.

NOTIFICATION

Two site signs were placed and their installation verified on June 16, 2016. On the same day, 1610 notification postcards were sent to the neighbouring property owners advising them of the application, and offering additional information on the City's website.

There were no responses to the notification.

DEVELOPMENT PERMIT STAFF COMMITTEE COMMENTS:

The Staff Committee has considered the approval sought by this application and concluded that with respect to the Zoning and Development By-law and Official Development Plan it requires decisions by both the Development Permit Board and the Director of Planning.

Staff Committee supports this application with the conditions contained in this report. The proposal is consistent with what was approved by Council through Rezoning.



J. Greer
Chair, Development Permit Staff Committee



A. Moorey
Senior Development Planner



V. Kopy
Project Coordinator

Project Facilitator: M. So

DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATIONS

The following is a list of conditions that must also be met prior to issuance of the Development Permit.

A.1 Standard Conditions

A.1.1 The proposed form of development can and does become approved by City Council;

A.1.2 reduction of floor area to a maximum of 342,873.20 sq. ft. (31,852.9 m²);

Note to Applicant: The total re-allotted area from Parcel 43 is 11,624.5 sq. ft. (1,080 m²).

A.1.3 inclusion of Communal areas located on the 9th and 11th levels of the towers as amenity space;

Note to Applicant: These areas have not been defined and will be considered amenity space.

A.1.4 compliance with section 10.21 of the Zoning and Development By-law;

Note to Applicant: Individual unit areas must be documented in the tables and typical unit types are to be better coordinated in the tables to clarify unit types and their associated areas.

A.1.5 correction and coordination of the following unit count information to be clearly documented on the submitted plans and associated tables:

Parcel 20:

- i. Building 1, level 14 to read 8 units;
- ii. Building 1, level 9 to read 7 units;
- iii. Building 2, level 15 and 16 to read 4 units on each floor;
- iv. Building 2, level 14 to read 7 units; and
- v. Building 2, level 1 to read 7 units (TH).

Parcel 21:

- i. Building 1, level 2 to read 6 units.
- ii. Building 1, level 1 to read 8 units (TH).
- iii. Building 2, level 1 to read 12 units (TH).

Note to Applicant: Confirm whether the total unit count for Parcel 20 is 239 and 133 units for Parcel 21. All calculations based on unit numbers are to be updated throughout. The required corrected information is located on pages A0.1, A0.2, A2.20.0 and A2.21.0.

A.1.6 provision of a minimum 21.67 ft. (6.6 m) maneuvering aisle between standard car spaces or provide additional stall width;

Note to Applicant: Reduced aisle widths to 20 ft. (6.1 m) are acceptable with additional stall widths. Refer to the "Parking and Loading Design Supplement".

A.1.7 compliance with Section 7 (Parking) of the CD-1 By-law;

Note to Applicant: Parking calculation is based on the gross floor area excluding amenity and bulk storage.

- A.1.8 provision of two (2) car shared parking spaces;

Note to Applicant: Refer to Standard Condition A.2.16.

- A.1.9 provision of a minimum 37 visitor parking spaces:

Note to Applicant: Provide CPTED measures between visitor parking and residential parking.

- A.1.10 design development to bicycle storage rooms as follows:

Note to Applicant: Provide adequate space for bicycle storage adjacent to East Building garbage and recycling room and provide a maximum of 40 spaces per room. Individual rooms can be separated with wire mesh compounds as per Section 6.3 of the Parking By-law. Confirm bicycle count and update required space.

- A.1.11 submission of the Official Building Grades and clearly label the all elevations, site plan and landscape plan;

- A.1.12 confirmation that building height does not exceed the maximum permitted;

Note to Applicant: Correction of building height is required for points C, F, J and N on page A.1.2. Building height shall be verified with submission of Building Grades, as per Standard Condition A.1.11.

- A.1.13 design development to locate, integrate and fully screen any emergency generator, exhaust or intake ventilation, electrical substation and gas meters in a manner that minimizes their visual and acoustic impacts on the building's open space and the Public Realm;

- A.1.14 an acoustical consultant's report shall be submitted which assesses noise impacts on the site and recommends noise mitigation measures in order to achieve noise criteria;

- A.1.15 written confirmation shall be submitted by the applicant that:

- the acoustical measures will be incorporated into the final design and construction, based on the consultant's recommendations;
- adequate and effective acoustic separation will be provided between the commercial and residential portions of the building; and
- mechanical (ventilators, generators, compactors and exhaust systems) will be designed and located to minimize the noise impact on the neighbourhood and to comply with Noise By-law #6555;

Standard Landscape Conditions

- A.1.16 consideration of rainwater management functions in landscape features on site; project should target compliance with one of the LEED stormwater management credits for quality or quantity control;

Note to Applicant: The City recently passed an Integrated Rainwater Management Plan (IRMP) which is targeting managing 90% of annual rainfall. The EFL Rainwater Management Plan was created prior to this Citywide IRMP, and did not include a clearly defined target - it only

referenced treating the “first flush”. The purpose of this condition is to meet the intent of the EFL Rainwater Management Plan while acknowledging the recent Citywide improvements.

It addresses the guiding principles (6) and design objectives (10) of the EFL Rainwater Management Plan. The new IRMP: “For developments defined as ‘large scale developments’, reduce post development rate and volume to at or below pre-development levels for the 2-year/24-hour precipitation events. Pre-development equals the site’s immediate preceding use.”

- A.1.17 modifications to the sub-grade retaining wall construction located along the property line at East Kent Ave. North to allow for the roots of trees to be able to benefit from extended soil volumes;

Note to Applicant: This can be done by providing “knock out” panels at the lower base of the retaining wall.

- A.1.18 provision of a partial irrigation plan with notations to indicate hose bib and irrigation connection locations;

Note to Applicant: Permanent high efficiency irrigation to be provided for all planted areas and individual hose bibs for all patios sized at 100 sq. ft. (9.3 m²) or greater.

- A.1.19 provision of large scale, detailed elevations for proposed vertical landscape structures;

Note to Applicant: This includes, but is not limited, to the playground, metal feature wall, retaining walls, outdoor furniture, urban agriculture potting table / storage, compost bin, trellis, privacy fences, railings, gates and bike racks.

- A.1.20 demonstration of compatibility of grades with the future park;

Note to Applicant: This can be done by providing additional detailed section(s) at the east edge, through the building interface, patios, planters walkway and through to the extrapolated future park grades (in consultation with the Park Board).

- A.1.21 demonstration of design principles and planting plans that enhance habitat as per the East Fraserlands Songbird Strategy;

Note to Applicant: This can be done through further refinement of the planting and landscape plans, where necessary, and by providing a written rationale. Consider water features that are bird friendly and plants and trees that can offer food and shelter.

- A.1.22 consideration in regard to the method and timing of necessary tree removal related to the project; and

Note to Applicant: Tree permit applications must be made in a timely manner with full documentation and department clearances while anticipating construction schedules, offsite impacts and seasonal bird nesting. Additional arborist reporting and/or a report(s) from a certified biologist may be requested.

- A.1.23 provision of new street trees adjacent to the development site;

Note to Applicant: Refer to the CD-1 Guidelines (2008) for Area One, East Fraser Lands which includes the Street Tree Master Plan (pg. 91). Street trees to be shown on the development permit plans and confirmed prior to the issuance of the building permit. Contact Eileen Curran, Streets Engineering (604.871.6131) to confirm tree planting locations and Park Board

(604.257.8587) for tree species selection and planting requirements. Provide a notation on the plan as follows, "Final spacing, quantity and tree species to the satisfaction of the General Manager of Engineering Services. New trees must be of good standard, minimum 2.4 inches (6 cm) caliper, and installed with approved root barriers, tree guards and appropriate soil. Root barriers shall be 8 ft. (2.4 m) long and 18 inches (.46 m). Planting depth of root ball must be below sidewalk grade. Call Park Board for inspection after tree planting completion".

Housing Policy & Projects

- A.1.24 design development to include the infrastructure necessary to support urban agricultural activity by residents including, tool storage, a potting bench, a compost bin for yard waste, and clarification of hose bib locations.

A.2 Standard Engineering Conditions

- A.2.1 Arrangements to the satisfaction of the General Manager of Engineering Services, the Director of Legal Services and the Approving Officer for the subdivision of Lot 31, DL 331, Plan EPP31354 to create the development site and to dedicate as road the area on right of way Plan EPP37540;

Note to Applicant: The preliminary approval letter for the subdivision was issued on October 30, 2015, and the proposed legal description post subdivision to be Lot 49, DL 331, NWD, Plan EPP53803.

- A.2.2 clarification is required for the two undetailed projections shown encroaching over the west and south property lines (see pages A2.21.0, A3.1, A3.2, A3.20.3, A3.20.2, A3.20.3, A3.20.4) as to whether they are acceptable under a standard canopy application. If not, either delete these features or make arrangements (legal agreements) to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services for this encroachment onto City property;

Note to Applicant: An application to the City Surveyor is required. The applicant and owner should be advised that building encroachments onto City street may create obstacles if strata titling the property is intended [Section 244(1)(f) of the Strata Property Act]. The City of Vancouver may not necessarily support the provision of easements for any part of the building on City streets. If strata titling is being considered, the applicant is advised to seek independent legal advice on this matter. Care should be taken with the design and construction of the proposed projection such that it is lightweight, demountable, and may be considered as an ancillary component of the building that is readily removable.

- A.2.3 registration of the Public Access Agreement, a draft copy of which is attached to the No-Development Covenant (CA3663567-69), for Public Access Paths through the "Mews" and along the easterly edge of the site is required;

Note to Applicant: Upon completion of the work a topographical survey and a reference plan (which may be volumetric) in registrable form must be provided prior to issuance of an occupancy permit.

- A.2.4 registration of the Park Precinct Services Agreement, a draft copy of which is attached to the No-development Covenant (CA366367-69), for all on-site and off-site works and services necessary or incidental to the servicing of the site is required;
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- A.2.5 arrangements to the satisfaction of the General Manager of Engineering Services for the completion of the road network between this development site, its directly adjacent obligations and the surrounding community;

Note to Applicant: For clarity, the completion of the road network includes links between Sawmill Crescent East and Boundary Road, along East Kent Ave North and Marine Way. Definition of obligation to be as per the EFL Area 1 Park Precinct Services Agreement, including Owner's Works and Road Works.

- A.2.6 arrangements to the satisfaction of the General Manager of Engineering Services and Director of Legal Services to secure necessary CPR utility crossings to facilitate the development of Avalon Park Corridor;

- A.2.7 provision of letters of Credit with respect to the Applicable Phase(s) of the Owner's Works, as defined in the EFL Area 1 Park Precinct Agreement CA3663329-3663334, in an amount to the satisfaction of the General Manager of Engineering Services;

- A.2.8 arrangements to the satisfaction of the General Manager of Engineering Services and General Manager of Parks Board for access in favour of City for the purpose of maintaining the adjacent Avalon Park;

- A.2.9 provision of a final footing design to be fully contained within the site;

Note to Applicant: The generic footings shown on page A4.21.1 would encroach onto City street.

- A.2.10 provision of a separate application to the General Manager of Engineering Services for street trees and or sidewalk improvements is required. Improvements include all Street frontages and those portions of Street shown in Schedule B1 and B2 in the EFL Area 1 Park Precinct Agreement CA3663329-3663334, and completion of the road network between this development site, its directly adjacent obligations and the surrounding community, and in accordance with the definitions for works in the Services Agreement and to the satisfaction of the General Manager of Engineering Services. Please submit a copy of the civil, electrical, and landscape plans directly to Engineering for review;

Note to Applicant: If non-standard materials are proposed they are subject to review and approval by the General Manager of Engineering Services and may require additional provisions for long-term maintenance to the satisfaction of the Director of Legal Services.

- A.2.11 provision of City building grades and corresponding design elevations at all entrances to the satisfaction of the General Manager of Engineering Services is required;

- A.2.12 design and location of all crossings, to the satisfaction of the General Manager of Engineering Services;

Note to Applicant: The proposed access location conflicts with existing utilities - coordinate crossing application with plan submission requirement for Standard Condition A.2.10. A standard City crossing should be shown with scoring as per the City of Vancouver Street Restoration Manual. Submission of a crossing application is required.

- A.2.13 provision of a 4.92 ft. (1.5 m) broom finish concrete walk with saw cut joints for the full length of the walkway on the east edge of the property next to the future park and deletion of the sections of proposed composite wood decking within the Statutory Right of Way (SRW);
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Note to Applicant: Engineering Services may accept a second material type at the location of the mews and Avalon corridor crossing; material selection must consider long term maintenance and accessibility, and be to the satisfaction of the General Manager of Engineering Services.

- A.2.14 provision of detailed design for secondary system of paths and paths for public access to the satisfaction of the General Manager of Engineering Services;

Note to Applicant: Detailed design should include surface treatments proposed, dimensions, elevations and grading.

- A.2.15 provision of Class B bike racks located 36 inches (0.9 m) on centre;

Note to Applicant: This was agreed to as part of the town square developments and will apply to all new developments.

- A.2.16 enter into a Shared Vehicle Agreement with the City to secure the provision, operation and maintenance of [1] Shared Vehicle and the provision and maintenance of [2] Shared Vehicle Parking Space(s) for use exclusively by such Shared Vehicle(s), [with such parking spaces to be in addition to the minimum parking spaces required by the Parking Bylaw], on terms and conditions satisfactory to the General Manager of Engineering Services and the Director of Legal Services, including the following:

- a. provide 1 Shared Vehicle to the development for a minimum period of [3 years],
- b. enter into an agreement with a Shared Vehicle Organization satisfactory to the General Manager of Engineering Services to secure the operation and maintenance of the Shared Vehicle(s),
- c. provide and maintain the Shared Vehicle Parking Space(s) for use exclusively by such shared vehicles,
- d. make arrangements to allow members of the Shared Vehicle Organization access to the Shared Vehicle Parking Space(s),
- e. provide security in the form of a Letter of Credit for \$50,000 per Shared Vehicle,
- f. registration of the Shared Vehicle Agreement against the title to the development, with such priority as the Director of Legal Services may require and including a covenant under section 219 of the Land Title Act of British Columbia, a statutory right of way, or other instrument satisfactory to the Director of Legal Services, securing these conditions, and provision of a letter of commitment from a car share company indicating their willingness to supply car share vehicles on the site at building occupancy;

Note to Applicant: Shared vehicle spaces are required to be a minimum width of 9.5 ft. (2.9 m). See Standard Condition A.1.8.

- A.2.17 compliance with the Parking and Loading Design Supplement to the satisfaction of the General Manager of Engineering Services.

Note to Applicant: The following items are required to meet provisions of the Parking By-law and the Parking and Loading Design Supplement.

- provision of improved parking plans at 1:125 scale and with gridlines as 1:250 drawings are provided;

Note to Applicant: Numerous dimensions and elevations are illegible. Convert all measurements and elevations to be in metric scale as imperial dimensions are shown on a metric drawing.

- provision of all stalls to be clearly numbered;
- provision of design elevations on both sides of the parking ramp at all breakpoints, both sides of the loading bay, and at all entrances;

Note to Applicant: Design elevations shown on the ramp are not along the breakpoints of the ramp. Additional design elevations are required within the parking and loading areas to calculate the slope and crossfall. Design elevations are required from the property line to the parking entrance.

- provision of corner cuts through the inside radius on the main parking ramp to enable two vehicles to pass each other unobstructed and provide turning swaths showing 2-way flow;

Note to Applicant: Corner cuts are required at the top and bottom of ramps to provide adequate radii for continuous two-way traffic flow where 200 or more vehicles are being served.

- provision of 23.95 ft. (7.3 m) separation between the parking ramp and maneuvering aisle, on P1 and P2 and provide turning analysis showing this;

Note to Applicant: This is to ensure vehicles making the 180 degree turn at the top and bottom of the ramps can turn into the correct side of the maneuvering aisle for continuous two-way traffic flow.

- provide additional parking stall width for stalls adjacent to walls and note on plans;

Note to Applicant: Shared vehicle spaces are required to be a minimum width of 9.5 ft. (2.9 m).

- provision of an improved landing at the bottom of the ramp on P2;

Note to Applicant: Drawing A2.P2 shows maneuvering off the side of the ramp, which is not acceptable.

- relocate the overhead gate for Parcel 21 to align with the parking ramp;

Note to Applicant: Engineering does not support the excessive maneuvering required for the gate shown on drawing A1.1.

- provision of improved maneuvering for Parcel 20 on drawing A2.P1;

Note to Applicant: Excessive maneuvering is required as the maneuvering aisle shifts by the west elevator core on Parcel 20. Aligning the N-S maneuvering aisle with the maneuvering aisle for Parcel 21 would achieve this.

- provision of a 20 ft. (6.1 m) maneuvering aisle clear of obstructions;

Note to Applicant: The raised planter on the east side of the overhead gate for Parcel 20 is encroaching into the maneuvering aisle.

- clarification of the maneuvering and independent access in and out of the Class B loading spaces; and
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Note to Applicant: Show the maneuvering for the largest truck to use the Class B loading spaces and confirm that independent parking and loading access is being provided.

- provision of minimum vertical clearance for the main ramp, security gates, and loading bays.

Note to Applicant: A section drawing is required showing elevations, and vertical clearances. The minimum vertical clearance should be noted on plans with 7.5 ft. (2.3 m) of vertical clearance is required for access and maneuvering to all disability spaces and 12.5 ft. (3.8 m) of vertical clearance is required for Class B loading spaces and maneuvering. Include maneuvering plans for Class B loading spaces in relationship to overpass.

Please contact Dave Kim of the Neighbourhood Parking and Transportation Branch at 604-871-6279 for more information or refer to the Parking and Loading Design Guidelines at the following link: (<http://vancouver.ca/home-property-development/parking-policies-guidelines.aspx>)

A.2.18 clarification of water, sanitary and storm services;

Note to Applicant: City only permits one service connection (water, sanitary, storm) per legal lot. Clearly note the locations on the development application plans.

A.2.19 clarification of garbage pick-up operations;

Note to Applicant: Please provide written confirmation that a waste hauler can access and pick up from the location shown. Note: pick up operations should not rely on bins being stored on the street or lane for pick-up. Bins are to be returned to storage areas immediately after emptying.

A.2.20 provision of grading plans for Avalon Corridor to the satisfaction of the General Manager of Parks Board and the General Manager of Engineering Services;

Note to Applicant: Grading plans must include detailed grading plan for Avalon Park North and concept grading plan for Avalon Park South.

A.2.21 provision of site servicing plans for Avalon Park North to the satisfaction of the General Manager of Parks Board and the General Manager of Engineering Services; and

A.2.22 written confirmation is required to be submitted for the following obligations:

- Park Precinct Park Master Agreement CA3664480-88: Prior to issuance of an occupancy permit the owner is obligated to complete the Owner's Park Works for Avalon Park North, to the satisfaction of the General Manager of Parks Board (GMPB). The GMPB has the discretion to allow temporary works or defer the completion date.
 - Public Art Agreement CA3663507-09: The public art conditions must be met prior to the issuance of permits.
 - District Energy Utility CA3663432-43: DEU pre-conditions are to be met prior to issuance of the building permit and the occupancy permit.
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A.3 Standard Licenses & Inspections (Environmental Protection Branch) Conditions:

- A.3.1 A qualified environmental consultant must be available to identify, characterize and appropriately manage any environmental media of suspect quality which may be encountered during any subsurface work.

B.1 Standard Notes to Applicant

- B.1.1 It should be noted that if conditions 1.0 and 2.0 have not been complied with on or before **February 22, 2017**, this Development Application shall be deemed to be refused, unless the date for compliance is first extended by the Director of Planning.
- B.1.2 This approval is subject to any change in the Official Development Plan and the Zoning and Development Bylaw or other regulations affecting the development that occurs before the permit is issuable. No permit that contravenes the bylaw or regulations can be issued.
- B.1.3 Revised drawings will not be accepted unless they fulfill all conditions noted above. Further, written explanation describing point-by-point how conditions have been met, must accompany revised drawings. An appointment should be made with the Project Facilitator when the revised drawings are ready for submission.
- B.1.4 A new development application will be required for any significant changes other than those required by the above-noted conditions.

B.2 Conditions of Development Permit:

- B.2.1 All approved off-street vehicle parking, loading and unloading spaces, and bicycle parking spaces shall be provided in accordance with the relevant requirements of the Parking By-law prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.
- B.2.2 All landscaping and treatment of the open portions of the site shall be completed in accordance with the approved drawings prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.
- B.2.3 Any phasing of the development, other than that specifically approved, that results in an interruption of continuous construction to completion of the development, will require application to amend the development to determine the interim treatment of the incomplete portions of the site to ensure that the phased development functions are as set out in the approved plans, all to the satisfaction of the Director of Planning.
- B.2.4 Amenity areas / guests suites / common residential storage spaces of 7,947 sq. ft. (738.3 m²), excluded from the computation of floor space ratio, shall not be put to any other use, except as described in the approved application for the exclusion. Access and availability of the use of all amenity facilities located in this project shall be made to all residents, occupants and/or commercial tenants of the building;

AND

Further, the amenity spaces and facilities approved as part of this Development Permit shall be provided and thereafter be permanently maintained for use by residents/users/tenants of this building complex.

- B.2.5 All approved street trees shall be planted in accordance with the approved drawings within six (6) months of the date of issuance of any required occupancy permit, or any use or occupancy of the proposed development not requirement an occupancy permit, and thereafter permanently maintained in good conditions.
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- B.2.6 All services, including telephone, television cables and electricity, shall be completely underground.
 - B.2.7 Must comply with all relevant provincial Acts and Regulations (e.g. Environmental Management Act, Contaminated Sites Regulation, Hazardous Waste Regulation) and municipal Bylaws (e.g. Fire Bylaw, Sewer and Watercourse Bylaw).
 - B.2.8 This site is affected by a Development Cost Levy By-law and levies will be required to be paid prior to issuance of Building Permits.
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