



Development Permit Panel Electronic Meeting

Council Chambers, City Hall
6911 No. 3 Road

Wednesday, May 10, 2023
3:30 p.m.

MINUTES

Motion to adopt the minutes of the Development Permit Panel meeting held on February 15, 2023.



1. **DEVELOPMENT PERMIT 21-932383**
(REDMS No. 6913890)

APPLICANT: Flat Architecture Inc.

PROPERTY LOCATION: 8951, 8971 Spires Road and 8991 Spires Gate

Director's Recommendations

That a Development Permit be issued which would:

1. *permit the construction of 22 townhouse units and two secondary suites at 8951, 8971 Spires Road and 8991 Spires Gate and the surplus portion of Spires Road on a site zoned "Parking Structure Townhouses (RTP4)" zone; and*
2. *vary the provisions of Richmond Zoning Bylaw 8500 to:*
 - (a) *reduce the minimum lot width from 40 m to 33.5 m; and*
 - (b) *reduce the minimum lot area from 2,400 m² to 2,000 m².*



ITEM

2. **DEVELOPMENT PERMIT 21-943565**

(REDMS No. 7202148)

APPLICANT: Orion Construction

PROPERTY LOCATION: 9800 Van Horne Way

Director's Recommendations

That a Development Permit be issued which would permit the construction of two multi-tenant light industrial buildings at 9800 Van Horne Way on a site zoned "Light Industrial (IL)".



3. **DEVELOPMENT PERMIT 22-019430**

(REDMS No. 7181149)

APPLICANT: Talvinder Jagde

PROPERTY LOCATION: 10151 Ainsworth Crescent

Director's Recommendations

That a Development Permit be issued which would:

1. *permit the construction of a coach house at 10151 Ainsworth Crescent on a site zoned "Single Detached with Granny Flat or Coach House Edgemere (REI)"; and*
2. *vary the provisions of Richmond Zoning Bylaw 8500 to:*
 - (a) *increase the maximum setback that a coach house is permitted to be located from the south property line from 2.0 m to 5.95 m; and*
 - (b) *decrease the minimum setback that a coach house is permitted to be located from the north property line from 2.0 m to 0.90 m.*



4. **New Business**

5. **Date of Next Meeting: May 25, 2023**

ADJOURNMENT



**Development Permit Panel
Wednesday, February 15, 2023**

Time: 3:30 p.m.

Place: Remote (Zoom) Meeting

Present: Joe Erceg, General Manager, Planning and Development, Chair
Cecilia Achiam, General Manager, Community Safety
James Cooper, Director, Building Approvals

The meeting was called to order at 3:30 p.m.

MINUTES

It was moved and seconded

That the minutes of the meeting of the Development Permit Panel held on December 14, 2022 be adopted.

CARRIED

1. DEVELOPMENT PERMIT 21-933765
(REDMS No. 6862789)

APPLICANT: Interface Architecture Inc.

PROPERTY LOCATION: 9300 and 9320 Cambie Road

INTENT OF PERMIT:

1. Permit the construction of 126 residential units in a five-storey multi-family apartment building over a common parkade at 9300 and 9320 Cambie Road on a site zoned “Low Rise Apartment (ZLR43) – Alexandra Neighbourhood (West Cambie)”.
2. Vary the provisions of Richmond Zoning Bylaw 8500 to:
 - (a) increase the maximum lot coverage of buildings from 40 to 43 per cent; and
 - (b) reduce the minimum width of one manoeuvring aisle in the parkade from 6.7 m to 6.4 m.

Development Permit Panel

Wednesday, February 15, 2023

Applicant's Comments

Ken Chow, Interface Architecture, Inc., with the aid of a visual presentation (attached to and forming part of these minutes as Schedule 1), provided background information on the project's site context, road frontages, development statistics, site plan, building elevations and sections, and floor plans, highlighting the following:

- a six-storey multi-family apartment building is located to the east of the subject site and a three-storey townhouse development is located to the west of the site;
- the proposed development is located within the Alexandra District Energy Utility Energy (DEU) catchment area and will be required to connect to the Alexandra DEU;
- the proposed building has been designed to provide an appropriate transition from the six-storey apartment building to the east to the three-storey townhouse development to the west;
- the required east-west McKim Way road dedication will split the site into the northern portion where the 126-unit five-storey apartment building will be sited and the southern portion which will have an outdoor amenity space with garden plots for the exclusive use of residents in the proposed development;
- the proposed unit types include one- to three-bedroom units with dens;
- five two- to three-bedroom units will be provided for affordable housing;
- 36 units, including the five affordable units, will meet the City's Basic Universal Housing (BUH) requirements;
- the central mass of the proposed building is positioned from the adjacent east and west developments to provide separation, screening, and privacy and mitigate potential overlook and shadowing onto adjacent developments;
- the southeast corner of the proposed building is chamfered to allow sunlight penetration to the proposed building and to the west face of the adjacent apartment building to the east;
- the Cambie Road and McKim Way frontages include terraced landscaping to provide an appropriate relationship with the street; and
- in addition to the fitness centre and a multipurpose room on the first floor, a common amenity room will be provided on each floor of the proposed building.

Development Permit Panel

Wednesday, February 15, 2023

Yiwen Ruan, PMG Landscape Architects, briefed the Panel on the main landscape features of the project with the aid of a visual presentation (attached to and forming part of these minutes as Schedule 2), noting that (i) 38 existing trees on the site will be removed and 79 new trees will be planted, (ii) curved retaining walls with planters are proposed along the south edge to provide transition from McKim Way to the proposed building, (iii) the pedestrian entries on McKim Way are marked with pedestrian scale lighting, (iv) an architectural trellis is proposed above the parkade entry, (v) the loading area is screened from McKim Way by raised planters, (vi) the subject site's grade along the west side is matched to the site grade of the adjacent townhouse development and trees and tall shrubs are proposed to provide screening and privacy, (vii) terraced planter walls and trees are proposed along the north edge of the subject site to provide transition from Cambie Road to the proposed building, (viii) a landscape boulder feature, bench seating and bicycle rack are proposed near the pedestrian lobby entrance, (ix) terraced planter walls, one row of trees, and lounge seats are provided along the east edge of the subject site to provide a quiet and resting zone for the proposed development and privacy to the two adjacent properties, (x) the outdoor amenity area on the podium includes, among others, a children's play area, a large lawn, and an outdoor dining area, (xi) the community gardens in the southern portion of the subject site will be fenced and gated, and (xii) permanent irrigation will be provided for all landscaped areas in the proposed development.

Panel Discussion

In reply to queries from the Panel, Mr. Chow and Mr. Ruan noted that (i) the green space adjacent to the parkade entry and loading area is elevated and will not be accessible to the public, (ii) the proposed children's play area includes a large open lawn area and multiple play structures that provide play opportunities for children with ages ½ to 12 years, (iii) a three- to four-foot wide rainwater percolation zone is provided along the east and west edges of the subject site, (iv) downward focused and low lighting are proposed throughout the subject site which include bollard lights, step lights and unity entry downward lights to provide adequate lighting and avoid light pollution, and (v) there are penthouse units with outdoor decks provided on the 5th floor along Cambie Road.

Development Permit Panel

Wednesday, February 15, 2023

Staff Comments

Wayne Craig, Director, Development, noted that (i) there is a Servicing Agreement associated with the project which includes, among others, frontage improvements along Cambie Road and road construction of McKim Way extension through the subject site, (ii) the proposed variance to reduce the minimum width of one manoeuvring aisle is limited to a portion of the parkade, was reviewed and supported by Transportation staff, and would not adversely impact traffic mobility within the parkade, (iii) the proposed variance to increase the maximum lot coverage of buildings is a technical variance associated with balcony projections and columns supporting the balcony projections which assist in achieving energy efficiency, (iv) the building has been designed to achieve BC Step Code Level 3, (v) the package of Transportation Demand Measures (TDM) associated with the project includes, among others, provision of one-year 2-zone monthly transit passes to 25 percent of the market units and 100 percent of affordable units, provision of a bicycle maintenance and repair room in the development, provision of two car share vehicle spaces equipped with electric vehicle (EV) charging, and provision of voluntary cash contributions for wayfinding and cycling-related infrastructure in the West Cambie area.

In reply to queries from the Panel, Mr. Craig confirmed that (i) there is an existing north-south pedestrian walkway adjacent to the proposed community gardens, (ii) the walkway will be improved as part of the Servicing Agreement, and (iii) the proposed lot coverage variance is associated with the balcony columns which help thermal bridging for the balconies and enhance energy efficiency.

Correspondence

None.

Gallery Comments

Shaun Traill, a resident of the six-storey apartment building (i.e., REMY building) to the east of the subject site, sought clarification regarding (i) the proposed variance in lot coverage from 40 to 43 percent, (ii) the proposed affordable housing units, and (iii) whether there is public access along the east side of the proposed development adjacent to the REMY building.

In reply to Mr. Traill's queries, Mr. Craig noted that (i) the proposed increase of 3 percent in lot coverage is associated with columns that support balconies on the second floor of the subject building and enhance energy efficiency, (ii) the proposed five affordable housing units in the project are low-end market rental units secured by housing agreement with the City and could be occupied by qualified tenants meeting the City's income requirements, and (iii) there is no public access along the east side of the subject building.

Development Permit Panel

Wednesday, February 15, 2023

Huang Wen Zheng, 4133 Stolberg Street, queried regarding the distance of the proposed building from the REMY building and expressed concern regarding fire truck access in the parkade as it relates to the proposed variance in minimum width of one manoeuvring aisle in the parkade.

In reply to Mr. Huang's queries, the Chair noted that the proposed building's setback from the common property line is larger than the building setback provided on the REMY building.

In addition, Mr. Craig noted that (i) the minimum required setback from the common property line is 4 meters, (ii) the central portion of the subject building is set back 10.4 meters from the east property line and the proposed building setback at the north and south ends of the proposed building is 4 meters, (iii) there is no need for fire truck access in the parkade, (iv) a fire suppression system will be installed in the proposed building that meets the City's Building Code requirements, and (v) the proposed manoeuvring aisle variance is limited to the eastern side of the parkade which is occupied only by small cars.

Mr. Huang also expressed concern regarding the height of the proposed building, its potential impact on sunlight exposure to the adjacent REMY building particularly during winter, and the width of the roads in the neighbourhood.

With regard to the concern on the height of the proposed building and road width, the Chair noted that (i) the proposed height of the building is a zoning issue which is not within the purview of the Panel, and (ii) the roads in the neighbourhood have been designed to accommodate the proposed development in accordance with the master plan for the neighbourhood.

With regard to the potential shadow impact of the proposed building on the adjacent REMY building, Mr. Craig referenced the shadow analyses for the project, noting that the two buildings will cast a shadow on each other during winter and confirmed that the amount of shading on the proposed development from the taller REMY building would be greater. In addition, Mr. Craig noted that the proposed building has been pulled back as far as possible from the east property line to mitigate shadowing impacts.

Panel Discussion

The Panel expressed support for the project, noting that (i) the project has been sensitively designed to provide an appropriate interface with existing adjacent developments and the adjacent streets, and (ii) the proposed outdoor amenity spaces are well thought out.

The Panel then directed staff to work with the applicant to address potential security issues with respect to the proposed community gardens on the southern portion of the subject site.

Development Permit Panel
Wednesday, February 15, 2023

Panel Decision

It was moved and seconded

That a Development Permit be issued which would:

1. *permit the construction of 126 residential units in a five-storey multi-family apartment building over a common parkade at 9300 and 9320 Cambie Road on a site zoned "Low Rise Apartment (ZLR43) – Alexandra Neighbourhood (West Cambie)".*
2. *vary the provisions of Richmond Zoning Bylaw 8500 to:*
 - (a) *increase the maximum lot coverage of buildings from 40 to 43 per cent; and*
 - (b) *reduce the minimum width of one manoeuvring aisle in the parkade from 6.7 m to 6.4 m.*

CARRIED

2. New Business

It was moved and seconded

That the Development Permit Panel meeting tentatively scheduled on Wednesday, March 1, 2023 be cancelled.

CARRIED

3. Date of Next Meeting: March 15, 2023

ADJOURNMENT

It was moved and seconded

That the meeting adjourn (4:39 p.m.).

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Development Permit Panel of the Council of the City of Richmond held on Wednesday, February 15, 2023.

Joe Erceg
Chair

Rustico Agawin
Committee Clerk



LIST OF IMAGES

- 1** TITLE SCREEN
- 2** SITE CONTEXT & PARCELING
- 3** EXISTING CAMBIE ROAD FRONTAGE
- 4** EXISTING MCKIM WAY FRONTAGE
- 5** DEVELOPMENT STATISTICS
- 6** SITE DESIGN CONTEXT 1
- 7** SITE DESIGN CONTEXT 2
- 8** SITE DESIGN CONTEXT 3
- 9** EAST-WEST SITE & BUILDING SECTION
- 10** BUILDING SECTION AT ENTRIES
- 11** BUILDING SECTION AT TOWNHOUSES
- 12** SHADOW STUDY AT 6-STOREY REMY
- 13** ACTUAL MATERIAL SAMPLES & COLOURS
- 14** RENDERING: AERIAL VIEW AT CAMBIE ROAD
- 15** RENDERING: AERIAL VIEW AT MCKIM WAY
- 16** RENDERING: STREET LEVEL VIEW AT CAMBIE ROAD
- 17** RENDERING: STREET LEVEL VIEW AT MCKIM WAY
- 18** PARKADE FLOOR PLAN
- 19** MAIN FLOOR PLAN



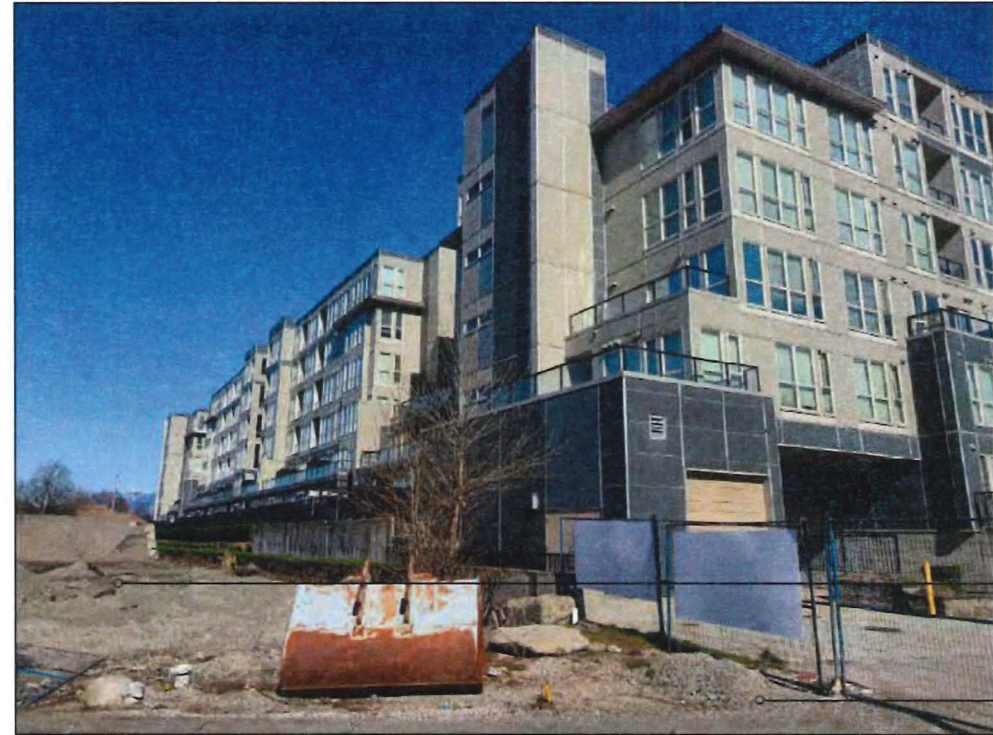
1 - Cambie St looking south east



1 - Cambie St looking south west



3 - Mckim Way looking north east



4 - Mckim Way looking north east

FLOOR AREA BREAKDOWN SUMMARY			
LEVELS	GROSS (m ² & ft ²)	EXEMPTIONS	NET (FAR)
L1	2,570.0 m ² (27,664 ft ²)	422.6 m ² (4,550 ft ²)	2,147.4 m ² (23,114 ft ²)
L2	2,575.0 m ² (27,717 ft ²)	128.1 m ² (1,379 ft ²)	2,446.9 m ² (26,338 ft ²)
L3	2,575.0 m ² (27,717 ft ²)	128.1 m ² (1,379 ft ²)	2,446.9 m ² (26,338 ft ²)
L4	2,575.0 m ² (27,717 ft ²)	128.1 m ² (1,379 ft ²)	2,446.9 m ² (26,338 ft ²)
L5	2,031.7 m ² (21,869 SF)	97.6 m ² (1,050 ft ²)	1,934.1 m ² (20,819 ft ²)
TOTALS	12,326.7 m ² (132,684 ft ²)	904.5 m ² (9,737 ft ²)	11,422.2 m ² (122,947 ft ²)

AHU & BUH SUMMARY						
AFFORDABLE LEMR HOUSING UNITS (AHU) / BASIC UNIVERSAL HOUSING UNITS (BUH) *ALL AHU ARE BUH						
UNIT NUMBER	NO. OF UNITS	UNIT TYPE	BUH	AHU	MIN. AHU SIZE REQ'	UNIT SIZE PROPOSED
225, 325, 425.	3	A2-U	●		—	61.67 m ²
103, 120.	2	C1-U	●	●	69 m ²	74.68 m ²
101, 107, 116, 122, 202, 208, 217, 223, 302, 308, 317, 323, 402, 408, 417, 423, 502, 508, 512, 518.	20	D1-U			—	87.14 m ²
115, 216, 316, 416.	4	D2-U	●		—	87.51 m ²
214, 314, 414.	3	E1-U	●		—	94.30 m ²
224, 324, 424.	3	E3-U	●	●	91 m ²	100.99 m ²
519.	1	E3-U	●		—	100.99 m ²
TOTAL	36					

WASTE MANAGEMENT SUMMARY			
	NO. OF BINS	AREA REQ PER BIN (m ²)	TOTAL AREA REQ (m ²)
MIXED CONTAINERS	6	1.26	7.56
REFUNDABLES	3	0.97	2.91
MIXED PAPER	4	1.26	5.04
GLASS	1	0.97	0.97
FOOD SCRAPS	5	0.97	4.85
CARDBOARD	1	4.88	4.88
GARBAGE	3	7.57	23.01
			49.22

UNIT MIX SUMMARY										
ROOM TYPE	UNIT TYPE	ft ²	L1	L2	L3	L4	L5	TOTAL UNITS NO.	TOTAL (ft ²)	UNIT MIX
1B	A1	634		1	1	1		3	1,902	
	A2-U	667		1	1	1		3	2,001	
								6	3,903	5%
1B + D	B1	651	1	1	1	1		4	2,604	
	B2	652		1	1	1	1	4	2,636	
	B3	660	1					1	660	
	B4	667		1	1	1		3	2,061	
	B5	707		1	1	1		3	2,121	
	B6	736	1					1	736	
								16	10,820	13%
2B	C1-U	806	2					2	1,612	
	C2.1	806		2	2	2	2	8	6,448	
	C2.2	801	2	2	2	2	2	10	8,010	
	C3.1	858	6	6	6	6	4	28	24,024	
	C3.2	851	2	2	2	2	2	10	8,510	
	C4	875	1	1	1	1		4	3,500	
	C5	986		1	1	1		3	2,956	
								65	55,062	51%
2B + D	D1-U	938	4	4	4	4	4	20	18,760	
	D2-U	942	1	1	1	1		4	3,766	
	D3	1,082					1	1	1,082	
								25	23,610	20%
3B	E1-U	1,015		1	1	1		3	3,045	
	E2	1,049	1	1	1	1		4	4,196	
	E3-U	1,087		1	1	1		3	4,348	
	E4	1,163					1	1	1,163	
	E5	1,344					1	1	1,344	
								13	1,344	10%
3B + D	F1	1,639					1	1	1,639	1%
								1	1,639	1%
TOTAL			22	28	28	28	20	126	96,378	100%

AVERAGE SITE GRADE CALCULATION					
	NE	NW	SE	SW	AVERAGE
SITE A (MAIN)	1.93	1.96	2.13	2.08	2.025 m
SITE B (REMNANT)	2.35	2.15	-	2.47	2.323 m
					AVERAGE FINISHED GRADE 2.17 m

ZONING SUMMARY			Zoning Bylaw No. 8500
LOT ZONING	PERMITTED (REQUIRED)	PROJECT SPECIFICS (PROPOSED)	
USES	RS1 / F (EXISTING)	ZLR43 (LOW-RISE APARTMENT)	
DENSITY (MAX)	MEDIUM DENSITY HOUSING (OCP) 1.50 FAR (BASE MKT HSG) = 10,104 m ² + 0.2 (1/3 ALH = 0.067 = 449.06 m ² MIN) & (2/3 MKT = 0.133 = 896.13 m ² MAX)	APARTMENT HOUSING 1.50 FAR (BASE MKT HSG) = 10,104 m ² + 0.067 ALH (452.7 m ²) + 0.131 MKT (860.25 m ²)	
	TOTAL ALLOWABLE MAX FAR: + 0.1 INTERIOR AMENITY = 673.6 m ² MAX	TOTAL PROPOSED FAR: + 0.0814 INTERIOR AMENITY = 548.5 m ² + 0.0814 (2,842 m ² / 6,738 m ²)	
LOT COVERAGE	40% MAXIMUM	40% MAXIMUM	
MIN BUILDING SETBACKS	7.5 m (MCKIM WAY); 4.0 m (CAMBIE ROAD)	7.5 m (MCKIM WAY); 4.0 m (CAMBIE ROAD)	
MIN PARKADE SETBACKS	7.5 m (MCKIM WAY); 2.0 m (CAMBIE ROAD)	7.5 m (MCKIM WAY); 2.0 m (CAMBIE ROAD)	
STAIR SETBACKS	1.5 m MINIMUM AT PUBLIC ROAD	1.5 m AT PUBLIC ROAD	
BUILDING HEIGHT MAX.	5 STOREYS, 19.5 m	19.5 m, 5 STOREYS OVER BSMT PARKADE	
FCL	2.6 m GSC (PER OCP WEST CAMBIE)	2.6 m GSC	
PARKING	192 SPACES (AFTER 10% TDM REDUX) * R: 164 SP = 1.5 PER 121 MKT UNITS * R: 5 SP = 1.0 PER 5 AHU UNITS * V: 23 SP = 0.2 PER 126 RESID UNITS	193 SPACES = 1.523 SP/UNIT * 164 RESID MARKET UNITS * 5 RESID AFFORDABLE UNITS * 24 VISITOR (INCLUDE 2 CAR SHARE)	
MIN AMENITY SPACE (14.4.5.D)	MIN. 100 m ² (INDOOR) 6 m ² /UNIT (756 m ²) COMMON OUTDOOR 3 m ² /UNIT (378 m ²) CHILDREN'S PLAY 6 m ² PRIVATE OUTDOOR SPACE	548.5 m ² = 0.0814 FAR (INDOOR) 853.1 m ² COMMON OUTDOOR (USABLE) 384.3 m ² CHILDREN'S PLAY MIN. 6.3 m ² PER UNIT	
MECHANICAL SPACE	100 m ² MAX.	96 m ²	
AFFORDABLE LEMR HOUSING (AHU) UNITS	449.06 m ² MINIMUM* = ONE THIRD OF 0.2 BONUS FAR = 0.0666667 FAR * TO BE BUILT, # UNITS EXCEED 60	452.7 m ² (5 UNITS, 2 x 2BR, 3 x 3BR)* * SEE SUMMARY TABLE * ALL AHU UNITS ARE ALSO BUH UNITS	
BASIC UNIVERSAL HOUSING (BUH) UNITS	10% (PER OCP GUIDELINES) TARGET 85% OF ALL LEMR UNITS	29% = 36 UNITS OUT OF 126 UNITS TOTAL	



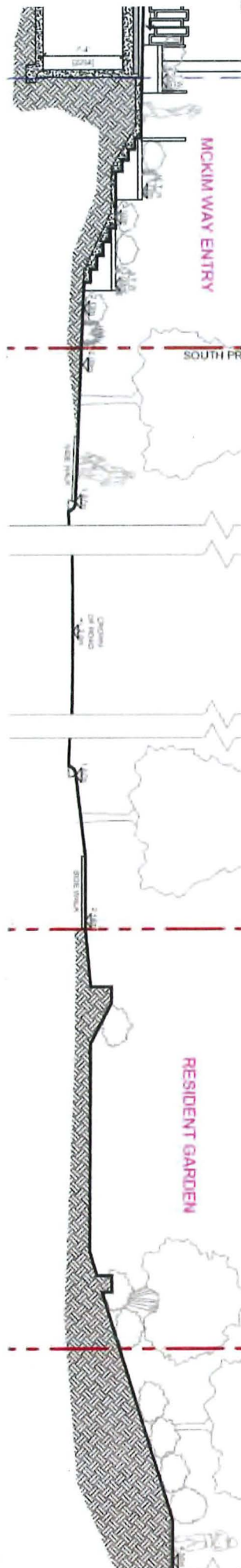




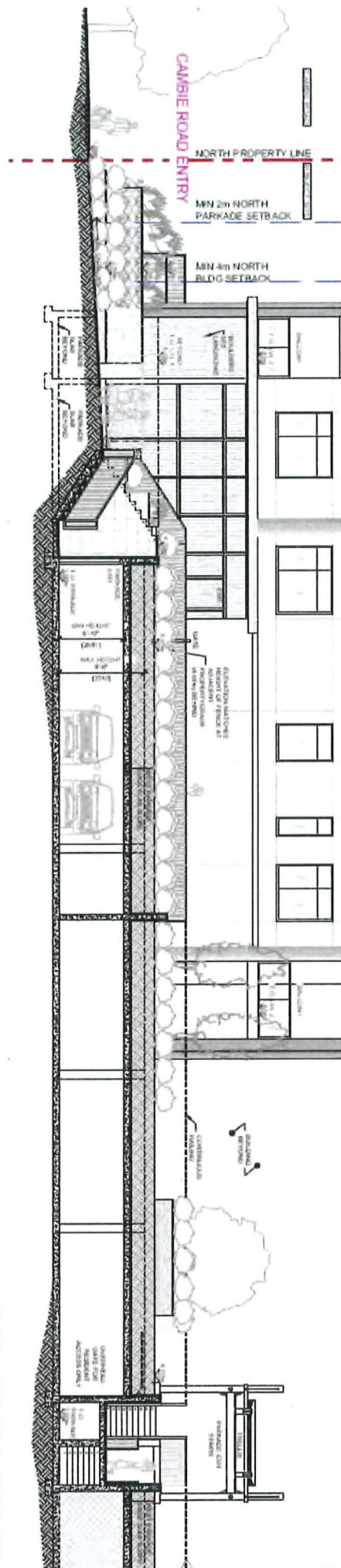
AERIAL VIEW - LOOKING FROM NORTH EAST



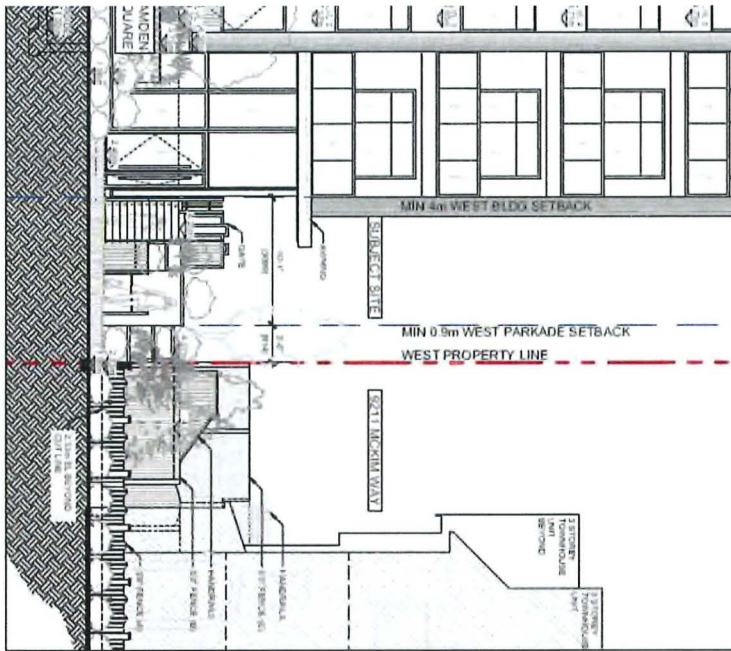
AERIAL VIEW - LOOKING FROM NORTH WEST



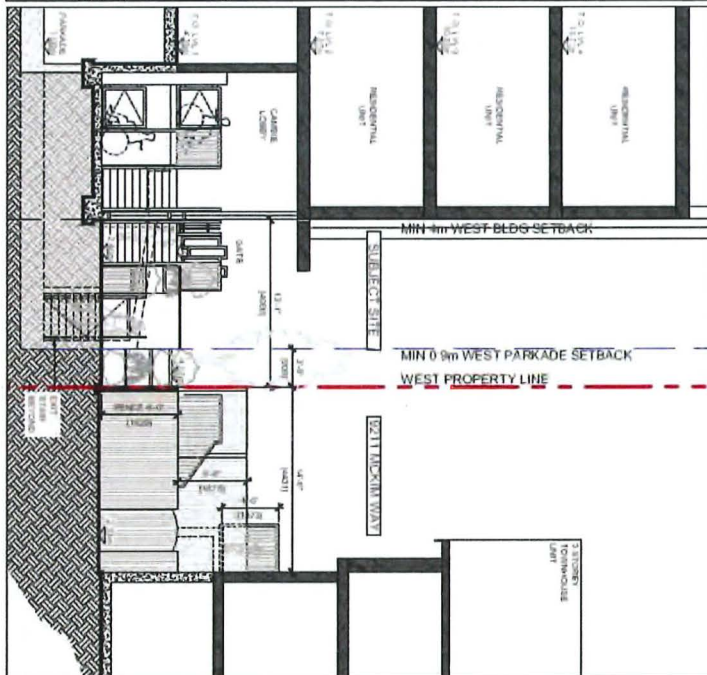
SECTION B: LOOKING EAST
SCALE 3/16" = 1'-0"



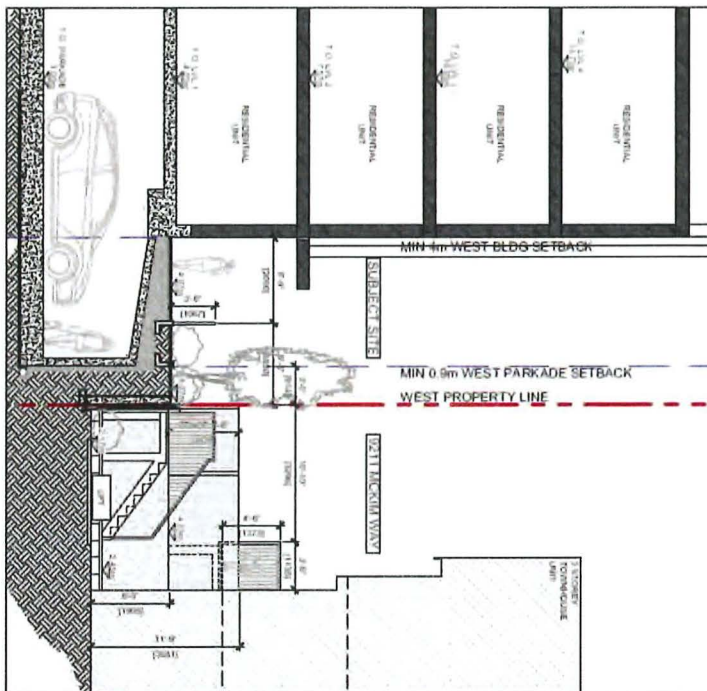
SECTION E: AT NORTH PL. LOOKING EAST
SCALE 3/16" = 1'-0"



SECTION F: AT NORTH PL LOOKING SOUTH



SECTION G: LOOKING SOUTH



SECTION H: LOOKING SOUTH



MARCH 21 1PM



MARCH 21 2PM



MARCH 21 3PM



MARCH 21 4PM



MARCH 21 5PM



MARCH 21 6PM

SHADOWING ON REMY WEST FACE (SOUTH END, MCKIM WAY) - SPRING EQUINOX (1PM TO 6PM)



JUNE 21 1PM



JUNE 21 2PM



JUNE 21 3PM



JUNE 21 4PM

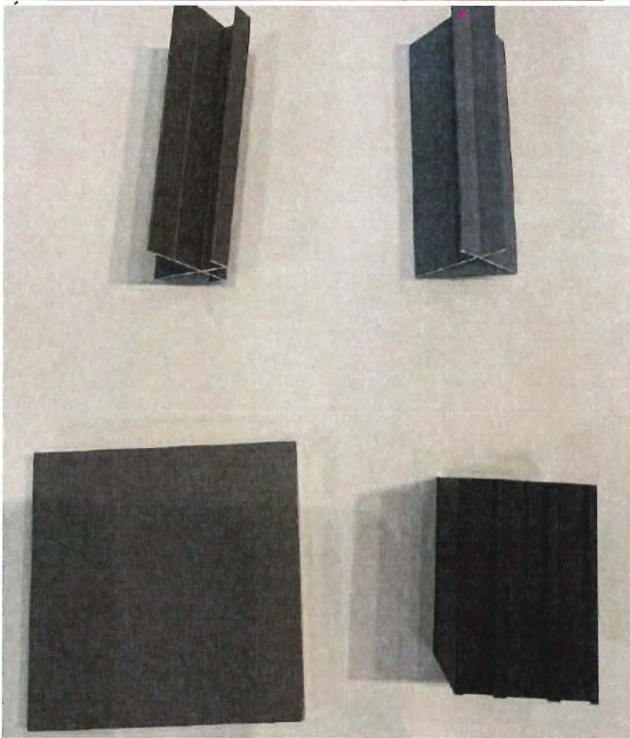


JUNE 21 5PM



JUNE 21 6PM

SHADOWING ON REMY WEST FACE (SOUTH END, MCKIM WAY) - SUMMER SOLSTICE (1PM TO 6PM)

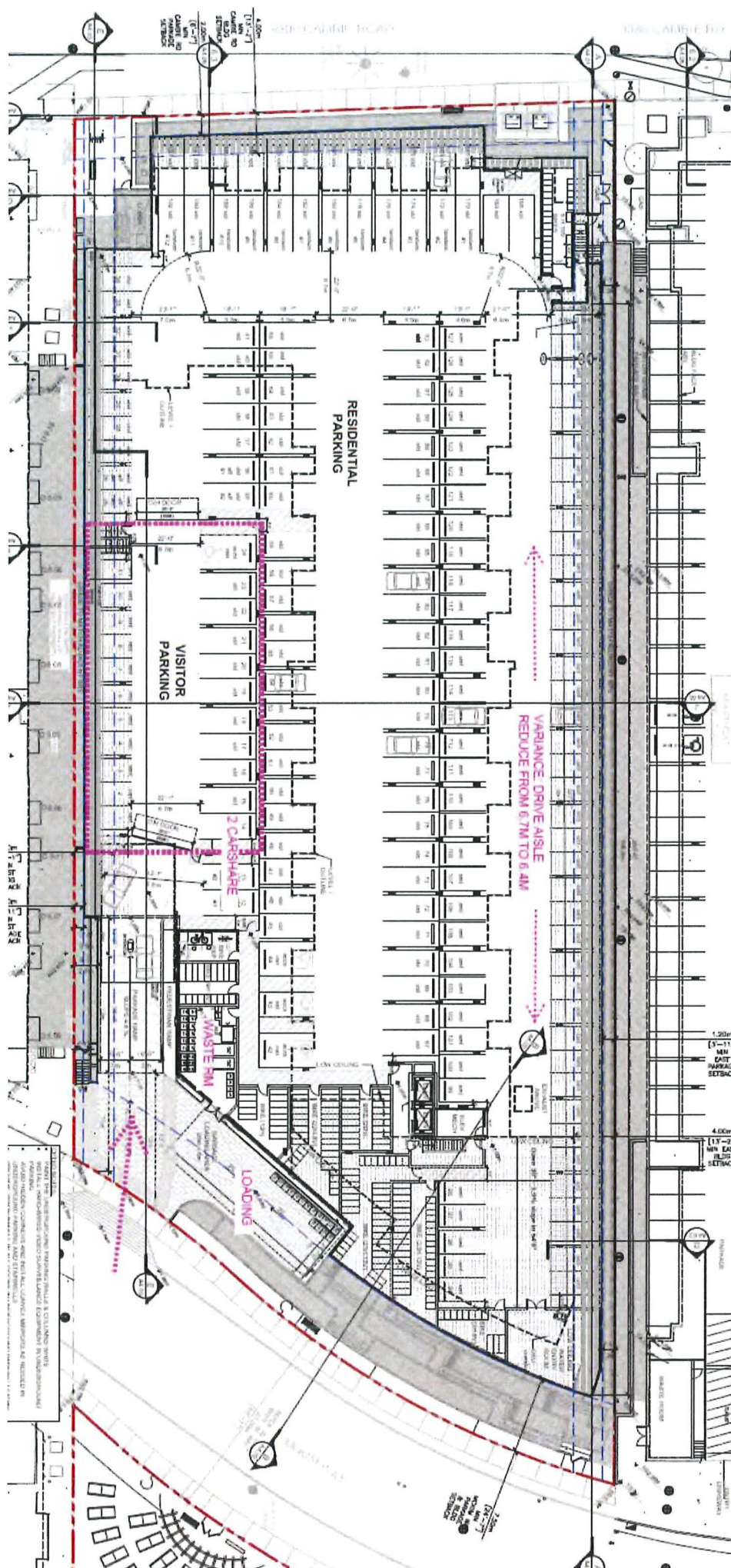


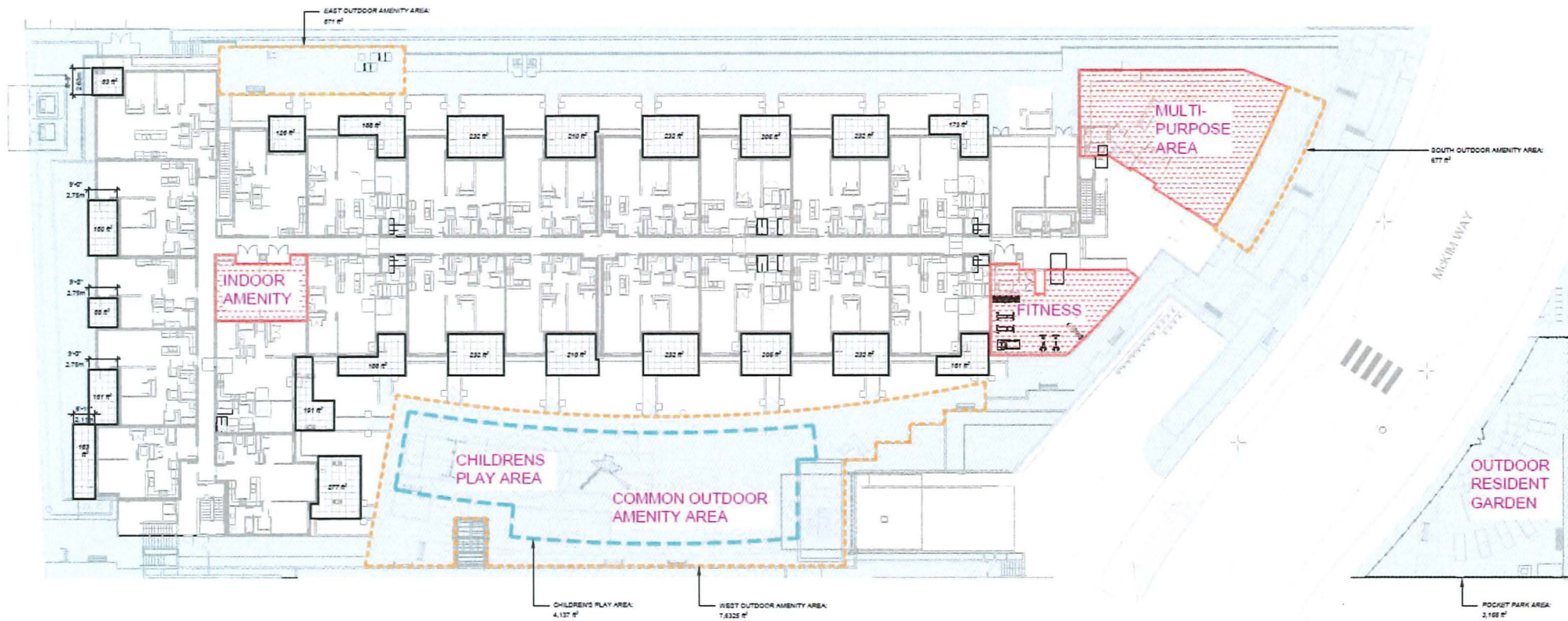












Schedule 2 to the Minutes of the
Development Permit Panel
meeting held on Wednesday,
February 15, 2023

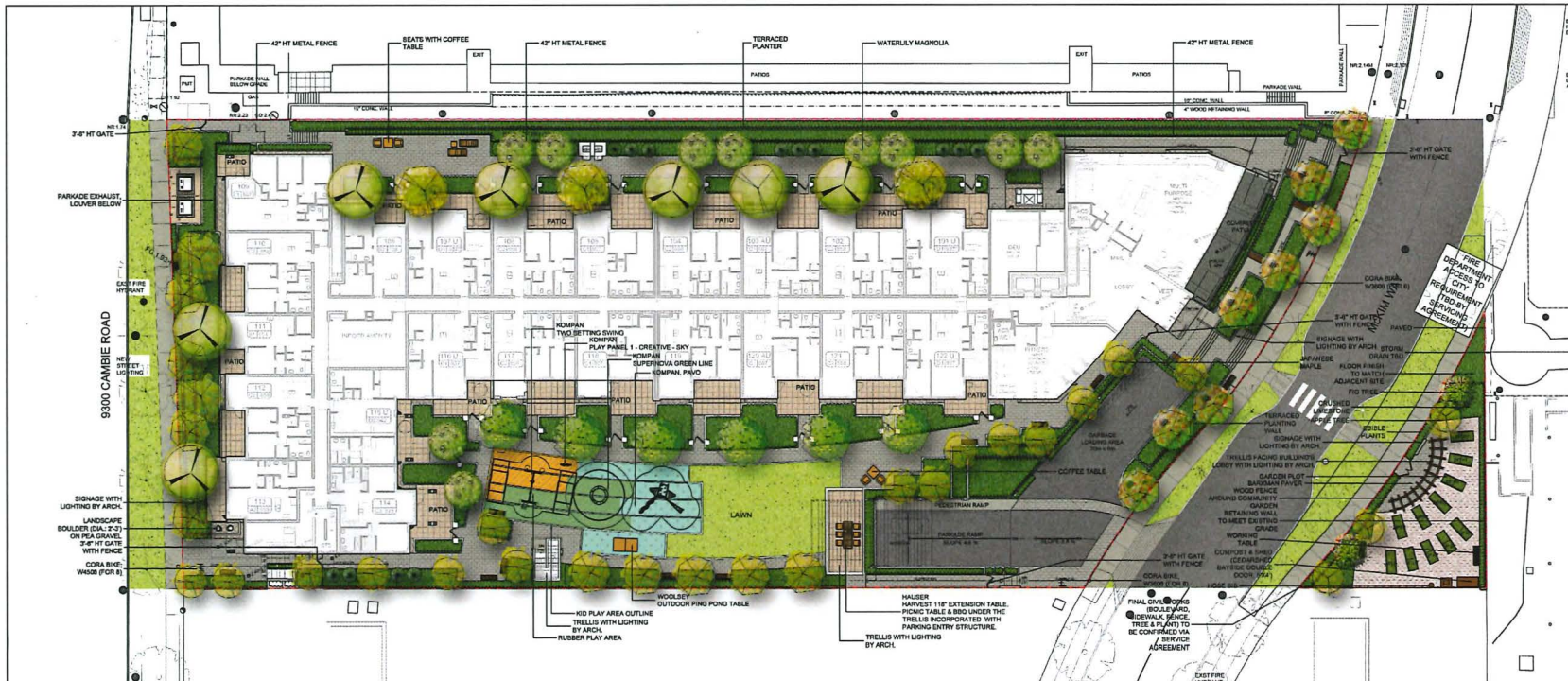
PLANT SCHEDULE - ONSITE				PMG PROJECT NUMBER: 19-151
KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
8	1	ACER CIRCINATUM	VINE MAPLE	4M HT; B&B; 3 STEM CLUMP
15	1	ACER PALMATUM	JAPANESE MAPLE	4M HT; B&B
8	1	ACER RUBRUM 'ARMSTRONG'	COLUMNAR ARMSTRONG MAPLE	8CM CAL; 2M STD; B&B
6	1	CERCIDIPHYLLUM JAPONICUM	KATSURA TREE	8CM CAL; 1.8M STD; B&B
10	1	FAGUS SYLVATICA 'DAWYCK GOLD'	DAWYCK GOLD BEECH	8CM CAL; B&B
6	1	GLEDITSIA T. INERMIS 'SKYLINE'	SKYLINE HONEY LOCUST	8CM CAL; 1.8M STD; B&B
10	1	AMELANCHIER X GRANDIFLORA	SERVICEBERRY	8CM CAL; 1.5M STD; B&B
13	1	PICEA GLAUCA	WHITE SPRUCE	4M HT; B&B

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNLA STANDARD. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY. * ALL LANDSCAPE MATERIAL AND WORKMANSHIP MUST MEET OR EXCEED BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD LATEST EDITION. * ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. * BIO-SOLIDS NOT PERMITTED IN GROWING MEDIUM UNLESS AUTHORIZED BY LANDSCAPE ARCHITECT.

NOTE: ONSITE IRRIGATION FOR ALL SOFT LANDSCAPE WILL BE INSTALLED

PLANT SCHEDULE - COMMUNITY GARDEN				PMG PROJECT NUMBER: 19-151
KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE	3	FICUS CARICA	COMMON FIG	8CM CAL; 1.5M STD; B&B
	2	MALUS DOMESTICA 'FUJI'	FUJI APPLE	8CM CAL; 1.5M STD; B&B

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNLA STANDARD. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY. * ALL LANDSCAPE MATERIAL AND WORKMANSHIP MUST MEET OR EXCEED BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD LATEST EDITION. * ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. * BIO-SOLIDS NOT PERMITTED IN GROWING MEDIUM UNLESS AUTHORIZED BY LANDSCAPE ARCHITECT.



PL

0 10 20 50 100 FT

DP PLAN #3

19151-9.2P

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SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
13	2022/10/24	CITY COMMENTS/NEW SITE PLAN	WE
12	2022/10/23	NEW SITE PLAN	WE
11	2022/09/26	ADP COMMENTS	WE
10	2022/09/20	PARADE EXHAUST	WE
9	2022/09/09	ISSUE FOR ADP	WE
8	2022/08/18	NEW SITE PLAN	WE
7	2022/07/25	CITY COMMENTS & NEW SITE PLAN	WE & N
6	2022/07/14	EAST PARADE LINE	WE
5	2022/06/29	NEW SITE PLAN	WE
4	2022/06/17	NEW SITE PLAN	WE
3	2022/05/29	NEW SITE PLAN - COMMUNITY GARDEN	WE
2	2022/05/23	NEW SITE PLAN AND CITY COMMENTS	WE
1	2022/05/09	CLIENT COMMENTS AND NEW SITE PLAN	WE

CLIENT:

PROJECT:

RESIDENTIAL DEV.

9300 & 9320 CAMBIE RD.
RICHMOND, BC

DRAWING TITLE:

LANDSCAPE
PLAN

DATE: 20.FEB.27

SCALE: 1/20"=1'-0"

DRAWN: YR

DESIGN: YR

CHKD: MCV

DRAWING NUMBER:

L1

OF 10

PMG PROJECT NUMBER:

19-151

PLANT SCHEDULE - ONSITE

PMG PROJECT NUMBER: 19-151

KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
6	1	ACER CIRCINATUM	VINE MAPLE	4M HT; B&B; 3 STEM CLUMP
15	1	ACER PALMATUM	JAPANESE MAPLE	4M HT; B&B
8	1	ACER RUBRUM 'ARMSTRONG'	COLUMNAR ARMSTRONG MAPLE	8CM CAL; 2M STD; B&B
6	1	CERCIDIPHYLLUM JAPONICUM	KATSURA TREE	8CM CAL; 1.8M STD; B&B
10	1	FAGUS SYLVATICA 'DAWYCK GOLD'	DAWYCK GOLD BEECH	8CM CAL; B&B
6	1	GLEDITSIA T. INERMIS 'SKYLINE'	SKYLINE HONEY LOCUST	8CM CAL; 1.8M STD; B&B
10	1	AMELANCHIER X GRANDIFLORA	SERVICEBERRY	8CM CAL; 1.5M STD; B&B
13	1	PICEA GLAUCA	WHITE SPRUCE	4M HT; B&B

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNLA STANDARD. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY. * ALL LANDSCAPE MATERIAL AND WORKMANSHIP MUST MEET OR EXCEED BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD LATEST EDITION. * ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. * BIO-SOLIDS NOT PERMITTED IN GROWING MEDIUM UNLESS AUTHORIZED BY LANDSCAPE ARCHITECT.

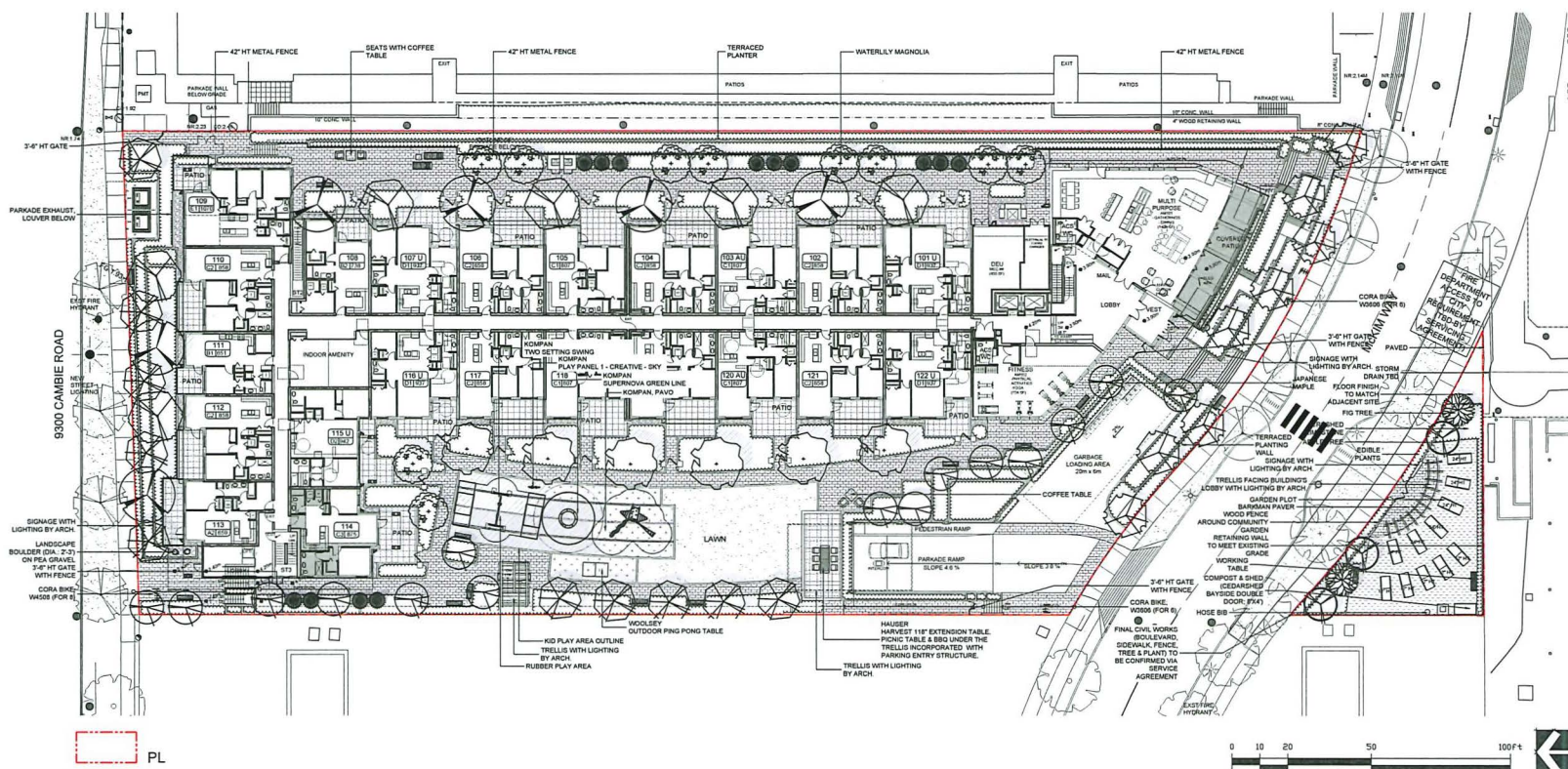
NOTE: ONSITE IRRIGATION FOR ALL SOFT LANDSCAPE WILL BE INSTALLED

PLANT SCHEDULE - COMMUNITY GARDEN

PMG PROJECT NUMBER: 19-151

KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE	3	FICUS CARICA	COMMON FIG	8CM CAL; 1.5M STD; B&B
2	2	MALUS DOMESTICA 'FUJI'	FUJI APPLE	8CM CAL; 1.5M STD; B&B

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNLA STANDARD. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY. * ALL LANDSCAPE MATERIAL AND WORKMANSHIP MUST MEET OR EXCEED BC LANDSCAPE STANDARD AND CANADIAN LANDSCAPE STANDARD LATEST EDITION. * ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. * BIO-SOLIDS NOT PERMITTED IN GROWING MEDIUM UNLESS AUTHORIZED BY LANDSCAPE ARCHITECT.



NO.	DATE	REVISION DESCRIPTION	DR.
13	2022/04/14	CITY COMMENTS/NEW SITE PLAN	WZ
12	2022/04/12	NEW SITE PLAN	WZ
11	2022/04/10	ADP COMMENTS	WZ
10	2022/04/10	PARADE EXHAUST	WZ
9	2022/04/08	ISSUE FOR ADP	WZ
8	2022/04/06	NEW SITE PLAN	WZ
7	2022/04/05	CITY COMMENTS & NEW SITE PLAN	WZ & WZ
6	2022/04/04	EAST PARADE LINE	WZ
5	2022/04/02	NEW SITE PLAN	WZ
4	2022/04/01	NEW SITE PLAN	WZ
3	2022/03/29	NEW SITE PLAN COMMUNITY GARDEN	WZ
2	2022/03/28	NEW SITE PLAN AND CITY COMMENTS	WZ
1	2022/03/28	CLIENT COMMENTS AND NEW SITE PLAN	WZ

CLIENT:

PROJECT:

RESIDENTIAL DEV.

9300 & 9320 CAMBIE RD.
RICHMOND, BC

DRAWING TITLE:

LANDSCAPE
PLAN

DATE: 20 FEB 27 DRAWING NUMBER:

SCALE: 1/20"=1'-0"

DRAWN: YR

DESIGN: YR

CHKD: MCY

L1

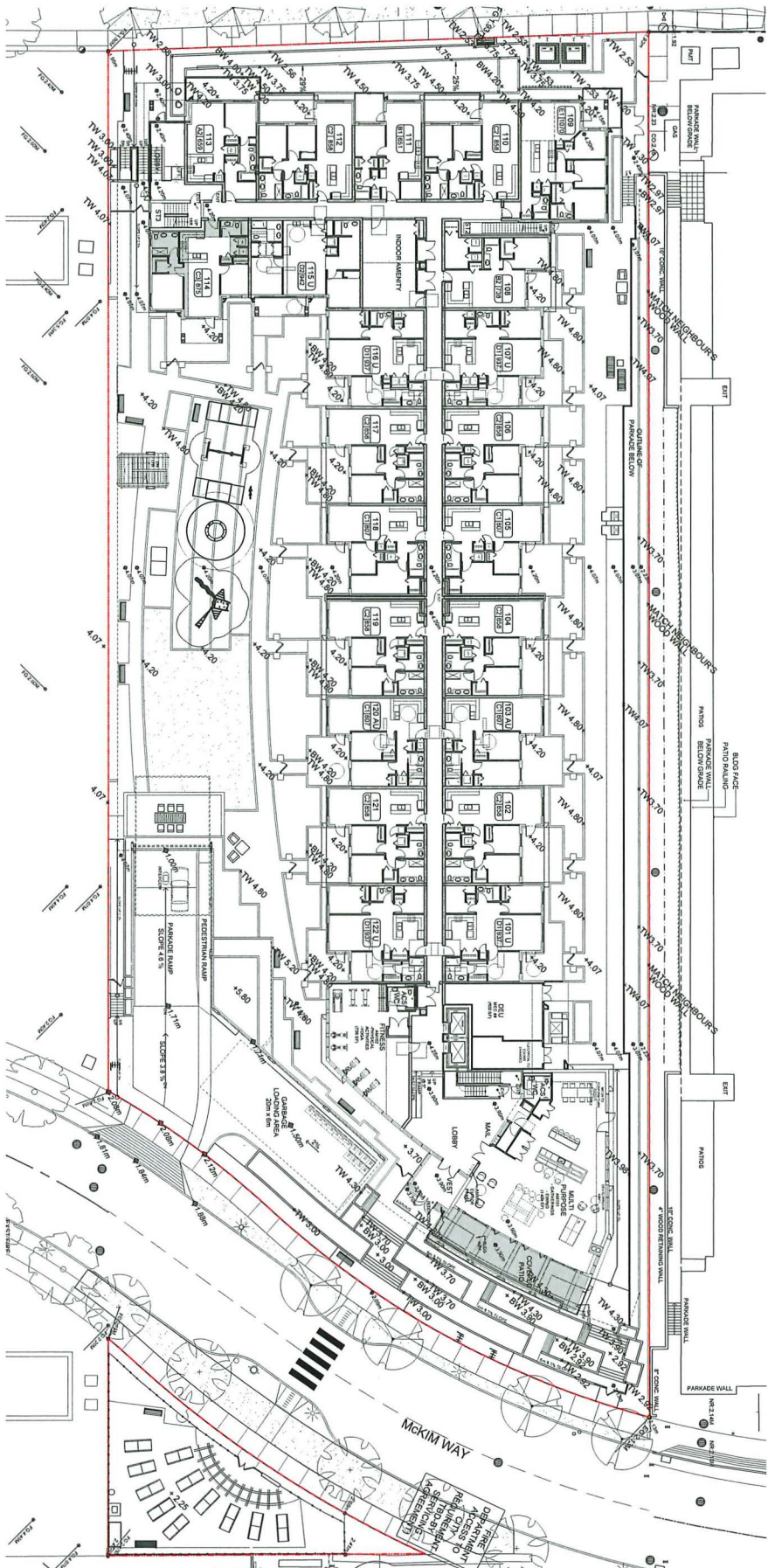
OF 10

DP PLAN # 3a

19151-9-2P

PMG PROJECT NUMBER:

19-151



PL



DP PLAN # 3b

DATE: 2018.07.27
SCALE: 1/8" = 1'-0"
DRAWN: YH
DESIGN: YH
CHECK: MCV
DRAWING NUMBER: L2
OF 10
PAC PROJECT NUMBER: 19-151

DRAWING TITLE:
GRADING PLAN

PROJECT:
RESIDENTIAL DEV.
9300 & 9320 CAMBIE RD.
RICHMOND, BC

CLIENT: REVISION DESCRIPTION

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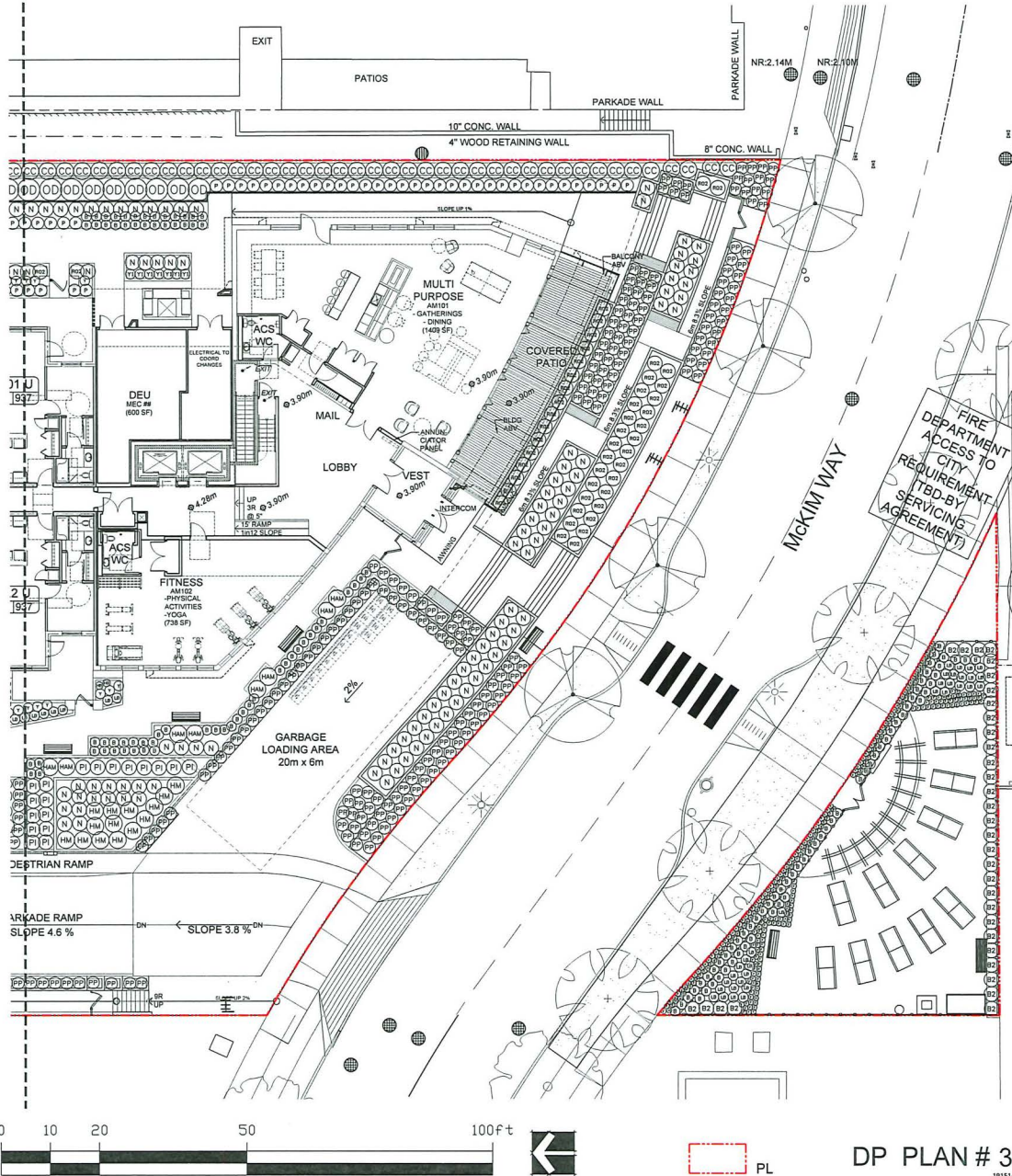
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MATCHING LINE

PLANT SCHEDULE				PMG PROJECT NUMBER: 19-151			
	KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS		
GR	450		BLUX MICROPHYLLA 'WINTER GREEN'	LITTLE LEAF BOX	#3 POT; 40CM		
	120		CHOISYA TERNATA SUNDANCE	MEXICAN MOCK ORANGE	#3 POT; 50CM		
	104		CORNUS SERICEA 'KELSEY'	DWARF KELSEY DOGWOOD	#3 POT; 80CM		
	256		HEBE PINQUILA 'SUTHERLANDII'	SUTHERLAND HEBE	#2 POT; 40CM		
	53		HYDRANGEA MACROPHYLLA 'ENDLESS SUMMER'	ENDLESS SUMMER BIGLEAF HYDRANGEA	#3 POT; 80CM		
	26		HYDRANGEA PANICULATA 'LIMELIGHT'	LIMELIGHT HYDRANGEA; LIMEGREEN-PINK	#3 POT; 80CM		
	318		NANDINA DOMESTICA MOONBAY	DWARF HEAVENLY BAMBOO	#3 POT; 50CM		
	56		OSMANTHUS DELAVAYI	FALSE HOLLY	#3 POT; 50CM		
	290		PRUNUS LAUROCEASUS 'OTTO LUYKEN'	OTTO LUYKEN LAUREL	#3 POT; 50CM		
	62		RHOODODENDRON 'CAPISTRANO'	HYBRID RHOODODENDRON; PALE YELLOW	#3 POT; 50CM		
	220		TAXUS X MEDIA 'HICKSI'	HICKS YEW	1.0M B&B		
	30		TAXUS X MEDIA 'HICKSI' (1.5M HT)	HICKS YEW	1.5M B&B		
GR	33		VACCINIUM 'POLARIS'	POLARIS BLUEBERRY	#3 POT; 60CM		
	88		CAREX ELATA 'AUREA'	BOWLES' GOLDEN SEDGE	#1 POT		
	127		HELIOTRICHON SEMPERVIRENS	BLUE OAT GRASS	#1 POT		
	54		OPHIPOGON PLANISCAPUS 'NIGRESCENS'	BLACK MONDO GRASS	#1 POT		
	PERSONAL	78		EUPHORBIA CHARACIAS SSP. 'WULFENII'	CHARACIAS SPURGE	15CM POT	
		112		LAURENTIDA ANGUSTIFOLIA 'HODGOTE BLUE'	ENGLISH LAVENDER; COMPACT; DEEP PURPLE	15CM POT	
		53		PEROVSKIA ATRIPLICIFOLIA 'BLUE SPIRE'	RUSSIAN SAGE	#2 POT	
		195		RUBUS CALYCAIDOIDES	CREeping RASPBERRY	#1 POT	
		57		SEDUM 'AUTUM JOY'	AUTUM JOY STONECROP	9CM POT	
		GC	278		FRAGARIA CHILOENSIS	BEACH STRAWBERRY	9CM POT
			112		PACHYSANDRA TERMINALIS	JAPANESE SPURGE	#1 POT; 15CM
			105		POLYSTICHUM MUNITUM	WESTERN SHAG FERN	#2 POT; 25CM

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NOTE: ON-SITE IRRIGATION FOR ALL SOFT LANDSCAPE WILL BE INSTALLED



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SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
13	2022/02/14	CITY COMMENTS/NEW SITE PLAN	WZ
12	2022/02/14	NEW SITE PLAN	WZ
11	2022/02/14	ADP COMMENTS	WZ
10	2022/02/14	PARADE ELEVATION	WZ
9	2022/02/14	ISSUE FOR ADP	WZ
8	2022/02/14	NEW SITE PLAN	WZ
7	2022/02/14	CITY COMMENTS & NEW SITE PLAN	WZ & WZ
6	2022/02/14	EAST PARADE LINE	WZ
5	2022/02/14	NEW SITE PLAN	WZ
4	2022/02/14	NEW SITE PLAN	WZ
3	2022/02/14	NEW SITE PLAN, COMMUNITY GARDEN	WZ
2	2022/02/14	NEW SITE PLAN AND CITY COMMENTS	WZ
1	2022/02/14	CLIENT COMMENTS AND NEW SITE PLAN	WZ

CLIENT:

PROJECT:

RESIDENTIAL DEV.
9300 & 9320 CAMBIE RD.
RICHMOND, BC

DRAWING TITLE:
SHRUB PLAN

DATE: 20 FEB 27 DRAWING NUMBER:
SCALE: 3/32"=1'-0"
DRAWN: YR
DESIGN: YR
CHKD: MCT
L4
OF 10

PMG PROJECT NUMBER: 19-151

DP PLAN # 3d

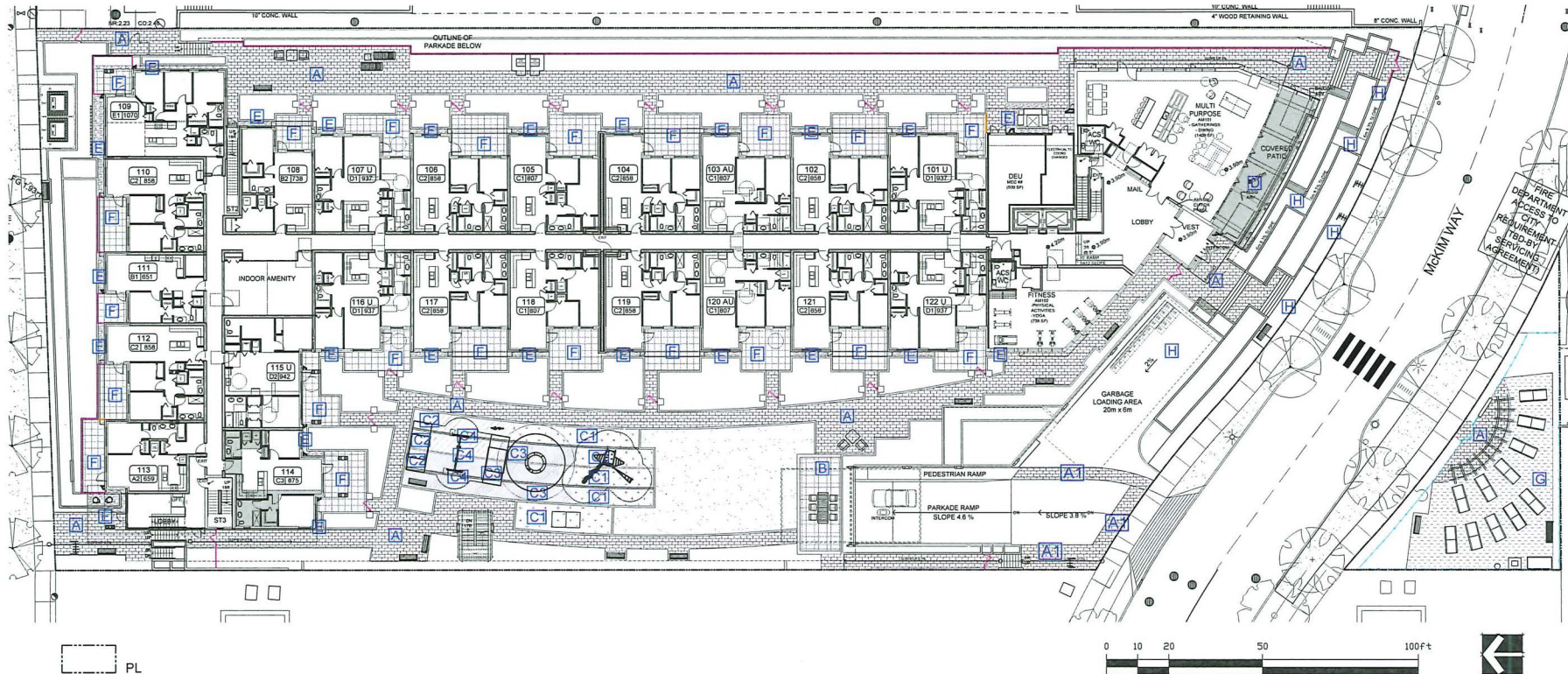
19151-9-2P

MATERIAL LEGEND

A	BARKMAN PAVER - BROADWAY 65MM COLOR: ASH SIZE: 23.62"x11.81"x2.56"
A1	(NEAR LOADING AREA AND PARADE ENTRY) BARKMAN PAVER - BROADWAY 103MM COLOR: ASH SIZE: 23.62"x11.81"x3.94"
B	BARKMAN PAVER - BROADWAY 65MM COLOR: STERLING
C1	POUR-IN-PLACE RUBBER, BLUE PER ARCHITECTURE'S COLOR, PROVIDE SUBMITTAL FOR PMG TO REVIEW BEFORE CONSTRUCTION
C2	POUR-IN-PLACE RUBBER, ORANGE, PROVIDE SUBMITTAL FOR PMG TO REVIEW BEFORE CONSTRUCTION
C3	POUR-IN-PLACE RUBBER, GREEN, PROVIDE SUBMITTAL FOR PMG TO REVIEW BEFORE CONSTRUCTION
C4	POUR-IN-PLACE RUBBER, GREY, PROVIDE SUBMITTAL FOR PMG TO REVIEW BEFORE CONSTRUCTION
D	WOOD DECK
E	WASHED RIVER ROCK
F	2"x2" PORCELAIN BELGARD, ARISTONKAT SERIES, ARCTIC MIST
G	CRUSHED LIMESTONE
H	SAW CUT CONCRETE

FENCE LEGEND

42" HIGH METAL FENCE
6" HIGH SOLID WOOD FENCE
42" WOOD FENCE



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p: 604 294-0011 ; f: 604 294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
13	2022/JUN/14	CITY COMMENTS/NEW SITE PLAN	ME
12	2022/JUN/12	NEW SITE PLAN	ME
11	2022/APR/25	ADP COMMENTS	ME
10	2022/APR/25	PARADE EXHIBIT	ME
9	2022/MAR/09	ISSUE FOR ADP	ME
8	2022/FEB/16	NEW SITE PLAN	ME
7	2022/FEB/16	NEW SITE PLAN	ME
6	2022/FEB/16	NEW SITE PLAN	ME
5	2022/JAN/27	NEW SITE PLAN	ME
4	2022/JAN/17	NEW SITE PLAN	ME
3	2022/OCT/25	NEW SITE PLAN, COMMUNITY GARDEN	ME
2	2022/OCT/25	NEW SITE PLAN AND CITY COMMENTS	ME
1	2022/MAR/06	CLIENT COMMENTS AND NEW SITE PLAN	ME

CLIENT:

PROJECT:

RESIDENTIAL DEV.
9300 & 9320 CAMBIE RD.
RICHMOND, BC

DRAWING TITLE:
**FENCING & MATERIAL
PLAN**

DATE: 20.FEB.27
SCALE: 1/32"=1'-0"
DRAWN: YR
DESIGN: YR
CHKD: MCT

DRAWING NUMBER:
L5
OF 10

DP PLAN # 3e
19151-9-27P




PMG PROJECT NUMBER: 19-151

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Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 : f: 604 294-0022

SEAL:

LIGHT LEGEND

	STEP LIGHT: WEGA, RECESSED WALL LUMINAIRE, SHIELDED, 1" ABOVE GROUND
	BOLLARD LIGHT: BEGA, BOLLARD, SHIELDED
	UNIT ENTRY LIGHT



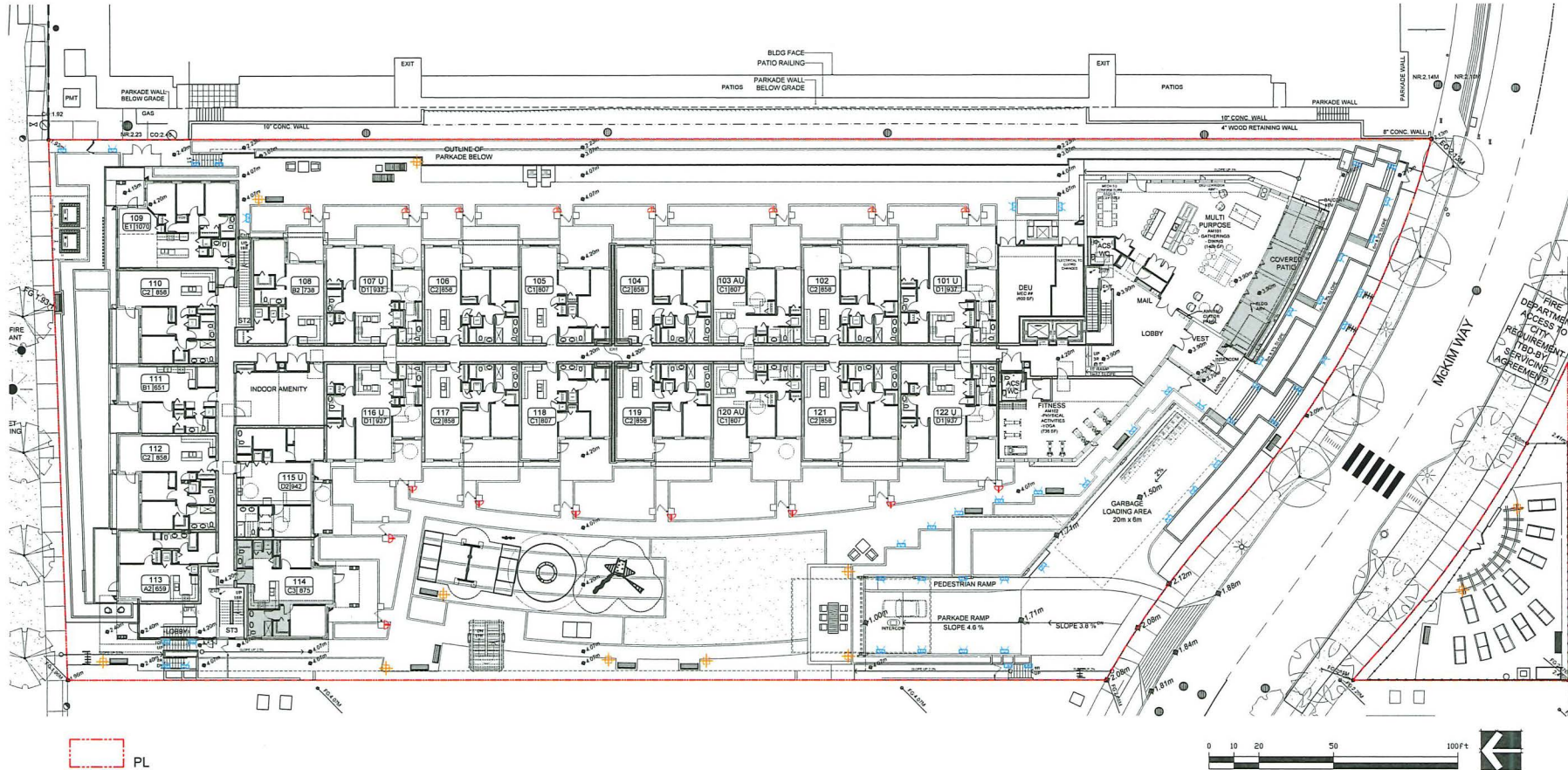
BEGA
BOLLARD, SHIELDED



BEGA
RECESSED WALL LUMINAIRE, SHIELD



KUZCO
MELROSE, EW07507



NO.	DATE	REVISION DESCRIPTION	DR.
13	2022/01/14	CITY COMMENTS/NEW SITE PLAN	WTE
12	2022/01/02	NEW SITE PLAN	WTE
11	2022/01/02	ADP COMMENTS	WTE
10	2022/01/02	PARKADE EXHAUST	WTE
9	2022/01/02	ISSUE FOR ADP	WTE
8	2022/01/02	NEW SITE PLAN	WTE
7	2022/01/02	CITY COMMENTS & NEW SITE PLAN	WTE & WTE
6	2022/01/02	EAST PARKADE LINE	WTE
5	2022/01/02	NEW SITE PLAN	WTE
4	2022/01/02	NEW SITE PLAN	WTE
3	2022/01/02	NEW SITE PLAN/COMMUNITY GARDEN	WTE
2	2022/01/02	NEW SITE PLAN AND CITY COMMENTS	WTE
1	2022/01/02	CLIENT COMMENTS AND NEW SITE PLAN	WTE

CLIENT:

PROJECT:

RESIDENTIAL DEV.
9300 & 9320 CAMBIE RD.
RICHMOND, BC

DRAWING TITLE:
**LIGHTING
PLAN**

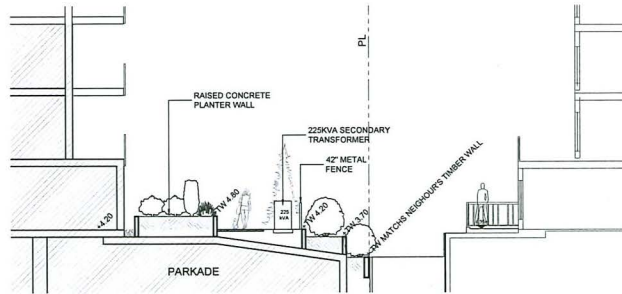
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DRAWING NUMBER:
L6
OF 10

DP PLAN # 3f

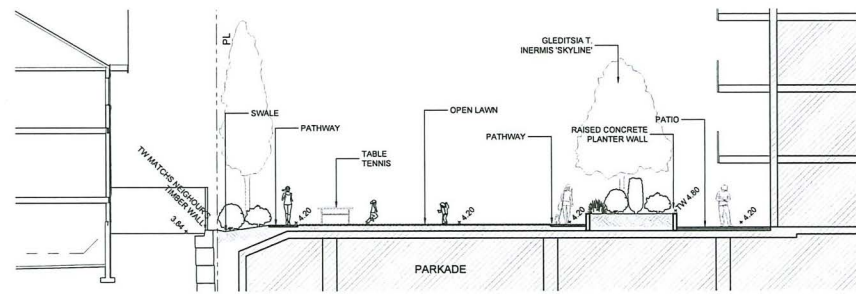
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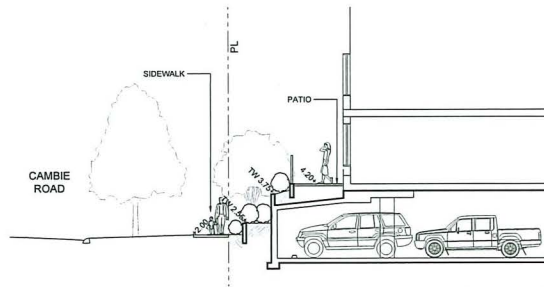
19-151



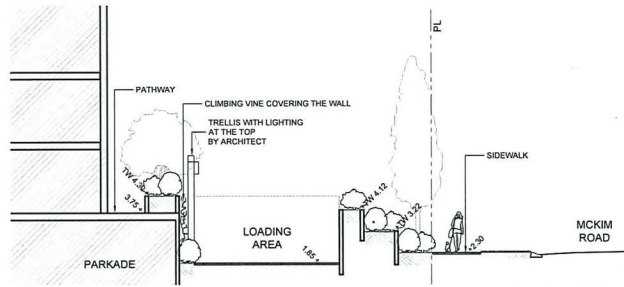
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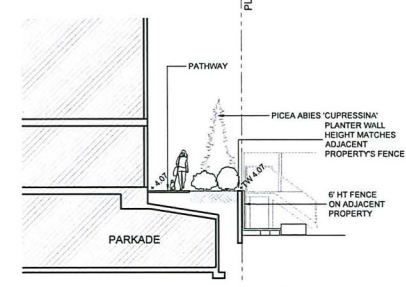
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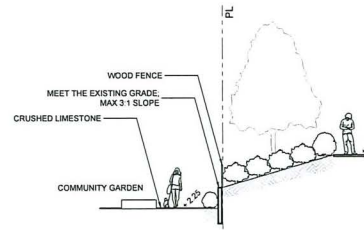
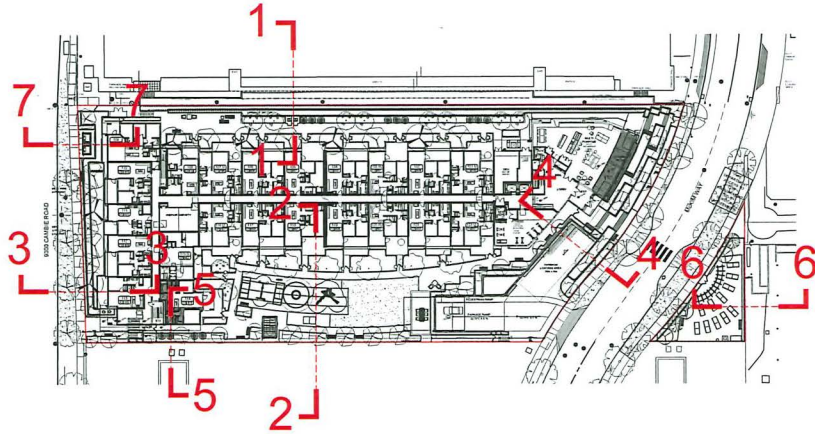
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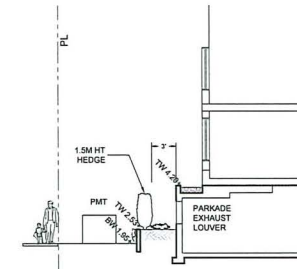
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5-5 SECTION 1/8"=1'-0"



6-6 SECTION 1/8"=1'-0"



7-7 SECTION 1/8"=1'-0"

13	2022/NOV/14	CITY COMMENTS NEW SITE PLAN	WZ
12	2022/JUN/22	NEW SITE PLAN	WZ
11	2022/APR/20	ADP COMMENTS	WZ
10	2022/APR/20	PARKADE EXHAUST	WZ
9	2022/MAY/01	ISSUE FOR ADP	WZ
8	2022/SEP/14	NEW SITE PLAN	WZ
7	2021/OCT/25	CITY COMMENTS & NEW SITE PLAN	WZ & WZ
6	2021/SEP/14	EAST PARKADE LINE	WZ
5	2021/JUL/21	NEW SITE PLAN	WZ
4	2021/MAY/17	NEW SITE PLAN	WZ
3	2020/OCT/23	NEW SITE PLAN, COMMUNITY GARDEN	WZ
2	2020/SEP/21	NEW SITE PLAN AND CITY COMMENTS	WZ
1	2020/MAR/01	CLIENT COMMENTS AND NEW SITE PLAN	WZ

NO. DATE REVISION DESCRIPTION DR.

CLIENT:

PROJECT:

RESIDENTIAL DEV.

9300 & 9320 CAMBIE RD.
RICHMOND, BC

DRAWING TITLE:
SECTIONS

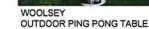
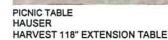
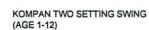
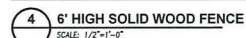
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DESIGN: YR
CHKD: MCV OF 10

DP PLAN # 3g

19151-9-2P

PMG PROJECT NUMBER:

19-151



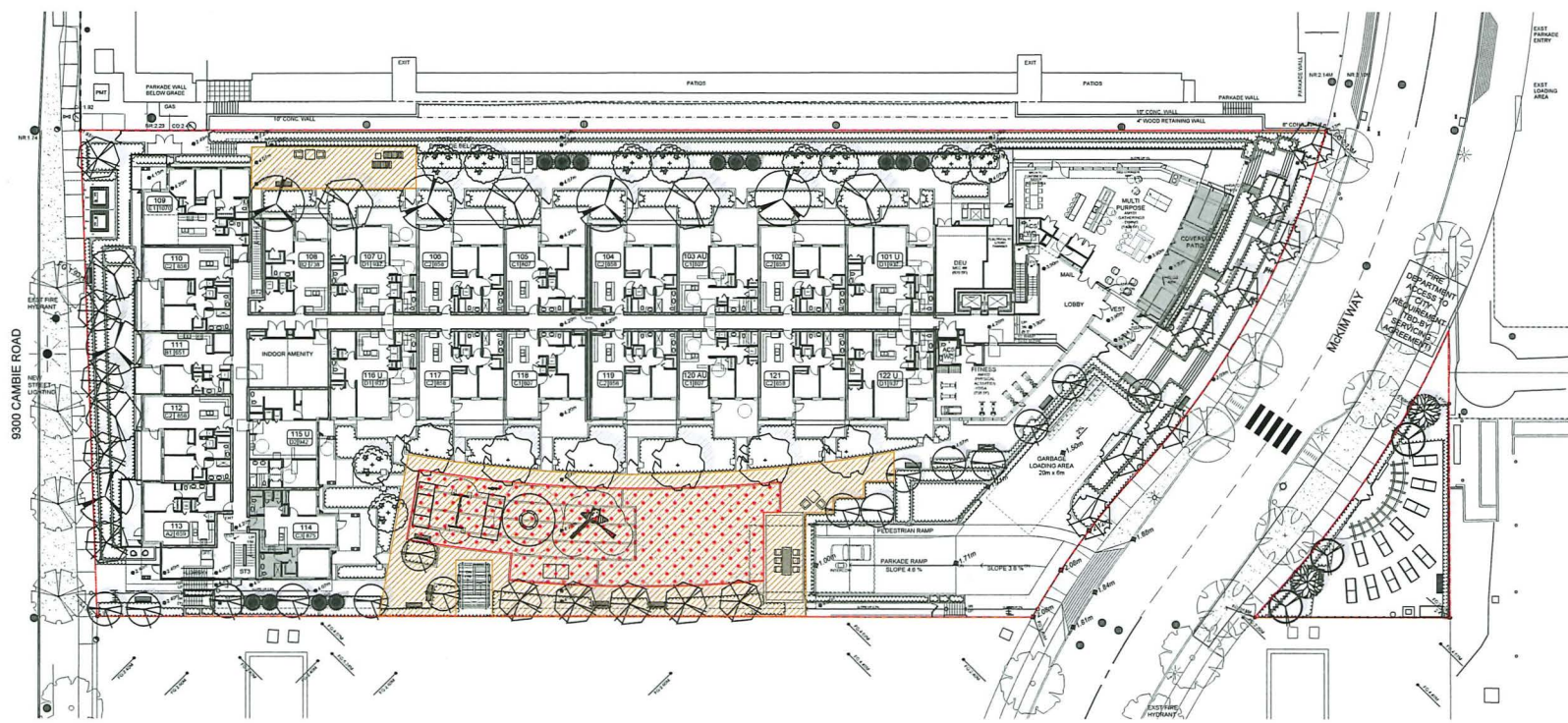
19-151

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pmg
LANDSCAPE
ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

SEAL:

AMENITY AREA: 848 SQ METERS
PLAY AREA: 384 SQ METERS



NO.	DATE	REVISION DESCRIPTION	DR.
13	2022/NOV/14	CITY COMMENTS/NEW SITE PLAN	MCT
12	2022/JUN/22	NEW SITE PLAN	YS
11	2022/JAN/20	ADP COMMENTS	YS
10	2022/JAN/20	PARADEWAY EXHIBIT	YS
9	2022/MAR/09	ISSUE FOR ADP	YS
8	2022/JAN/15	NEW SITE PLAN	YS
7	2022/OCT/25	CITY COMMENTS & NEW SITE PLAN	YS & MCT
6	2022/SEP/14	EAST PARADEWAY	YS
5	2022/JUL/20	NEW SITE PLAN	YS
4	2022/MAY/17	NEW SITE PLAN	YS
3	2022/OCT/23	NEW SITE PLAN, COMMUNITY GARDEN	YS
2	2022/APR/25	NEW SITE PLAN AND CITY COMMENTS	YS
1	2022/MAR/09	CLIENT COMMENTS AND NEW SITE PLAN	YS

CLIENT:

PROJECT:

RESIDENTIAL DEV.
9300 & 9320 CAMBIE RD.
RICHMOND, BC

DRAWING TITLE:
**AFAA
CALCULATION**

DATE: 20.FEB.27
SCALE: 1/20"=1'-0"
DRAWN: YR
DESIGN: YR
CHKD: MCT

DRAWING NUMBER:
L9
OF 10

DP PLAN # 3i

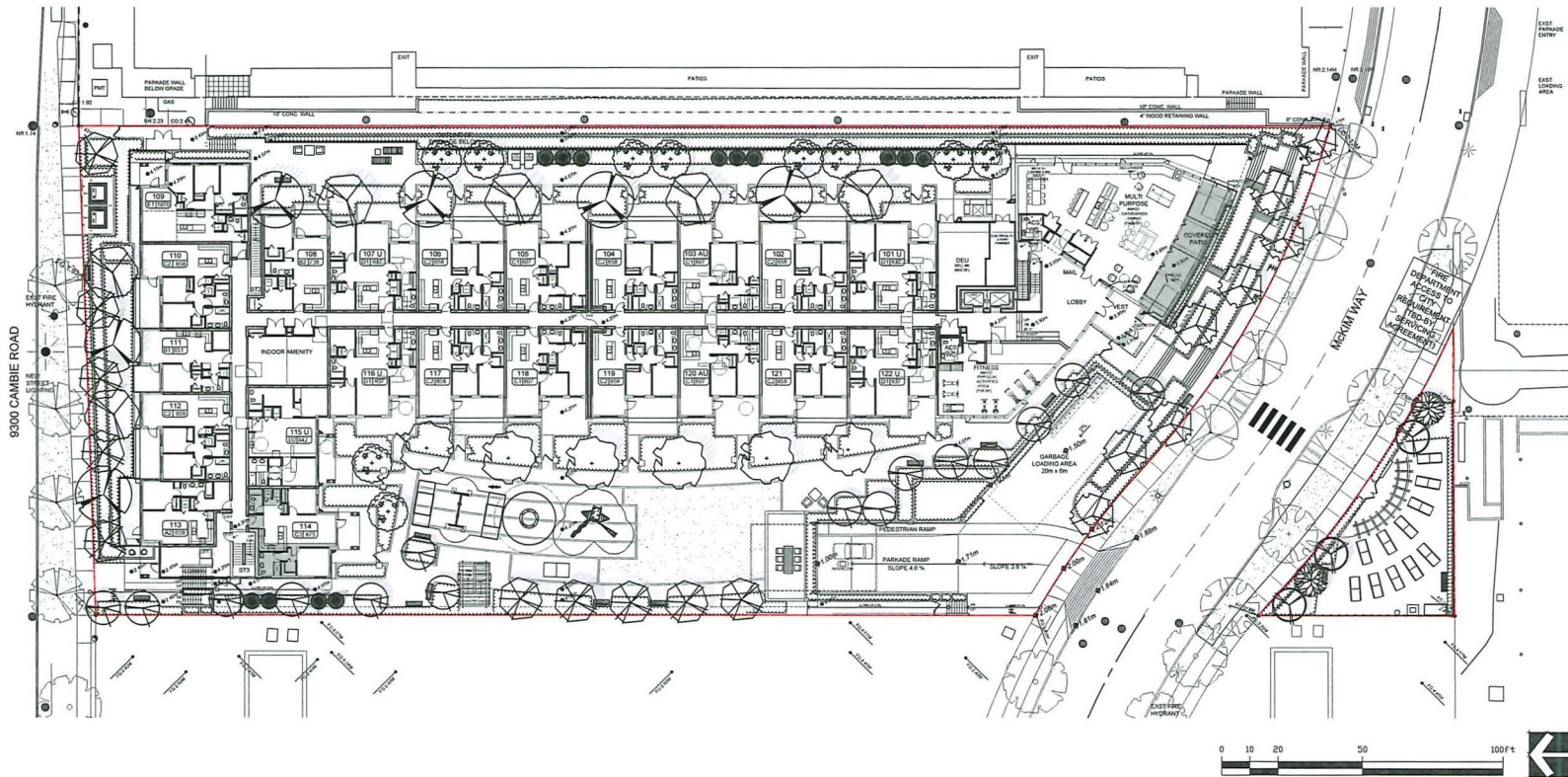
TOTAL SITE AREA: 6,736 M²

SOFT LANDSCAPE AREA: 1,825.54 M²
LOT COVERAGE PERCENTAGE: 27.1%

POROUS AREA: 2206.86M²
LOT COVERAGE PERCENTAGE: 32.8%

SOFT LANDSCAPE AREA

POROUS AREA EXCEPT FOR SOFT LANDSCAPE AREA



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p: 604-294-0111 ; f: 604-294-0022

SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
13	2022/NOV/14	CITY COMMENTS/NEW SITE PLAN	ME
12	2022/NOV/22	NEW SITE PLAN	ME
11	2022/APR/26	ADP COMMENTS	ME
10	2022/APR/20	PARKADE CONSULT	ME
9	2022/MAR/09	ISSUE FOR ADP	ME
8	2022/FEB/16	NEW SITE PLAN	ME
7	2022/OCT/25	CITY COMMENTS & NEW SITE PLAN	ME & ME
6	2022/OCT/14	EAST PARKADE LINE	ME
5	2022/JUL/29	NEW SITE PLAN	ME
4	2022/MAY/17	NEW SITE PLAN	ME
3	2022/OCT/29	NEW SITE PLAN COMMUNITY GARDEN	ME
2	2022/SEP/25	NEW SITE PLAN AND CITY COMMENTS	ME
1	2022/MAR/08	CLIENT COMMENTS AND NEW SITE PLAN	ME

CLIENT:

PROJECT:

RESIDENTIAL DEV.
9300 & 9320 CAMBIE RD.
RICHMOND, BC

DRAWING TITLE:
**AREA
CALCULATION**

DATE: 20.FEB.27 DRAWING NUMBER:
SCALE: 1/20"=1'-0" **L10**
DRAWN: YR
DESIGN: YR
CHKD: MCY OF 10

DP PLAN # 3j

19151-9-2IP

PMG PROJECT NUMBER:

19-151



City of
Richmond

Report to Development Permit Panel

To: Development Permit Panel

Date: April 21, 2023

From: Wayne Craig
Director of Development

File: DP 21-932383

Re: Application by Flat Architecture Inc. for a Development Permit at 8951,
8971 Spires Road and 8991 Spires Gate

Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of 22 townhouse units and two secondary suites at 8951, 8971 Spires Road and 8991 Spires Gate and the surplus portion of Spires Road on a site zoned "Parking Structure Townhouses (RTP4)" zone; and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to:
 - a) Reduce the minimum lot width from 40 m to 33.5 m; and
 - b) Reduce the minimum lot area from 2,400 m² to 2,000 m².

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

WC:el
Att. 3

Staff Report

Origin

Flat Architecture Inc., on the behalf of 0924206 BC Ltd. (Incorporation number: BC0924206; Directors: Brian R. Purcell, John Young, Dexter Young, Michael Young and Eric Sen Hang Yung), has applied to the City of Richmond for permission to develop 22 residential units and two secondary suites at 8951, 8971 Spires Road and 8991 Spires Gate and the surplus portion of the Spires Road road allowance. The applicant has proposed to purchase the surplus road allowance and consolidate it into the development site. A total of 20 multi-level townhouse units and two ground-level flats fronting Spires Road will be included in the development. The unit sizes range between 71.27 m² (767 ft²) and 139.91 m² (1,505 ft²), providing a mix of two to five-bedroom units. Two of the 20 multi-level townhouse units are proposed to contain a two-bedroom secondary suite fronting Spires Gate. Parking will be provided within the parking structure at grade.

The site is being rezoned from “Single Detached (RS1/E)” zone to “Parking Structure Townhouses (RTP4)” zone for this project under Bylaw 10218 (RZ 18-818420), which received Third Reading following the Public Hearing on January 18, 2021. The site is currently vacant but previously contained three single-family dwellings.

Servicing Agreement

Frontage improvements, including beautification works along the site frontage (including ditch infill) and future back lane, road widening, new fire hydrants, public walkways on-site and upgrades to the storm sewer and sanitary sewer, were secured through the rezoning process and will be constructed through a separate Servicing Agreement (SA 21-930503). The Servicing Agreement must be entered into prior to final adoption of the rezoning bylaw.

Development Information

Please refer to the attached Development Application Data Sheet (Attachment 1) for a comparison of the proposed development data with the relevant Bylaw requirements.

Background

The Spires Road Neighbourhood is identified in the City Centre Area Plan as an area intended to transition from a predominately single-family neighbourhood toward a higher-density neighbourhood.

To the North: Across Spires Gate, Single-family homes on lots zoned “Single Detached (RS1/E)”, which are designated as Park under the City Centre Area Plan.

To the South: A recently completed 64-unit high-density townhouse development (RZ 17-766525 & DP 18-829140) on a lot zoned “Parking Structure Townhouses (RTP4)”.

To the East: Across Spires Road, single-family homes on lots zoned “Single Detached (RS1/E)”, which are designated for medium-density, mid-rise (4-8 storeys) housing with market rentals and affordable housing components, under the recently updated City Centre Area Plan.

To the West: A 19-unit townhouse development (with a common parking structure), on a lot zoned “Town Housing (ZT46) – South McLennan and Brighthouse Village (City Centre)”.

Rezoning and Public Hearing Results

The Public Hearing for the rezoning of this site was held on January 18, 2021. No concern regarding the rezoning application was expressed at the Public Hearing.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan and is generally in compliance with the “Parking Structure Townhouses (RTP4)” zone except for the zoning variances noted below.

Zoning Compliance/Variations (staff comments in **bold**)

The applicant requests to vary the provisions of Richmond Zoning Bylaw 8500 to:

- 1) Reduce the minimum lot width from 40 m to 33.5 m;

(Staff support this variance since the subject site is an orphaned site located between Spires Road and a future lane to the west. This corner lot is considered to have its front lot line along Spires Gate and a lot width of approximately 33.5 m. There is no opportunity for the developer to acquire additional property to meet the minimum lot width requirement. This corner site also has an approx. 61 m frontage along Spires Road. The variance was noted at time of rezoning, with no concerns identified at the Public Hearing.)

- 2) Reduce the minimum lot area from 2,400 m² to 2,000 m².

(Staff support this variance since the subject site is an orphaned site located between Spires Gate to the north and a recently approved townhouse development to the south. There is no opportunity for the developer to acquire additional property to meet the minimum lot size requirement. The variance was noted at time of rezoning, with no concerns identified at the Public Hearing.)

Advisory Design Panel Comments

The Advisory Design Panel (ADP) has reviewed the project and supports it. A copy of the relevant excerpt from the Advisory Design Panel Minutes from Wednesday, May 18, 2022 is attached for reference (Attachment 2). The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in ‘**bold italics**’.

Analysis***Conditions of Adjacency***

- The proposed form of development on the subject site is the same as those on the surrounding properties to the south and west, which are grade-oriented housing in the form of high-density townhouses (i.e., low-rise, street wall buildings with common parking structures concealed from public view by non-parking uses).
- Location and orientation of windows are carefully considered to minimize the opportunity of looking into close-by windows of existing adjacent developments and units proposed on site. Planters are proposed on the roof deck to provide privacy screening between units facing each other across the internal courtyard.
- Lane dedication along the west side of the site for the provision of the future north-south lane parallel to Cooney Road has been secured at Rezoning. Since this future lane along the west property line of the site is not required for access for the proposed development, the lane is not required to be built at this time. The existing site grade along the west edge of the lane dedication area will be maintained to provide an appropriate transition to the adjacent townhouse development to the west. This lane dedication area will be maintained by the site's strata until the lane has become operational; and this arrangement has been secured through the rezoning process.
- To enhance pedestrian circulation within the Spires Road Neighbourhood, a 1.5 m wide SRW along the north side property line of the adjacent development site to the south has been secured for future pedestrian connection between Spires Road and the future back lane. A similar 1.5 m wide SRW along the south property line of the subject site has also been secured at rezoning stage in order to widen the walkway SRW to 3.0 m. Interim sod lawn within the 1.5 m wide SRW on the adjacent property has been provided as part of the adjacent development to the south. As part of this development, the developers are required to remove the sod lawn and construct within the 3.0 m wide SRW a 1.5 m wide concrete walkway and a 0.75 m wide swale for drainage along both edges of the walkway. These arrangements have been secured through the rezoning process and the design and construction of the walkway will be included in the Servicing Agreement.
- Perimeter drainage will be required as part of the Building Permit to ensure storm water is managed and addressed through the development and will not impact the neighbouring properties.

Urban Design and Site Planning

- The development will contain 22 units, including:
 - Two single-level Basic Universal Housing units at grade with direct access to Spires Road and direct access to the parking structure. The BUH units are two-bedroom units and are approximately 71 m² (767 ft²) in size.
 - Two four-storey units each with a secondary suite at grade. The secondary suites are two-bedroom units and are approximately 65 m² (700 ft²) in size. The secondary suites will have a direct, street-level entry from Spires Gate. The principal units will have direct access from the podium. These homes will also have direct access to the parking structure.

- Two four-storey units each with a rec room and bathroom on the ground level. These homes will have a direct, street-level entry from Spires Gate, as well as direct access from the podium and the parking structure.
- 16 three-storey townhouse units with main unit entry located on the podium level.
- Three townhouse blocks are proposed and are positioned to enclose a parking structure at grade. The townhouse blocks are connected by the outdoor courtyard space on the podium, above the parking structure.
- Pedestrian access to the podium (via exterior stairs) will be provided on both the Spires Road and the Spires Gate frontages.
- An enclosed lobby is also proposed along the Spires Road frontage to provide a secured space for the mailbox kiosk, elevator to the podium level and access to the enclosed parking area.
- Vehicular access to the parking structure will be from Spires Road.
- 31 residential parking spaces are proposed, which exceeds the minimum bylaw requirement.
- The proposal will feature 16 parking spaces in a tandem arrangement. This arrangement is consistent with the tandem parking provision of Richmond Zoning Bylaw 8500. A restrictive covenant to prohibit the conversion of the tandem garage area into habitable space, and to ensure that both parking spaces be assigned to the same dwelling unit where two parking spaces are provided in a tandem arrangement, has been secured at rezoning.
- A total of three accessible residential parking stalls are to be provided on site; two spaces will be assigned to the two Basic Universal Housing units proposed, and one space will be designated for visitor parking.
- A total of five visitor parking spaces (including one accessible parking stall) are to be provided throughout the site. The number of visitor parking spaces proposed is in compliance with the minimum bylaw requirement.
- Both internal and external bicycle parking spaces have been incorporated into the proposal and are in compliance with the Zoning Bylaw requirements.
- The enclosed garbage room housing garbage, recycling and organics storage bins is proposed to locate within the parking structure, by the security gate, and adjacent to the loading area.
- Indoor amenity space is not proposed on-site. A \$44,225.00 cash-in-lieu contribution has been secured as a condition of rezoning approval, consistent with the Official Community Plan (OCP).
- The overall size of the proposed outdoor amenity spaces comply with the Official Community Plan (OCP) requirements. The locations and sizes of the outdoor amenity spaces are appropriate for providing open landscape and amenity spaces convenient to all units.
- All of the units will have private outdoor areas at grade and/or on the elevated podium overtop the parking structure. All ground-level flats and secondary suites will have a private outdoor space consisting of a front yard on the street level; all townhouse units will have a private outdoor space consisting of a patio on the podium level and a roof top deck overlooking the internal courtyard.

- While the configurations of some the proposed yard/patio spaces at grade and/or on the podium level are slightly shallower than what is encouraged under the Development Permit Guidelines, the functionality of those yard spaces have not been compromised. Each of the proposed private outdoor space at grade includes a patio area that is large enough to accommodate a table with seating, a lawn area and/or a small garden of perennials, shrubs, with a tree to provide shade. Each of the proposed private outdoor space on the podium level is large enough to host a BBQ and seating area with a table.

Architectural Form and Character

- The proposed development embodies the Tudor style architecture with varying façade treatment at key points, steep roof pitches, proportionate windows set symmetrically into traditional massing forms and projecting bays with prominent gables.
- The building massing of the four-storey townhouse units along the road frontages are reduced by enclosing the top floor under the pitched roof.
- The top floor is also stepped back to increase sun penetration opportunity onto the internal courtyard on top of the parking podium.
- The proposal reinforces a pedestrian friendly streetscape along the road frontages with individual gates/walkways, street level entries and small gated front yards.
- All dwelling units have direct entrances either from the street or the internal courtyard on the podium. All entrances feature private yards and a lower entry roof to reflect a single-family character.
- The proposed building materials (brick veneer, high density fibre cement boards, stucco, wood trim, post, fascia and barge board, shingles and divided windows) are generally consistent with the Official Community Plan (OCP) Guidelines.
- Fibre cement boards and stucco are the two dominant materials used on the elevations. Façade details and trim contrast the background colours of the elevations. Asphalt shingles are used to accentuate a single family character. Brick veneer is used as accent material in the lower portions of the buildings. Board and batten with contrasting colours are used on the gable ends to reflect the Tudor style architecture.

Landscape Design and Open Space Design

- 19 bylaw-sized trees and one hedge row on the subject development site were assessed at the rezoning stage, and all of these trees and hedge row are identified for removal due to poor condition.
- Based on the 2:1 tree replacement ratio goal stated in the Official Community Plan (OCP), 38 replacement trees are required. The applicant is proposing to plant eleven replacement trees on-site, including six conifer and five deciduous trees at grade.
- The applicant has agreed to provide a voluntary contribution of \$20,250.00 to the City's Tree Compensation Fund in lieu of planting the remaining 27 replacement trees.
- A pedestrian-oriented streetscape along the road frontages is proposed with a defined edge with layered shrub planting, metal picket fence and slightly raised patios.
- Each ground-oriented unit will have a private front yard with a small lawn area and/or patio as well as a tree and landscape area to generate animation along the streetscape.

The front yards will be separated with a low metal fence with landscaping to provide privacy for individual units.

- At the intersection of Spire Road and Spires Gate, low-level ornamental shrubs will be provided to allow for clear visibility for vehicular movements.
- The area in front of the main lobby will be treated with permeable paving and highlighted with trees on either side to accentuate the entrance to the building.
- Decorative concrete paving is proposed at the vehicle entry of the site and permeable paving will be used to delineate the loading area by the vehicle entry.
- The west elevation will be screened by vigorous vines, supported by cable trellises.
- Circulation around the building is provided by a concrete pathway along the south and west property line.
- The courtyard on the podium level provides private patio spaces for residents. Low cast-in-place planters are proposed along the common walkway to establish an appealing and intimate residential character to encourage socialization and provide for casual surveillance of the common outdoor area.
- There are two outdoor spaces on the podium level:
 - A children's play area is proposed at the northwest corner of the courtyard. Play equipment has been chosen to fit into the play area and to provide different play opportunities (i.e., climbing, social, imagination, balance and motor skills) that can be used by different age groups and for multiple purposes. A bench is also provided for caregivers.
 - Another outdoor amenity space is proposed at the southeast corner of the courtyard. This space is designed as a social area for more passive activities. Features proposed within this outdoor amenity space include a dining area with an outdoor kitchen and a community garden area with accessible planting pods.
- Planters are proposed at the roof decks to enhance privacy between units facing each other.
- A smart irrigation system fine-tunes its watering based on the amount of light, soil condition and local weather forecast is proposed to ensure continued maintenance of live landscaping.
- In order to ensure that the proposed landscaping works are completed, the applicant is required to provide a landscape security of \$187,615.31 in association with the Development.

Crime Prevention Through Environmental Design

- Site lighting and clear sight lines provide unobstructed views of the surrounding area. Walkways are direct and open.
- Wall-mounted lights are proposed on all sides of the parking podium. These lights are provided only where building-mounted lights are incapable of illuminating any external spaces. These lights are indirect and do not offer any unwanted glare with built-in anti-glare shading system.
- Plantings near residential entries are low to maximize views and casual surveillance opportunities of common areas.
- Expansive glazing for each unit increases the visual presence and surveillance along the road frontages, future back lane, outdoor amenity spaces and the courtyard on the podium level.

Sustainability

- The project will be designed to meet Step Code 3 requirements of the BC Energy Step Code, including energy modelling.
- No thermal breaks are required as no balconies are being proposed. The roof decks will be insulated from below with minimum R40 insulation to meet the minimum requirement.
- Sound transmission through the façade has been evaluated; conventional exterior construction, including windows and doors with standard thermal glazing satisfies the minimum requirements.
- Energy Star appliances, water sense toilets and energy efficient lighting (LED or CFL) will also be provided.

Accessible Housing

- The proposed development includes two BUH units that are designed to be easily renovated to accommodate a future resident in a wheelchair. These single-storey units are required to incorporate all of the accessibility provisions listed in the Basic Universal Housing Features section of the City's Zoning Bylaw, and are permitted a density exclusion of 1.86 m² (20 ft²) per unit.
- All of the proposed units incorporate aging-in-place features to accommodate mobility constraints associated with aging. These features include:
 - Stairwell handrails;
 - Lever-type handles for plumbing fixtures and door handles; and
 - Solid blocking in washroom walls to facilitate future grab bar installation beside toilets, bathtubs and showers.

Conclusions

As the proposed development would meet applicable policies and Development Permit Guidelines, staff recommend that the Development Permit be endorsed, and issuance by Council be recommended.



Edwin Lee
Planner 2
(604-276-4121)

EL:js

- Att. 1: Development Application Data Sheet
2: Excerpt from Advisory Design Panel Meeting Minutes (March 23, 2002)
3: Development Permit Considerations



DP 21-932383

Attachment 1

Address: 8951, 8971 Spires Road and 8991 Spires Gate

Applicant: Flat Architecture Inc.

Owner: 0924206 BC Ltd.

Planning Area(s): City Centre

Floor Area Gross: 2,660.75 m²

Floor Area Net: 2,392.95 m²

	Existing	Proposed
Site Area:	2,319.44 m ²	2,068.0 m ²
Land Uses:	Single-Family Residential	Multiple-Family Residential
OCP Designation:	Low-Density Residential	No Change
Area Plan Designation:	City Centre Area Plan Amended July 18, 2022: Urban Centre T5 Sub-Area B.2: Mixed Use – Mid-Rise Residential & Limited Commercial	Under the provisions for instream applications: City Centre Area Plan: General Urban T4 Sub-Area B.1: Mixed Use – Low-Rise Residential & Limited Commercial
Zoning:	Single Detached (RS1/E)	Parking Structure Townhouses (RTP4)
Number of Units:	3	22

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 1.20	1.16	none permitted
Lot Coverage – Building:	Max. 50%	48.9%	none
Lot Coverage – Non-porous Surfaces:	Max. 80%	66.8%	none
Lot Coverage – Landscaping:	Min. 20%	20.0%	none
Setback – Front Yard - Spires Gate (m):	Min. 3.0 m	3.0 m	none
Setback – Exterior Side Yard – East – Spires Road (m):	Min. 3.0 m	3.0 m	none
Setback – Interior Side Yard - West (future lane) (m):	Min. 1.5 m	1.5 m	none
Setback – Rear - South (m):	Min. 1.5 m	1.5 m	none
Height (m):	Max. 15.0 m (4 storeys)	14.8 m (4 storeys)	none
Lot Depth:	Min. 30.0 m	61.22 m	none

Lot Width:	40 m	33.5 m	Variance Requested
Site Area:	Min. 2,400 m ²	2,068 m ²	Variance Requested
Off-street Parking Spaces – Regular (R) / Visitor (V):	1.2 (R) and 0.2 (V) per unit	1.4 (R) and 0.2 (V) per unit	none
Off-street Parking Spaces – Total:	27 (R) and 5 (V)	31 (R) and 5 (V)	none
Tandem Parking Spaces:	Max. 50% of required residential spaces (27 x Max. 50% = 13)	12 + 4 extra small parking spaces	none
Small Car Parking Spaces	Max. 50% when 31 or more spaces are provided on-site (36 x Max. 50% = 18)	10	none
Handicap Parking Spaces:	Min. 2% when 11 or more spaces are required (36 x 2% = 1 spaces)	3	none
Bicycle Parking Spaces – Class 1 / Class 2:	1.25 (Class 1) and 0.20 (Class 2) per unit	1.63 (Class 1) and 0.22 (Class 2) per unit	none
Off-street Parking Spaces – Total:	28 (Class 1) and 5 (Class 2)	36 (Class 1) and 5 (Class 2)	none
Amenity Space – Indoor:	Min. 100 m ² or Cash-in-lieu	Cash-in-lieu	none

Excerpt from the Minutes from
The Design Panel Meeting

Wednesday, May 18, 2022 – 4:00 p.m.
Rm. M.1.003
Richmond City Hall

1. DP 21-932383 - 22 TOWNHOUSE UNITS OVER A PARKING PODIUM

ARCHITECT: FLAT Architecture

LANDSCAPE ARCHITECT: Architecture Panel Inc.

PROPERTY LOCATION: 8951, 8971 Spires Road and 8991 Spires Gate

Applicant's Presentation

Architect Rajinder Warraich, FLAT Architecture, Inc. and Landscape Architect Ruchir Dhall, Architecture Panel Inc., presented the project and answered queries from the Panel.

Panel Discussion

Comments from Panel members were as follows:

- the project was presented well by the applicant; the materials package is comprehensive and easy to understand;

Noted.

- the targeted insulation R-values for the proposed design look good; however, concerned on U- values for windows; the targeted 1.4 U-value for windows could be improved to a starting point of 0.39 which is seen in many existing buildings;

U value of windows to be based on energy modelling for Step code 3. It can vary from .39 to 1.4 as per energy model report.

- consider changing the language for solar heat gain coefficient (SHGC) from “0.32 or higher” to “0.32 or lower” as the latter values are better;

SHGC value to be .32 or lower as requested.

- consider a minimum HRV Sensible Recovery Efficiency (SRE) of 85% and not 65% due to improvements in products and technology;

Increased to 85 %.

- the proposed gas or propane fire pit on the podium level outdoor amenity area is not consistent with the overall sustainability objective of the project; consider non fossil fuel-powered alternates such as an electric fire pit;

Fire pit Removed as suggested.

- appreciate the general landscape approach for the project and the hierarchy of outdoor spaces;

Noted.

- review the size and depth of planters proposed at the podium level to ensure they are adequate for planting and establishing trees; Planting depth and tree location;

Significant amendments have been done at the podium level despite having adequate soil volume for small trees (~750mm). They have been replaced with large shrubs like rhododendron vulcan, which assume similar height to the smaller trees creating a much thicker and colorful foliage presence. Also, significant sections of the hard patios have been substituted with water absorbent sod to increase the permeable areas.

- appreciate the separation of the active from passive spaces in the outdoor amenity area; however, review the size of the play equipment and consider other alternatives considering the tightness of the outdoor amenity area; Outdoor;

Amenity area redesigned based on ADP discussion and comments. i.e., the consolidated dining and congregation area proposed towards the outdoor cooking areas to the N and the vegetable planters moved to the S so that both areas have consolidated sections with minimal breaks. Also, the outdoor fire-pit was taken out to achieve the above configuration per the ADP recommendations.

- ensure that picnic tables and planters at the community garden area are wheelchair accessible;

Yes, all outdoor amenity is accessible.

- look at fencing details to ensure appropriate distance between the pickets as the project moves forward to the next stages of the development process;

Distance between pickets is less than 4inch and meet BCB 2018.

- there is too much landscaping on the limited open spaces in the project; consider simplifying the landscaping and not program every outdoor amenity space, e.g. a green space could be more appropriate for some areas than installing play areas and outdoor furniture;

The landscaping has been simplified by substituting the thick tree configuration with large shrubs on the podium level. Furthermore, simplification of landscape programming is what we feel an optimum solution to reducing the intense landscaping pointed above.

- overall, the project is well thought out and laid out considering the size of the subject site and the proposed number of housing units;

Noted.

- consider integrating a parcel delivery drop off area close to the mailbox in the main lobby of the building;

Parcel Delivery area is provided in the vestibule near main entrance. Vestibule with doors in 2 tiers (first door accessible to general public and second door accessible to authorized persons) are provided for security.

- consider adding more details to reflect a true Tudor style considering that the subject site is in a transition area from single-family to higher density residential developments;

The overall design of the buildings reflect a true Tudor style. More wood trims have been added in the elevations, window and door trims have been made more decorative, pitch of the roofs is steep and more masonry has been added on level 1 to give grounding effect.

- note that there is a difference between the renderings presented by the applicant and the landscape plans at the northeast corner of the site; the landscape plans indicate significant grass as opposed to the renderings which show thicker plantings; clarify the difference, including the proposed signage at the northeast corner;

Renderings updated and coordinated with landscape drawings.

- intensive planting at the northeast corner of the subject site could help soften the transition into the neighbourhood and create a gateway condition;
Planting soften along northeast corner as suggested. Very distinct and low height perennials and grasses are proposed outside of the yard hedging to create a visually attractive but non-blocking vegetation arrangement.

- stairways that connect the ground level to the podium level look daunting; consider installing a landing halfway up the stairs to make them more accessible to people with mobility issues;

Provision of landing is not mandatory as per the code. Only the landing in main staircase has been removed because there isn't sufficient space to provide the requisite number of steps after the setback.

- ensure adequate wheelchair turnaround space for at-grade patios for Basic Universal Housing (BUH) units to enhance their accessibility;

Turnaround provided as 1.5 walkways are good for turnarounds.

- consider toning down the differences in character, e.g. materials, colour and texture on the ground floor facades of the building to achieve more consistency; the stucco on the west ground floor façade appears out of character with the rest of the building facades; consider relating the stucco to the other building facades by either adding brick or fiber cement on the west ground floor façade; Noted,

The material is revised and brick added as per suggestion.

- the exterior treatment for the building base facing the street appears flat and is less successful than the treatment for the building base facing the podium; the in and out relationship with the bay windows facing the podium successfully breaks down the building mass;

The main entrance canopies to the units and entrance to the main lobby break the continuity of the material at grade level. The overall building is small and the introduction of brick cladding on the ground floor provides heavier base.

- the metal and glass guardrails appear out of character with the rest of the detailing on the building; look at the metal picket fence on the landscape drawings and consider a greater relationship of the various fencing/guardrail materials;

Metal and glass guard changed to Picket fence style.

- the metal and glass guardrails on the roof deck facing the podium are pushed forward a bit too much and appear more prominent than the traditional elements on the façade of the lower levels; consider pushing back the metal and glass guardrails to provide more prominence to the traditional elements;

We have converted all railings to picket style fence and have not pushed the railing inwards. Pushing the railing inwards will result in reduction of roof top patio areas.

- the second bedroom of BUH Unit 101 does not have a separate bathing space; the resident will have to go into the accessible bathroom to the master bedroom;

The entire design of BUH units and Level 1 has changed after the ADP meeting; separate bathing space added in the 2nd bathroom of both BUH units.

- in general, the kitchen space looks tight with respect to turning radii; ensure that there is a five-foot turning circle within the working area of the kitchen or clarify if that is being achieved;

The entire design of BUH units and Level 1 has changed after the ADP meeting and this concern has been addressed.

- look at the proximity of the exit from the elevator to the top of the exit stairs on the podium level which could pose a safety concern for a person in wheelchair; review how those elements are related to one another; also look at the screening of exposed condensers in the area if they fit within the overall concept of the project;

In previous submissions the door of the elevator lobby was opening right in front of the top of the staircase. Now the position of this door has been changed to the side of the lobby and it opens on the podium pathway which does not pose any safety concern for a person on wheelchair. The condensers are well screened behind landscape planters.

- appreciate the provision of automated doors in certain locations of the building and not just at the main entrance; also appreciate the installation of wiring for automated door openers for entrances to units;

Noted.

- appreciate the accessibility of gathering places and common amenities such as garbage and recycling;

Noted.

- consider locating the two designated accessible parking stalls for BUH Units 101 and 102 to the northeast corner behind Unit 102 to make them more accessible to the two BUH units; also consider relocating the accessible visitor parking stall next to the accessible parking stall (i.e., stall number 20) to parking stall number 15; the proposal would eliminate the unnumbered stall on the northeast side but would enlarge the size of all accessible parking stalls in the proposed development;

The accessible parking for BUH Unit 1 and 2 are located right near there entrances in the new layout of level 1.

- consider installing doors swinging into the bedroom instead of into the washroom or installing pocket doors for the accessible washrooms of BUH units to enhance their accessibility to people in wheelchairs; updated,

The bathroom door opens towards the bedroom which addresses the concern in this comment.

- consider assigning mailboxes for BUH units which are between 57 cm to 110 cm from the ground level to make them accessible to people in wheelchairs;

Noted.

- appreciate the applicant for identifying CPTED strategies for the project;

Noted.

- the landscape design for the project will work well with the neighbourhood;

Noted.

- agree with the Panel comment regarding the second bedroom of BUH unit 101 not having access to a bathing space without going to the ensuite washroom for the master bedroom;

Updated.

- the location of the stove and refrigerator for A3 units are very close to each other, which could potentially impact the working of these appliances;

Updated.

- look at the door swings not only of the BUH units but also of the refrigerators to ensure ease of opening;

The entire design of BUH units and Level 1 has changed after the ADP meeting. This concern has been addressed in the new design.

- support the Panel comment that the targeted U-values for windows should be pushed further;

U value to decrease based on the Energy modelling and step code requirements.

- ensure accessibility of BUH units to adjacent open spaces;

The patio levels and the levels of the parkade have been kept at same levels as the BUH units for easy accessibility. Grade of all slopes/ ramps leading up to the BUH units is less than 5%.

- the aluminum and glass guardrails are very prominent and out of character, particularly in the courtyard as they are installed on the edge of the roof deck; support the Panel comment to recess the aluminum and glass guardrails if they will be retained or consider installing a picket style fence;

We have converted all railings to picket style fence and have not pushed the railing inwards. Pushing the railing inwards will result in reduction of roof top patio areas.

- the aluminum and glass guardrails on Level 2 appear too finicky and busy; a picket fence would be more appropriate or if the same materials for the guardrails are retained, consider recessing them back and not repeating them on the roof deck; and

All railings including guardrails converted to picket style railings.

- support the Panel comment that the architectural expression on Level 1 on the south and west elevations are out of character with the rest of the development; the brick works well in other elevations; however, consider strategically using brick, e.g. in the corners and under the stairs due to cost considerations or if not using brick, consider using an alternate material and colour that blends better with the rest of the development considering that the west elevation will become prominent when the future lane and sidewalk will be constructed.

The material is revised and brick added as per suggestion.

Panel Decision

It was moved and seconded

That DP 21-932383 be supported to move forward to the Development Permit Panel subject to the applicant giving consideration to the comments of the Advisory Design Panel.

CARRIED



Development Permit Considerations

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

Address: 8951, 8971 Spires Road and 8991 Spires Gate

File No.: DP 21-932383

Prior to approval of the Development Permit, the developer is required to complete the following:

1. Receipt of a Letter of Credit for landscaping in the amount of \$187,615.31 (based on the costs estimate provided by a CSLA registered landscape Architect including 10% contingency).
2. City acceptance of the developer's offer to voluntarily contribute \$14,250 to the City's Tree Compensation Fund for the planting of replacement trees within the City.

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

1. Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.
2. Incorporation of accessibility measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.
3. If applicable, payment of latecomer agreement charges associated with eligible latecomer works.
4. Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals 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 contains prohibitions on the removal or disturbance of both birds and their nests. Issuance of Municipal permits does not give an individual authority to contravene these legislations. The City of Richmond recommends that where significant trees or vegetation exists on site, the services of a Qualified Environmental Professional (QEP) be secured to perform a survey and ensure that development activities are in compliance with all relevant legislation.

Signed _____

Date _____



City of Richmond

Development Permit

No. DP 21-932383

To the Holder: Flat Architecture Inc.

Property Address: 8951, 8971 Spires Road and 8991 Spires Gate

Address: 6321 King George Boulevard, Unit 209
Surrey, BC V3X 1G1

1. This Development 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 Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. The "Richmond Zoning Bylaw 8500" is hereby varied to:
 - a) Reduce the minimum lot width from 40 m to 33.5 m; and
 - b) Reduce the minimum lot area from 2,400 m² to 2,000 m².
4. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #46 attached hereto.
5. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
6. As a condition of the issuance of this Permit, the City is holding the security in the amount of \$187,615.31 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. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
7. 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.

Development Permit
No. DP 21-932383

To the Holder: Flat Architecture Inc.
Property Address: 8951, 8971 Spires Road and 8991 Spires Gate
Address: 6321 King George Boulevard, Unit 209
Surrey, BC V3X 1G1

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.

This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO.
DAY OF , .

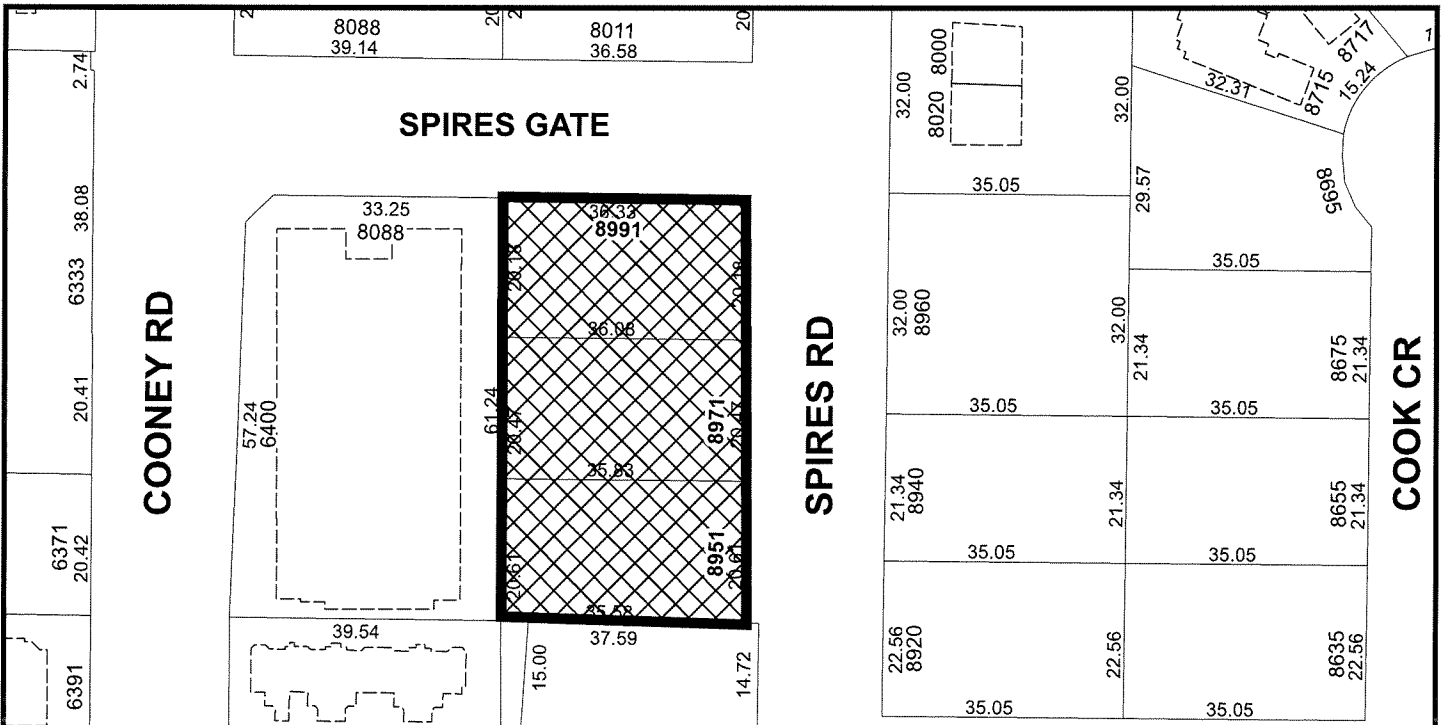
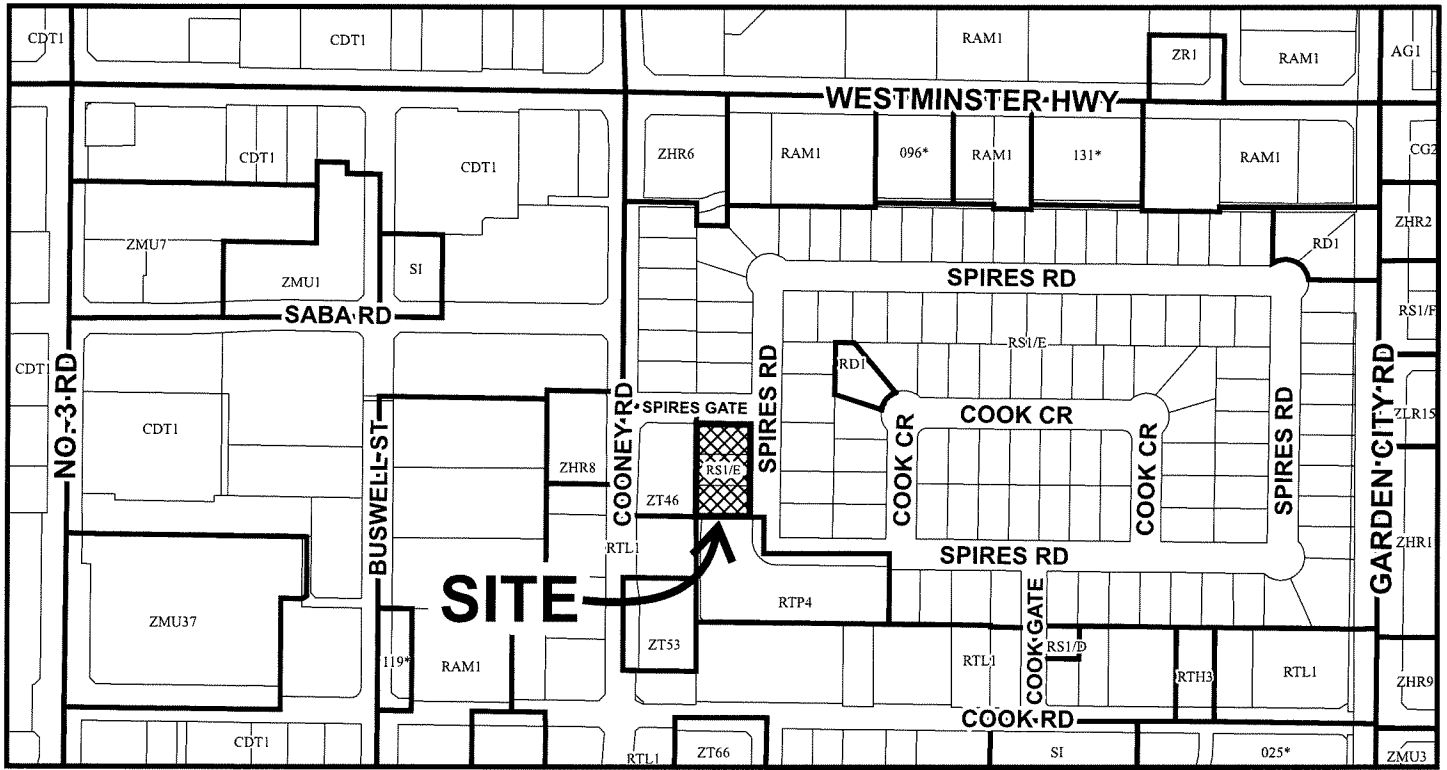
ISSUED BY THE COUNCIL THE

DELIVERED THIS DAY OF , .

MAYOR



City of Richmond



DP 21-932383
SCHEDULE "A"

Original Date: 05/19/21

Revision Date:

Note: Dimensions are in METRES

8951,8971 SPIRES ROAD,SPIRES GATE, RICHMOND,B.C

PROJECT RECONCILIATION		DP NO : 21-932383		
CIVIC ADDRESS:		8951, 8971 Spires RD & 8991 Spires Gate Richmond BC		
LOT AREA				
	TOTAL:	24,966.24	SQ.FT.	2319.44 m2
	DEDICATIONS:	2,704.34	SQ.FT.	251.24 SQMT
	NET AREA:	22,261.90	SQ.FT.	2068.2 SQMT
ZONING				
	CURRENT	RS1/E		
	PROPOSED	RTP4		
F.A.R CALCULATIONS				
	FAR PROPOSED			1.17 on net
FLOOR AREA (EXCLUDING PARKING)				
	LEVELS			RESIDENTIAL NET
	PARKADE LEVEL- LVL 1			4,249.00 Sq.Ft. 394.75 M2.
	PODIUM LEVEL- LVL 2			9,835.00 Sq.Ft. 913.70 M2.
	THIRD FLOOR - LVL 3			9,868.00 Sq.Ft. 916.77 M2.
	FOURTH FLOOR- LVL4			4,688.00 Sq.Ft. 435.53 M2.
	GROSS TOTAL AREA			28,640.00 Sq.Ft. 2,660.75 M2.
	Deduction of 10m2 per stair per unit for 20 units (see table on right)			2,655.46 Sq.Ft. 246.70 M2.
	NET TOTAL AREA			25,984.54 Sq.Ft. 2,414.05 Sq.Ft.
				OUTDOOR AMENITY SPACE:
				REQUIRED 6m2 per unit 1420 ft2 (132 m2)
				PLUS 10% OF NET SITE AREA 2227 ft2 (206.9 m2)
				TOTAL REQUIRED 3647 ft2 (338.9 m2)
				PROPOSED 4430 ft2 (411.56 m2)
UNIT COUNT:				
	3 bed room Units	18		
	2 Bedroom H/C accessible Units (BUH units)	2		
	3 Bed TH units c/w Seconday Suite	2		
	Total No of Units	22		
OFF STREET PARKING				
	RESIDENCES:			SAY
	REQUIRED	TOWNHOUSE	22 x 1.2	= 26.4 SPACES 27 SPACES
	PROVIDED			All Units to have Level 2 Charging Stations. 31 SPACES
	VISITORS			
	REQUIRED		22 X .2	= 4.4 SPACES 5 SPACES
	PROVIDED			5 SPACES
			TOTAL	36 SPACES
	TANDEM PARKING ASPACES			
	Max 50 % of required spaces (50 % of 32)		16	
	PROVIDED		16	
	SMALL CAR SPACES:			
	PROVIDED			2 Visitor and 8 Residential
	ACCESSIBLE PARKING SPACES:			
	REQUIRED		2 % of 33 spaces .66 spaces say 1 space	
	PROVIDED			3 Parking Spaces in total (2 for Accessible units+ 1 for Visitor)
BICYCLE PARKING				
	CLASS 1			
	REQUIRED		22 X 1.25	27.5 28 SPACES
	PROVIDED			33 SPACES
	CLASS 2			
	REQUIRED		22 X .2	4.4 5 SPACES
	PROVIDED			5 SPACES

UNIT TYPES & AREAS							
	UNIT AREAS (FT2)				TOTAL UNIT AREA IN FT2	TOTAL UNIT AREA IN M2	UNIT TYPE
UNIT NO.	LEVEL1	LEVEL2	LEVEL3	LEVEL4			
1	767.573	0	0	0	767.573	71.31	2 BEDROOM
2	767.149	0	0	0	767.149	71.27	2 BEDROOM
3	0	505.437	512	246.581	1264.018	117.43	3 BEDROOM
4	0	477.66	536.137	260	1273.797	118.34	3 BEDROOM
5	0	454.58	475.8	233.412	1163.792	108.12	3 BEDROOM
6	0	477.66	536.137	260	1273.797	118.34	3 BEDROOM
7	0	454.58	475.8	233.412	1163.792	108.12	3 BEDROOM
8	0	454.8	475.77	224	1154.57	107.26	3 BEDROOM
9		535.4	554	269.13	1358.53	126.21	3 BEDROOM
9A	697.48	0	0	0	697.48	64.80	2 BEDROOM SECONDARY SUITE
10	345.65	460.65	475.65	224	1505.95	139.91	3 BEDROOM
11	0	460.65	475.65	224	1160.3	107.80	3 BEDROOM
12	0	460.65	475.65	224	1160.3	107.80	3 BEDROOM
13	345.65	460.65	475.65	224	1505.95	139.91	3 BEDROOM
14		505	522	250	1277	118.64	3 BEDROOM
14A	740.49	0	0	0	740.49	68.79	2 BEDROOM SECONDARY SUITE
15	0	454	570	252.56	1276.56	118.60	3 BEDROOM
16	0	444	470.65	219	1133.65	105.32	3 BEDROOM
17	0	444	470.65	219	1133.65	105.32	3 BEDROOM
18	0	444	470.65	219	1133.65	105.32	3 BEDROOM
19	0	444	470.65	219	1133.65	105.32	3 BEDROOM
20	0	444	470.65	219	1133.65	105.32	3 BEDROOM
21	0	471.58	501.99	207.05	1180.62	109.68	3 BEDROOM
22	0	483.2	512	246	1241.2	115.31	3 BEDROOM

UNIT STAIRCASES AND THEIR CUTOUTS ON HIGHEST STOREY DEDUCTIONS		
UNIT NO.	STAIRCASE DEDUCTION IN M2	STAIRCASE DEDUCTION ON HIGHEST STOREY IN M2
1	0.00	0.00
2	0.00	0.00
3	7.43	4.08
4	7.43	4.08
5	7.43	4.08
6	7.43	4.08
7	7.43	4.08
8	7.43	4.08
9	10	4.08
10	10	4.08
11	8.18	4.08
12	8.18	4.08
13	10	4.08
14	10	4.08
15	7.53	3.90
16	8.08	4.08
17	8.08	4.08
18	8.08	4.08
19	8.08	4.08
20	8.08	4.08
21	8.08	4.08
22	8.08	4.08
TOTAL	165.05	81.42
GRAND TOTAL		246.47



FLAT
ARCHITECTURE INC.

Unit 209- 6321 King George B
Surrey BC, V3X 1G1
www.flataarchitecture.ca
contact@flataarchitecture.ca

Ph: 604-503-4484

PROJECT INFO: 11 UNITS
Townhouse Development at 8951,
8971 Spires Rd., 8991 Spires Gate,
Richmond, BC

DATE 31-Mar-23

PROJECT NO:
17-127

SCALE: As Noted DRAWN: R.W

[illegible]

DATA SHEET

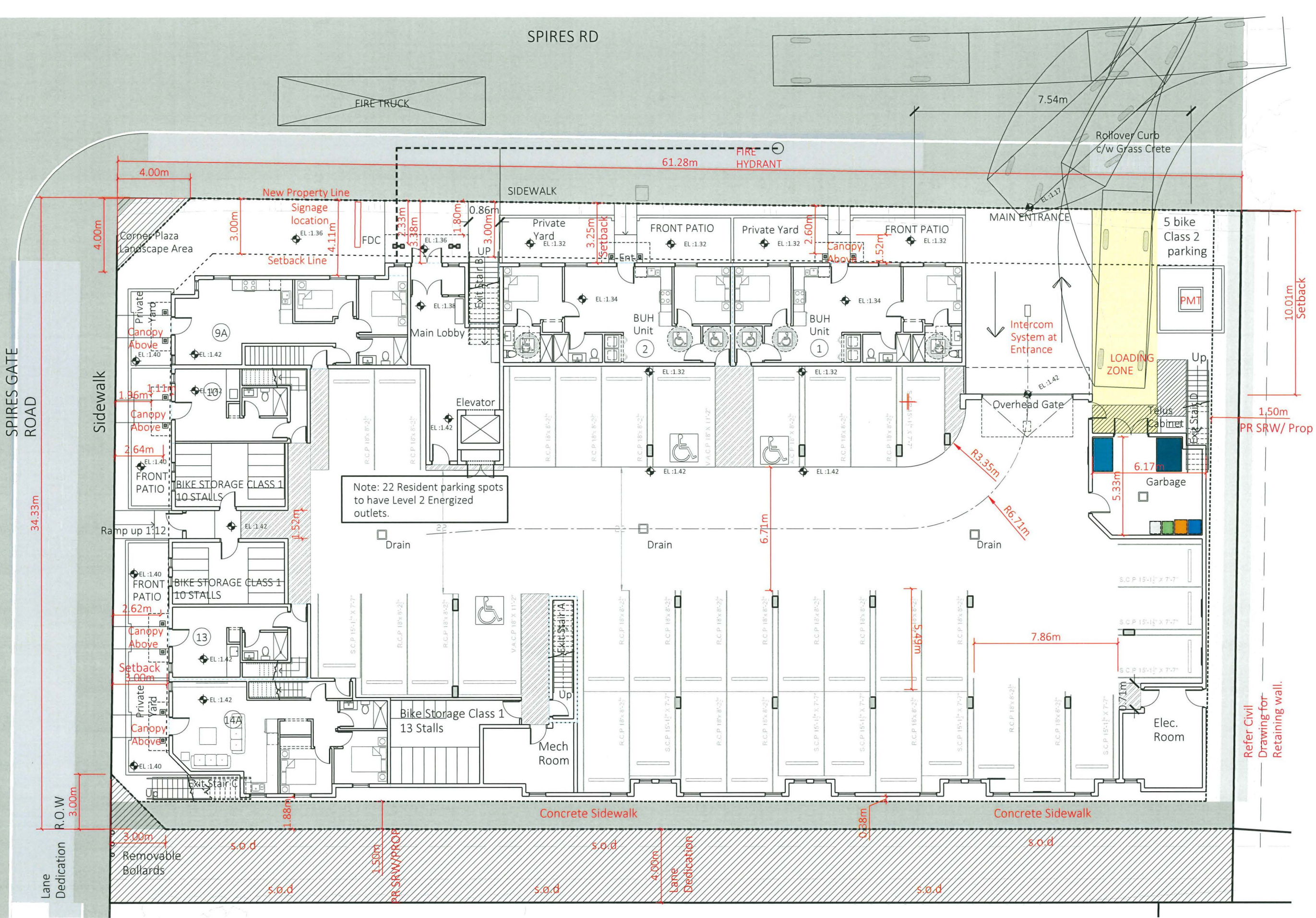
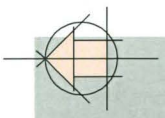
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DP 21-932383

Plan #1

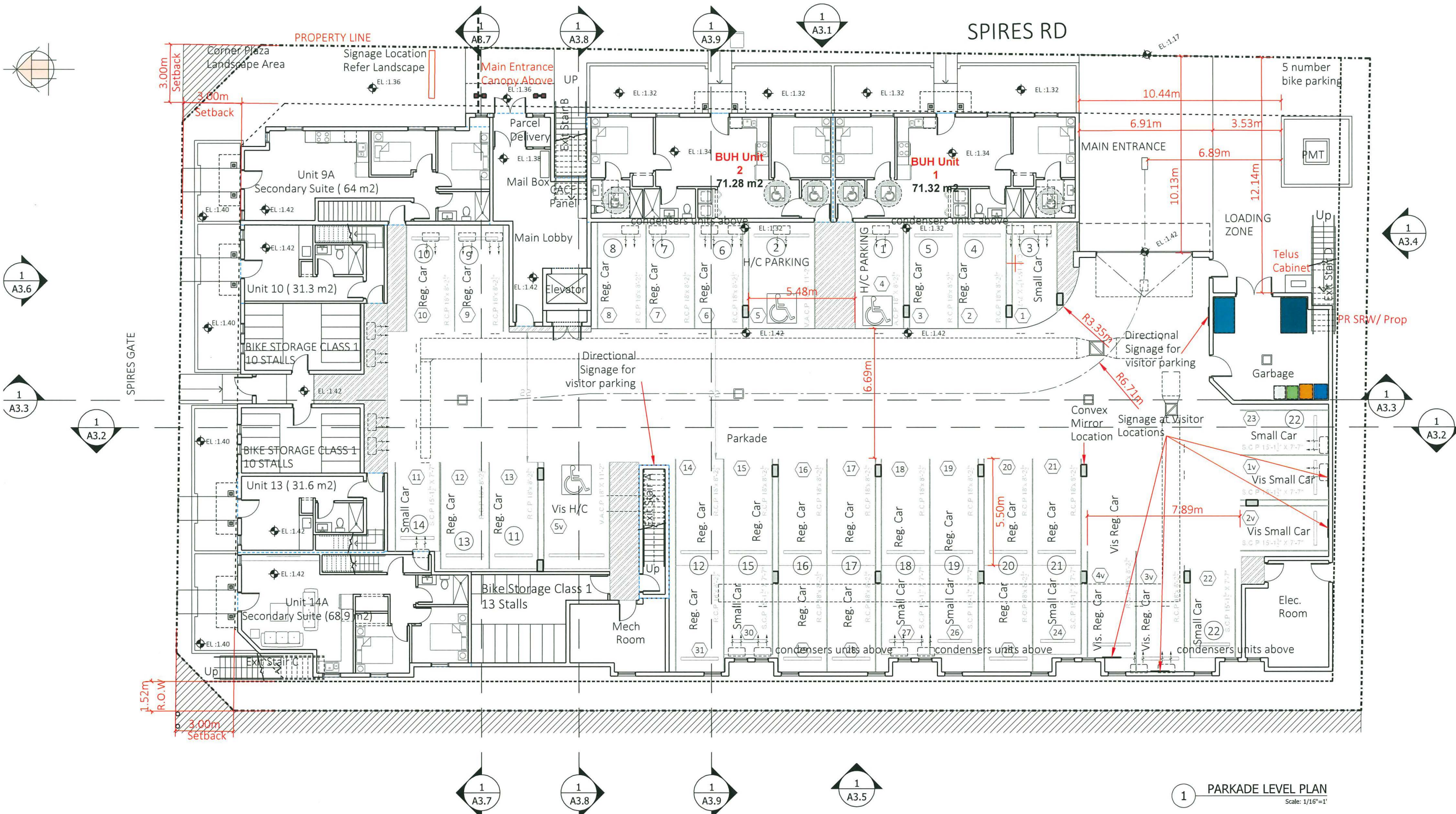
April 20, 2023

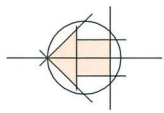
DP NO : 21-932383



REV	DESCRIPTION	DATE
1.	Issued For DP	02/08/22

Refer Civil
Drawing for
Retaining wall.





FLAT!
ARCHITECTURE

Unit 209- 6321 King George Blvd
Surrey BC, V3X 1G1
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Ph: 604-503-4484

PROJECT INFO: 11 UNITS
Townhouse Development at 8951,
8971 Spire Rd., 8991 Spire Gate,
Richmond, BC
CLIENT: Juliana

DATE
31-Mar-23

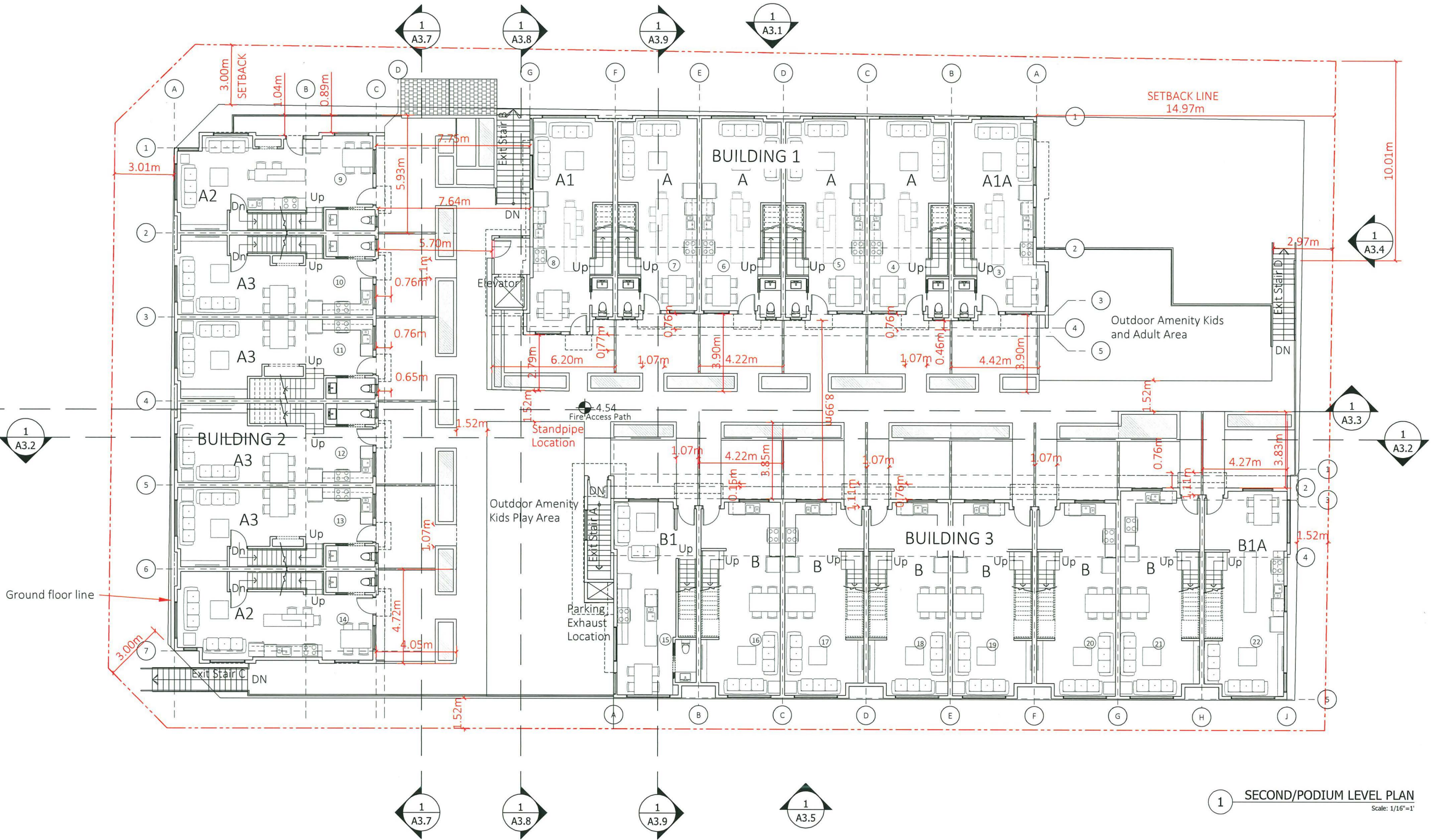
PROJECT NO:
17-127

SCALE: DRAWN BY:
As Noted R.W

REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W	02/08/22

PODIUM LEVEL PLAN

A2.2

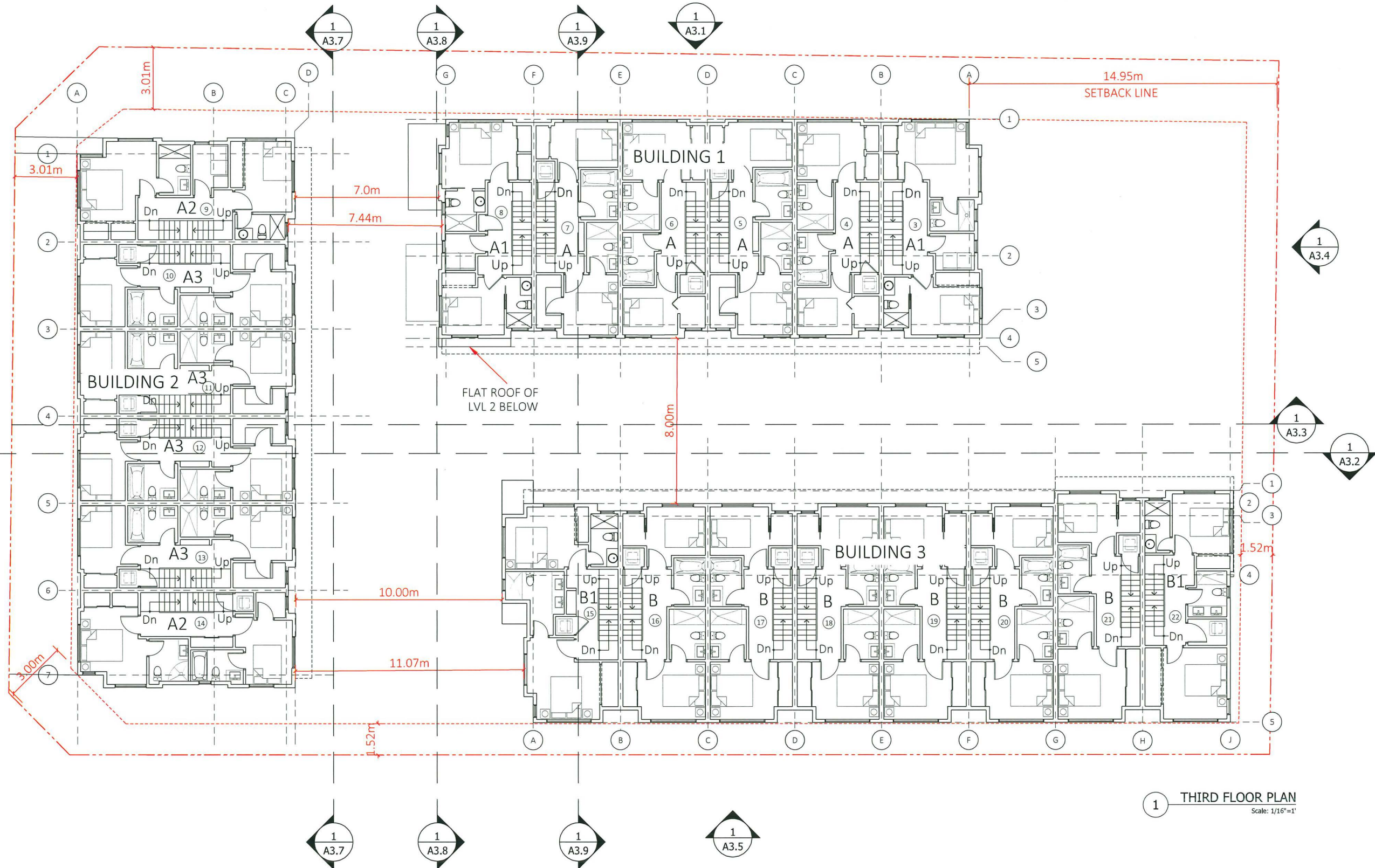
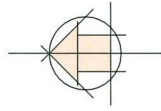


1 SECOND/PODIUM LEVEL PLAN
Scale: 1/16"=1'

DP 21-932383

Plan #4

April 20, 2023



1 THIRD FLOOR PLAN
Scale: 1/16"=1'



FLAT!
ARCHITECTURE

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Surrey BC, V3X 1G1
www.flatarchitecture.ca
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Ph: 604-503-4484

PROJECT INFO: 11 UNITS
Townhouse Development at 8951,
8971 Spires Rd., 8991 Spires Gate,
Richmond, BC
CLIENT: Juliana

DATE
31-Mar-23

PROJECT NO:
17-127

SCALE: DRAWN BY:
As Noted R.W

REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W	02/08/22

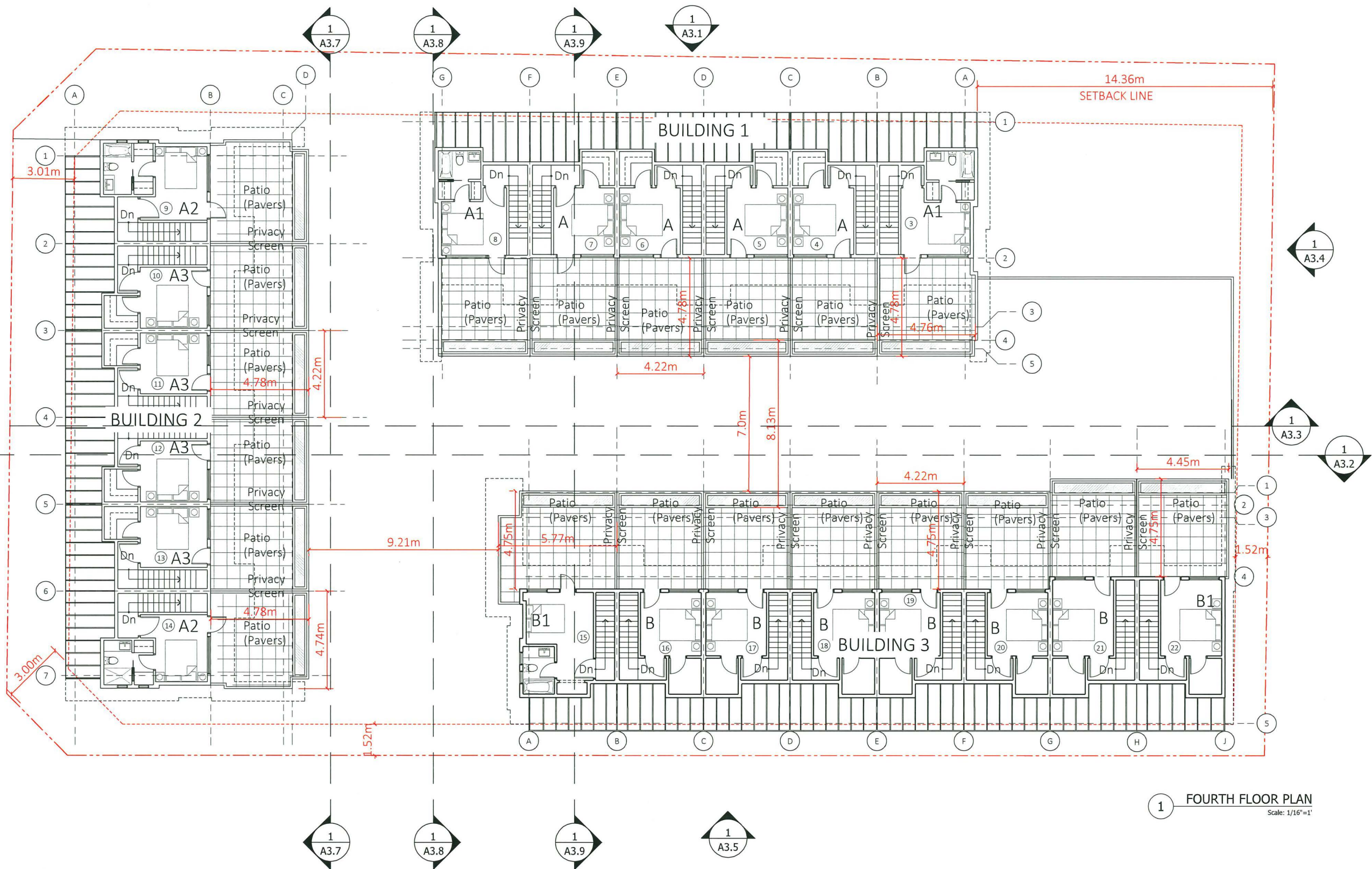
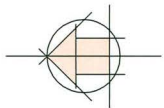
THIRD FLOOR PLAN

A2.3

DP 21-932383

Plan #5

April 20, 2023



1 FOURTH FLOOR PLAN
Scale: 1/16"=1'

DP 21-932383

Plan #6

April 20, 2023



Unit 209- 6321 King George Blvd
Surrey BC, V3X 1G1
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contact@flat1architecture.ca
Ph: 604-503-4484

PROJECT INFO: 11 UNITS
Townhouse Development at 8951,
8971 Spire Rd., 8991 Spire Gate,
Richmond, BC
CLIENT: Juliana

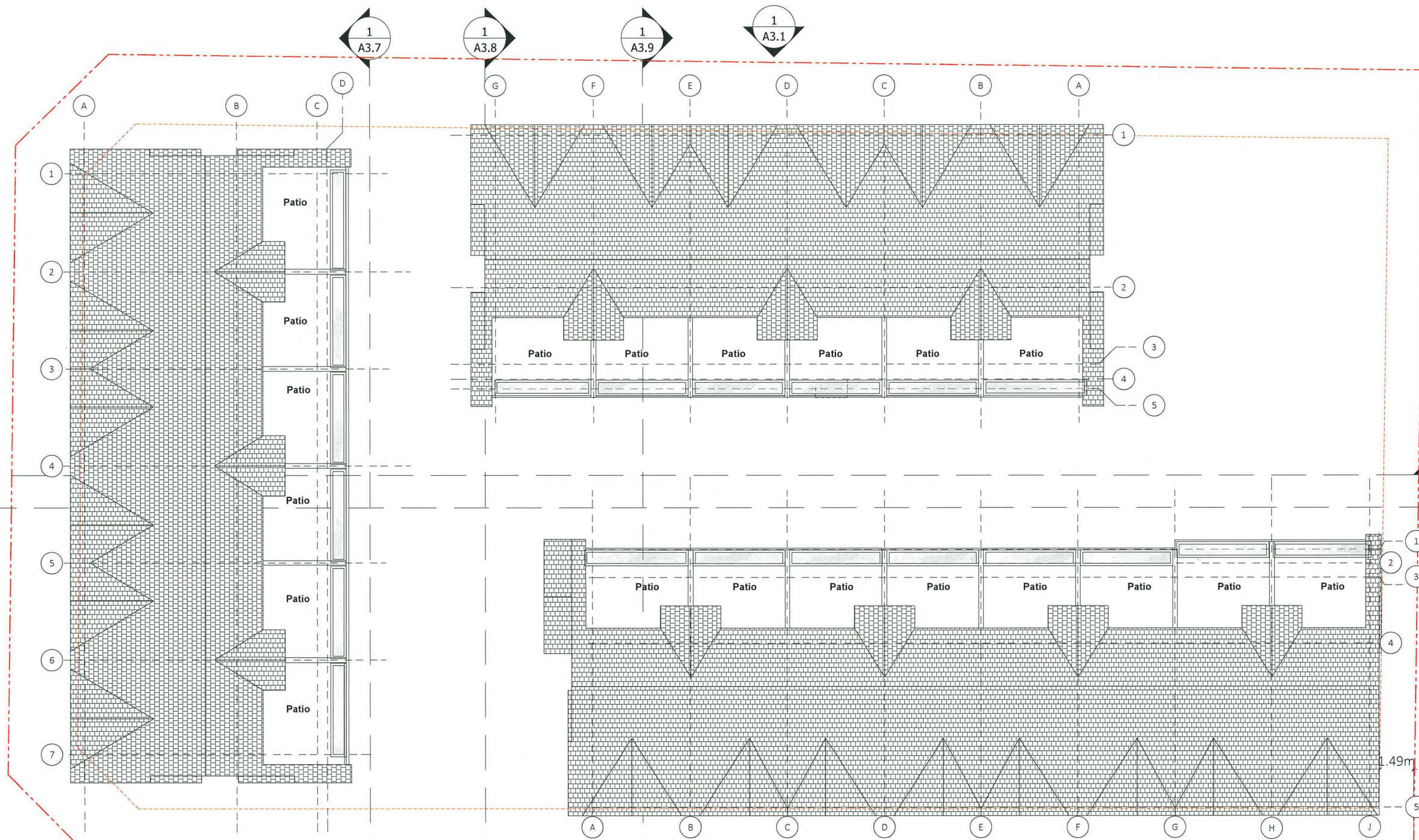
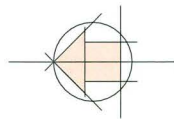
DATE
31-Mar-23
PROJECT NO:
17-127

SCALE: As Noted
DRAWN BY: R.W

REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W	02/08/22

FOURTH FLOOR PLAN

A2.4



DP 21-932383

Plan #7

April 20, 2023

1 ROOF PLAN
Scale: 1/16"=1'

PROJECT INFO:
Townhouse Development at 8951,
8971 Spires Rd., 8991 Spires Gate,
Richmond, BC
CLIENT: Juliana

DATE
23-Feb-23

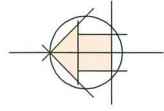
PROJECT NO:
17-127

SCALE: As Noted
DRAWN BY: R.W.

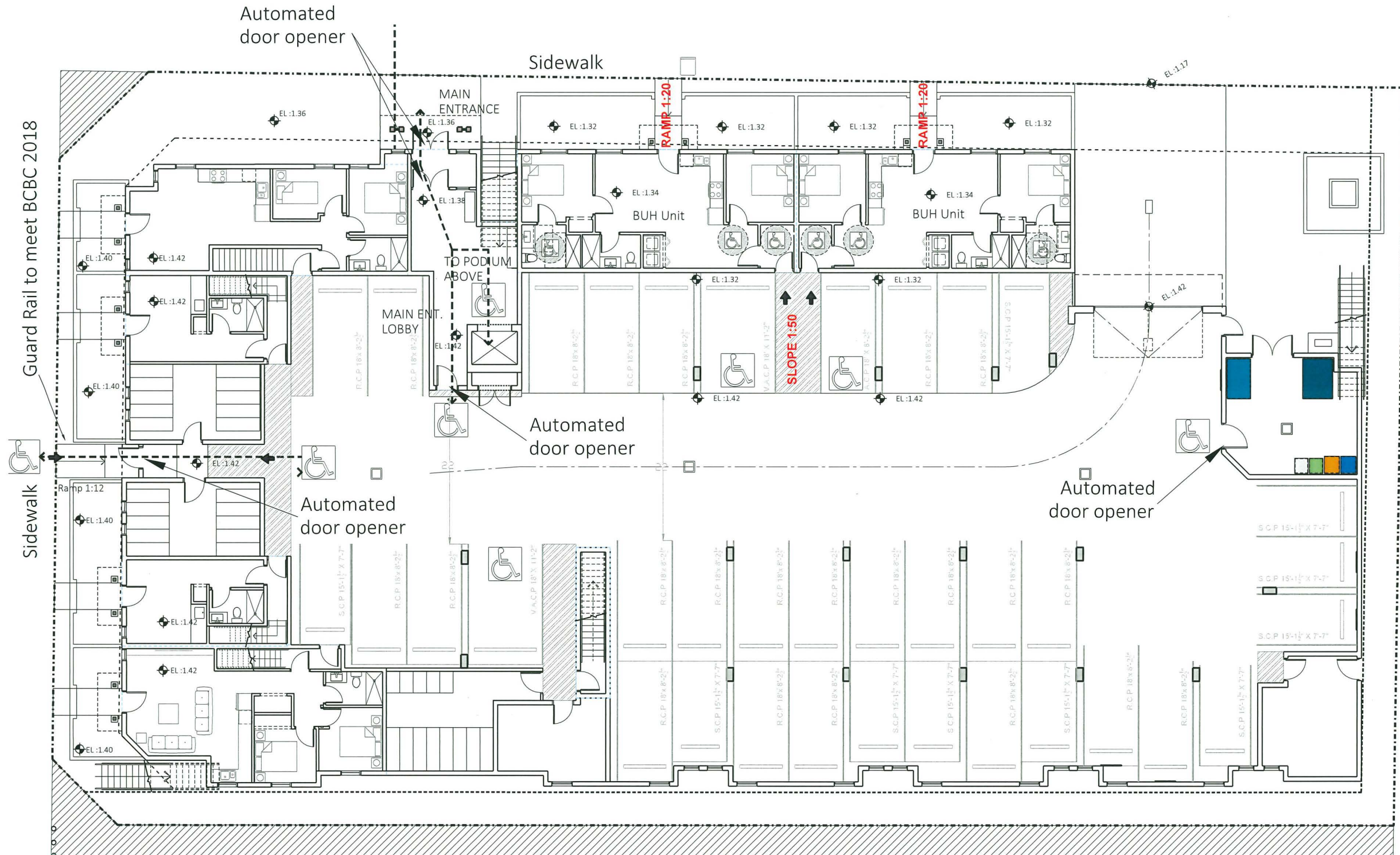
REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W.	02/08/22

ROOF PLAN

A2.5



SPIRES GATE ROAD



1 MAIN LEVEL PLAN
Scale: 1/16"=1'



FLAT1
ARCHITECTURE

Unit 209- 6321 King George Blvd
Surrey BC, V3X 1G1
www.flat1architecture.ca
contact@flat1architecture.ca

Ph: 604-503-4484

PROJECT INFO:
Townhouse Development at 8951,
8971 Spires Rd., 8991 Spires Gate,
Richmond, BC
CLIENT: Juliana

DATE
23-Feb-23
PROJECT NO:
17-127
SCALE: As Noted
DRAWN BY: R.W.

REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W.	02/08/23

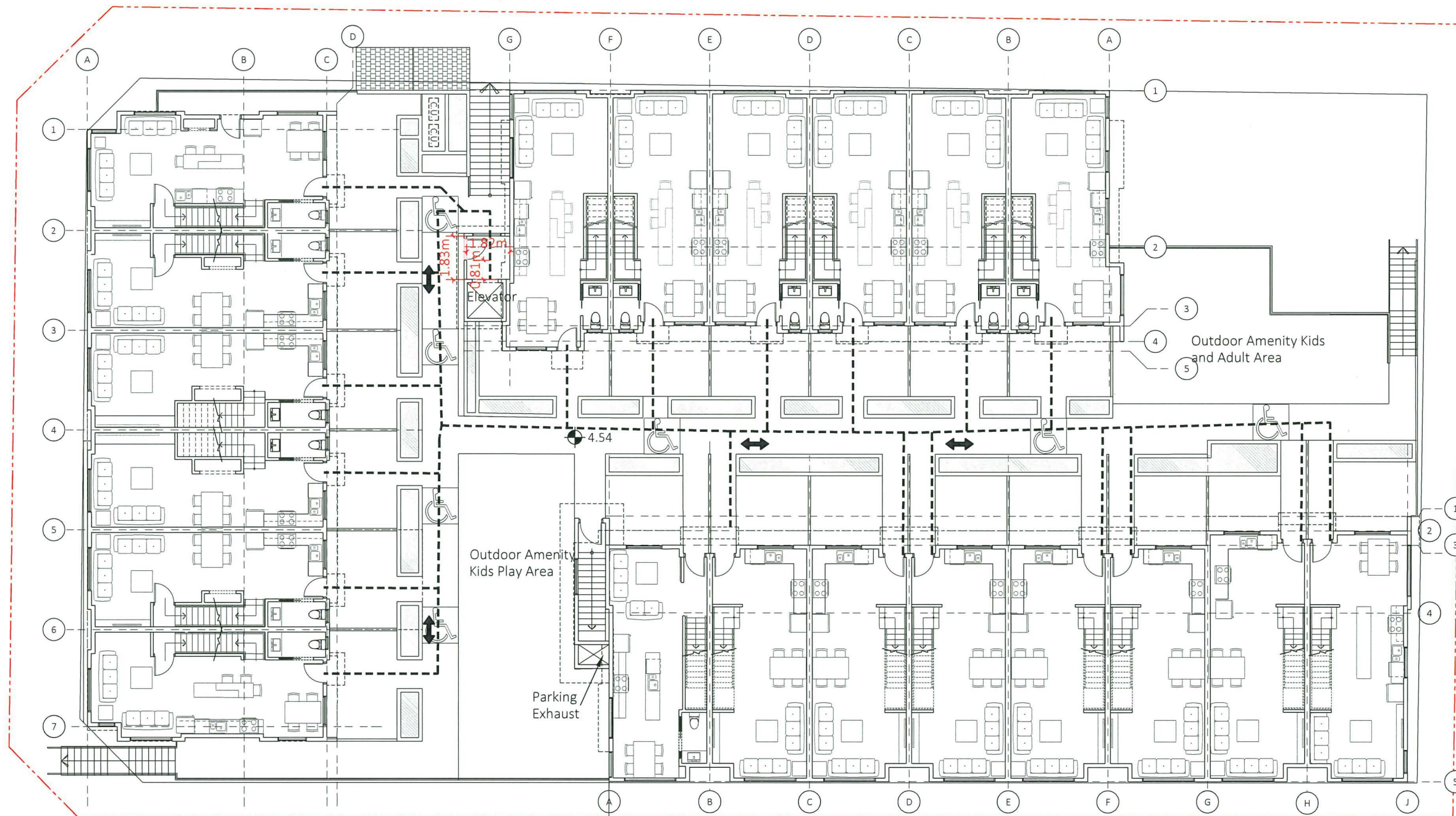
ACCESSIBILITY PLAN
LEVEL 1

DP 21-932383

Plan #8

April 20, 2023

A2.10



1 PODIUM LEVEL PLAN
Scale: 1/16"=1'

PROJECT INFO:
Townhouse Development at 8951,
8971 Spire Rd., 8991 Spire Gate,
Richmond, BC
CLIENT:
Juliana

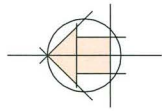
DATE
23-Feb-23

PROJECT NO:
17-127

SCALE: DRAWN BY:
As Noted R.W

REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W	02/08/22

ACCESSIBILITY PLAN
PODIUM LVL



NOTE: THIS DESIGN
COMPLIES WITH THE
BUH GUIDELINES OF
RICHMOND ZONING
BY-LAWS.



1.5 M DIA CLEAR
SPACE FOR
ACCESSIBILITY



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PROJECT INFO:
Townhouse Development at 8951,
8971 Spire Rd., 8991 Spire Gate,
Richmond, BC
CLIENT:
Juliana

DATE
23-Feb-23

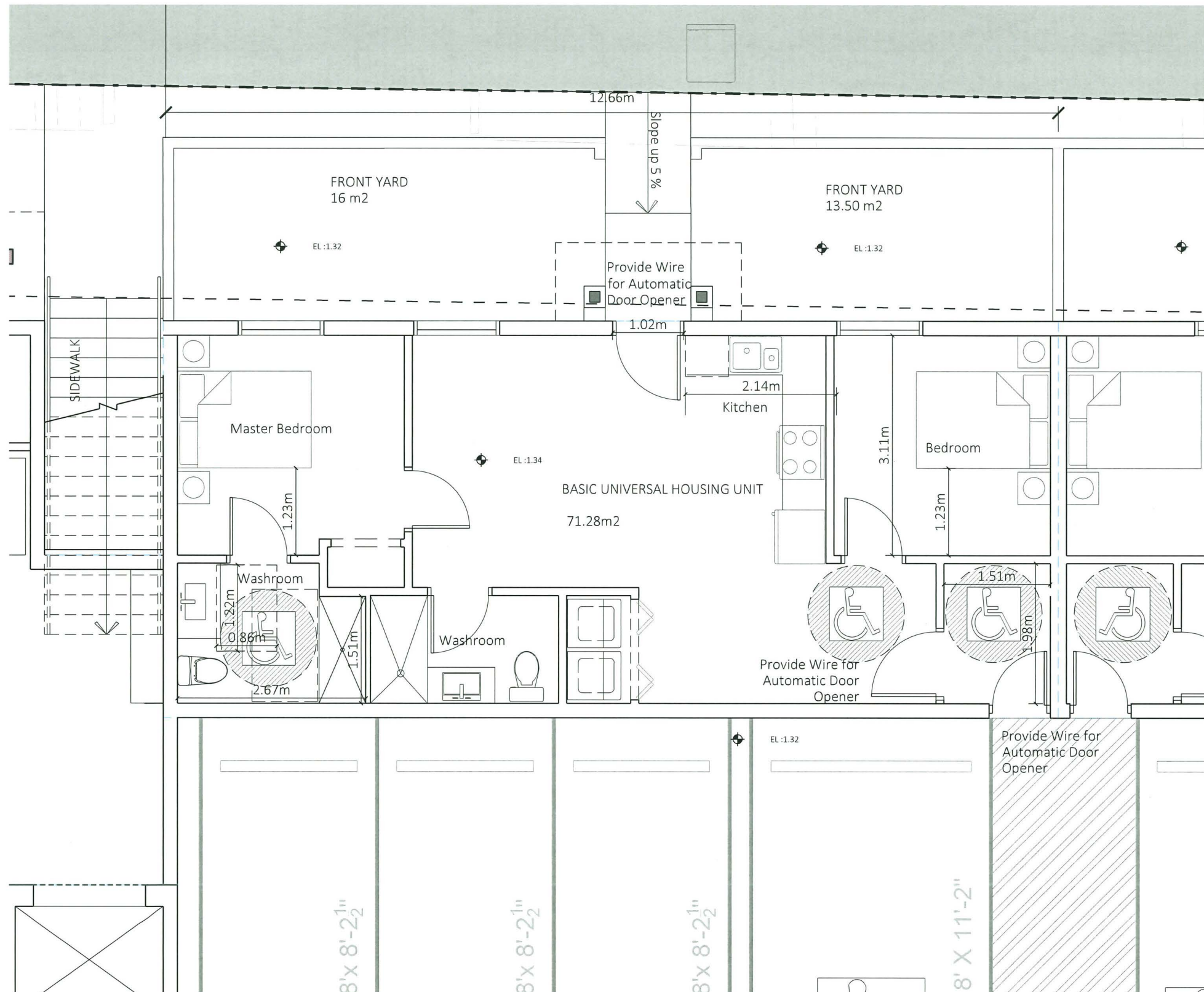
PROJECT NO:
17-127

SCALE: DRAWN BY:
As Noted R.W

REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W	02/08/23

ACCESSIBLE UNIT
PLAN

A2.12



FLOOR SURFACE:

- Floor finishes to be Slip Resistant

DOORS AND DOORWAYS:

- All Exterior Doors to have flush threshold in BUH units
- All Doors to Accessible units to be min of 855mm
- Maneuvering space to meet BUH guidelines e.g 1220 on push side wih 600mm clearance on door handle side

WINDOWS:

- one window is being provided to meet min sill height of 750mm in bedroom

OUTLETS AND SWITCHES

- Outlets, Thermostats and switches to meet BUH guidelines

BATHROOMS:

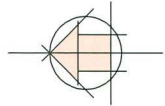
- one bathroom is being provided to meet the BUH guidelines in bedroom.

1 BUH- 2
Scale: 3/16"=1'

DP 21-932383

Plan #10

April 20, 2023



NOTE: THIS DESIGN
COMPLIES WITH THE
BUH GUIDELINES OF
RICHMOND ZONING
BY-LAWS.



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SPACE FOR
ACCESSIBILITY



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Ph: 604-503-4484

PROJECT INFO:
Townhouse Development at 8951,
8971 Spires Rd., 8991 Spires Gate,
Richmond, BC
CLIENT: Juliana

DATE
23-Feb-23

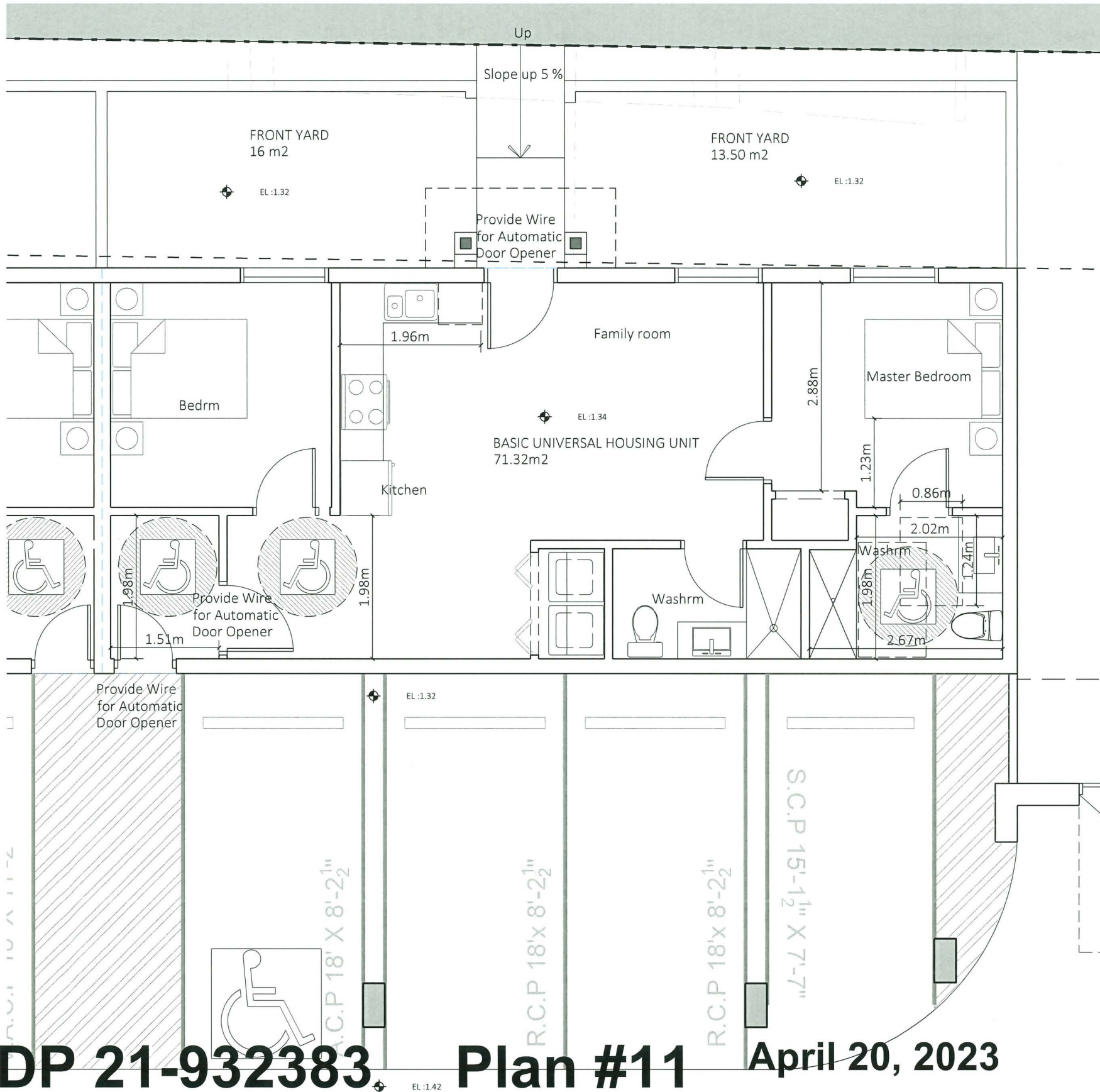
PROJECT NO:
17-127

SCALE: DRAWN BY:
As Noted R.W

REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W	02/08/22

ACCESSIBLE UNIT
PLAN

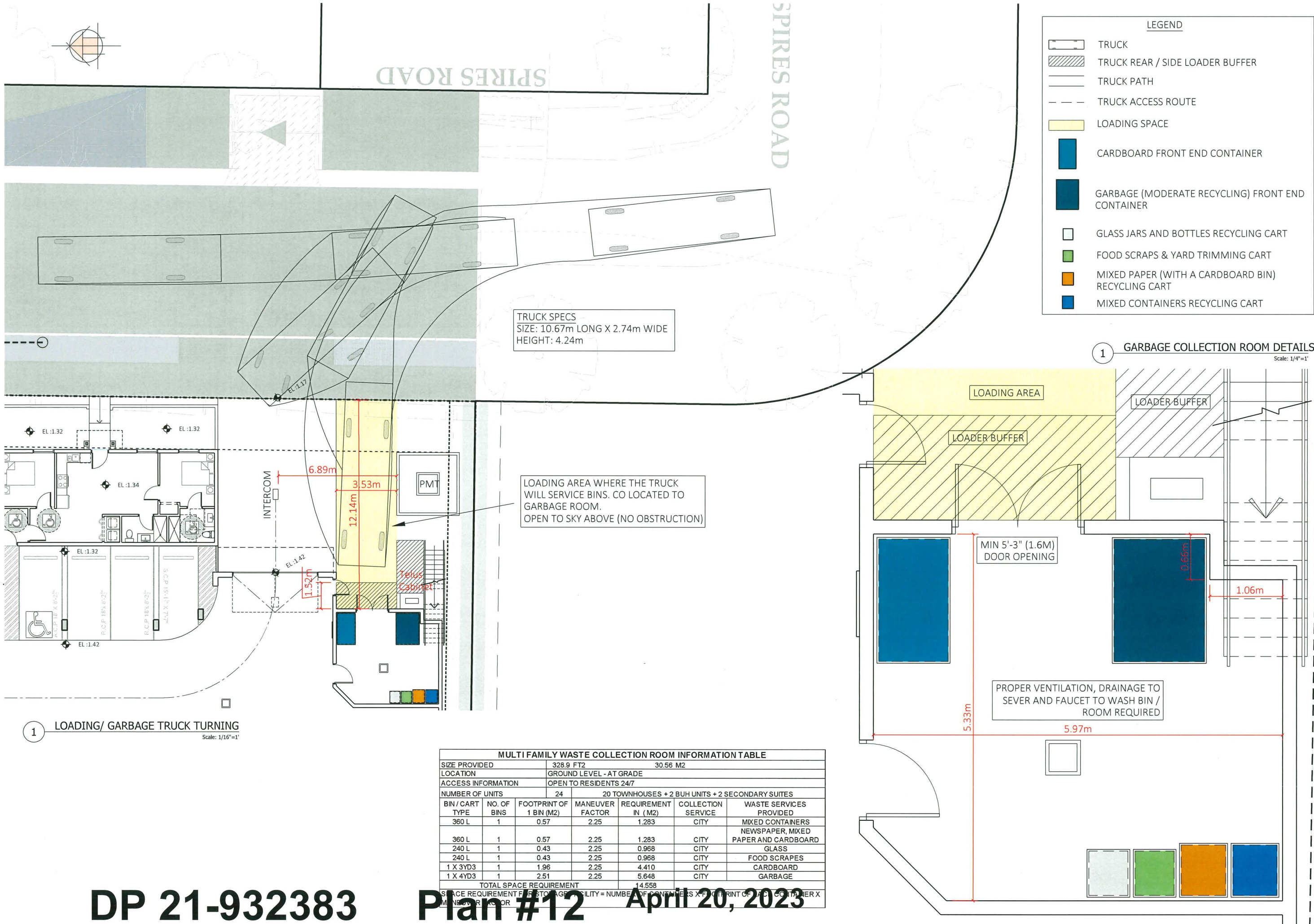
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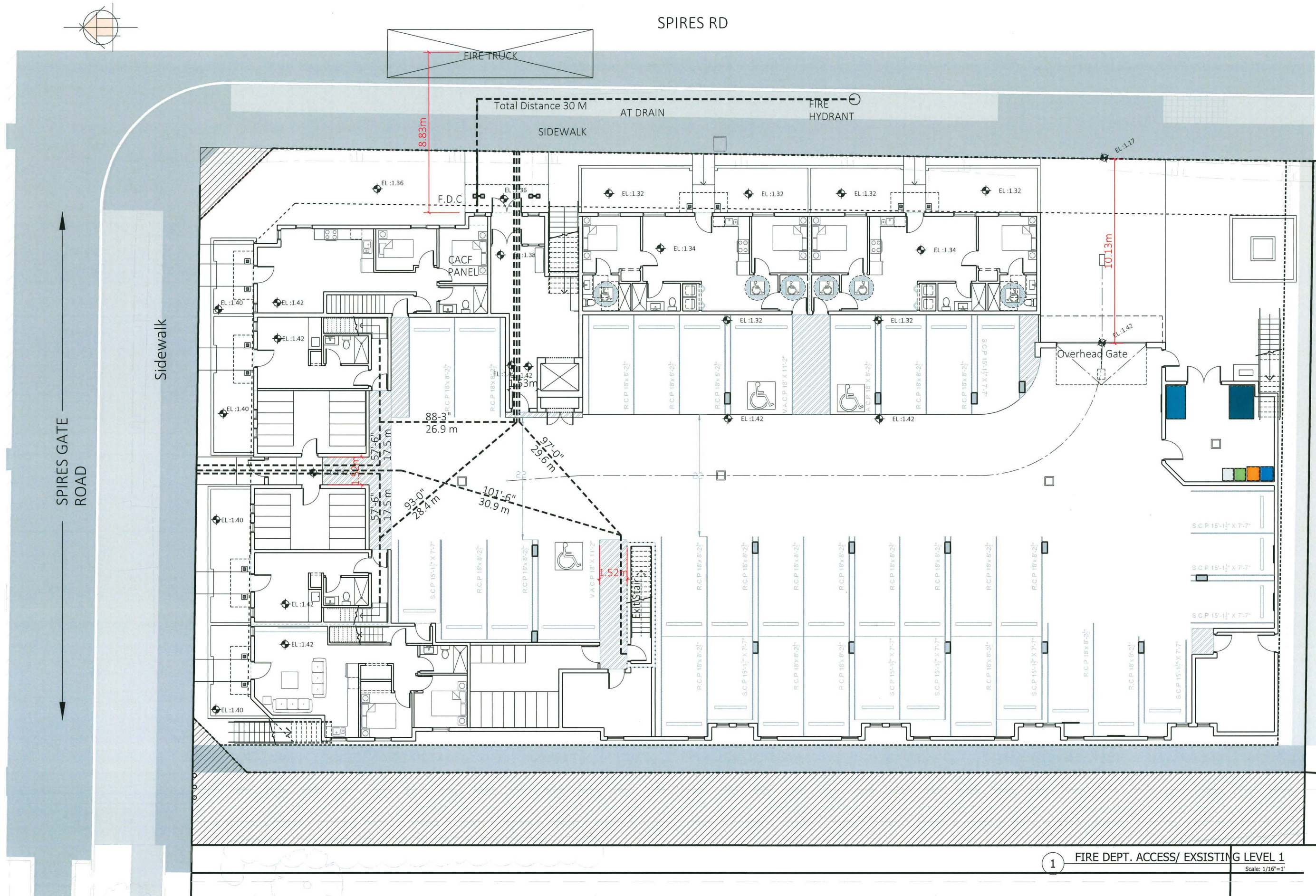
- FLOOR SURFACE:
- Floor finishes to be Slip Resistant
- DOORS AND DOORWAYS:
- All Exterior Doors to have flush threshold in BUH units
 - All Doors to Accessible units to be min of 855mm
 - Maneuvering space to meet BUH guidelines e.g 1220 on push side wih 600mm clearance on door handle side
- WINDOWS:
- one window is being provided to meet min sill height of 750mm in bedroom
- OUTLETS AND SWITCHES
- Outlets, Thermostats and switches to meet BUH guidelines
- BATHROOMS:
- one bathroom is being provided to meet the BUH guidelines in bedroom.

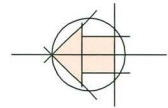
1 BUH- 1
Scale: 3/16"=1'

DP 21-932383 Plan #11 April 20, 2023



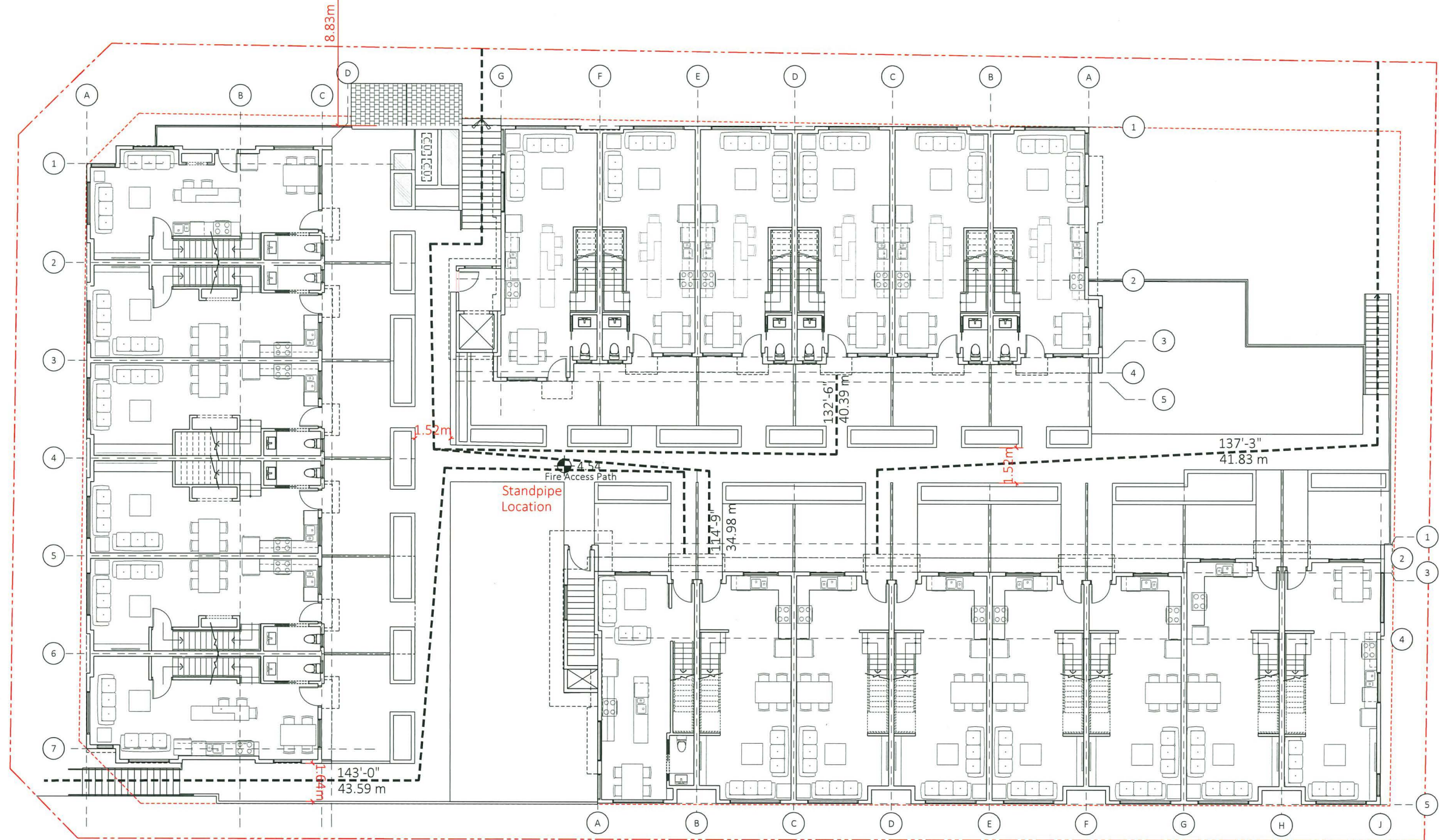
REV	DESCRIPTION	DATE
1.	Issued For DP	02/08/22





↑ SPIRES GATE ROAD ↓

SPIRES RD



1 FIRE DEPT. ACCESS/ PODIUM - LEVEL 2
Scale: 1/16"=1'



FLAT!
ARCHITECTURE

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Ph: 604-503-4484

PROJECT INFO:
Townhouse Development at 8951,
8971 Spires Rd., 8991 Spires Gate,
Richmond, BC
CLIENT:

DATE
23-Feb-23

PROJECT NO:
17-127

SCALE: DRAWN BY:
As Noted R.W

REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W	02/08/22

PODIUM - LVL 2
FIRE ACCESS PLAN

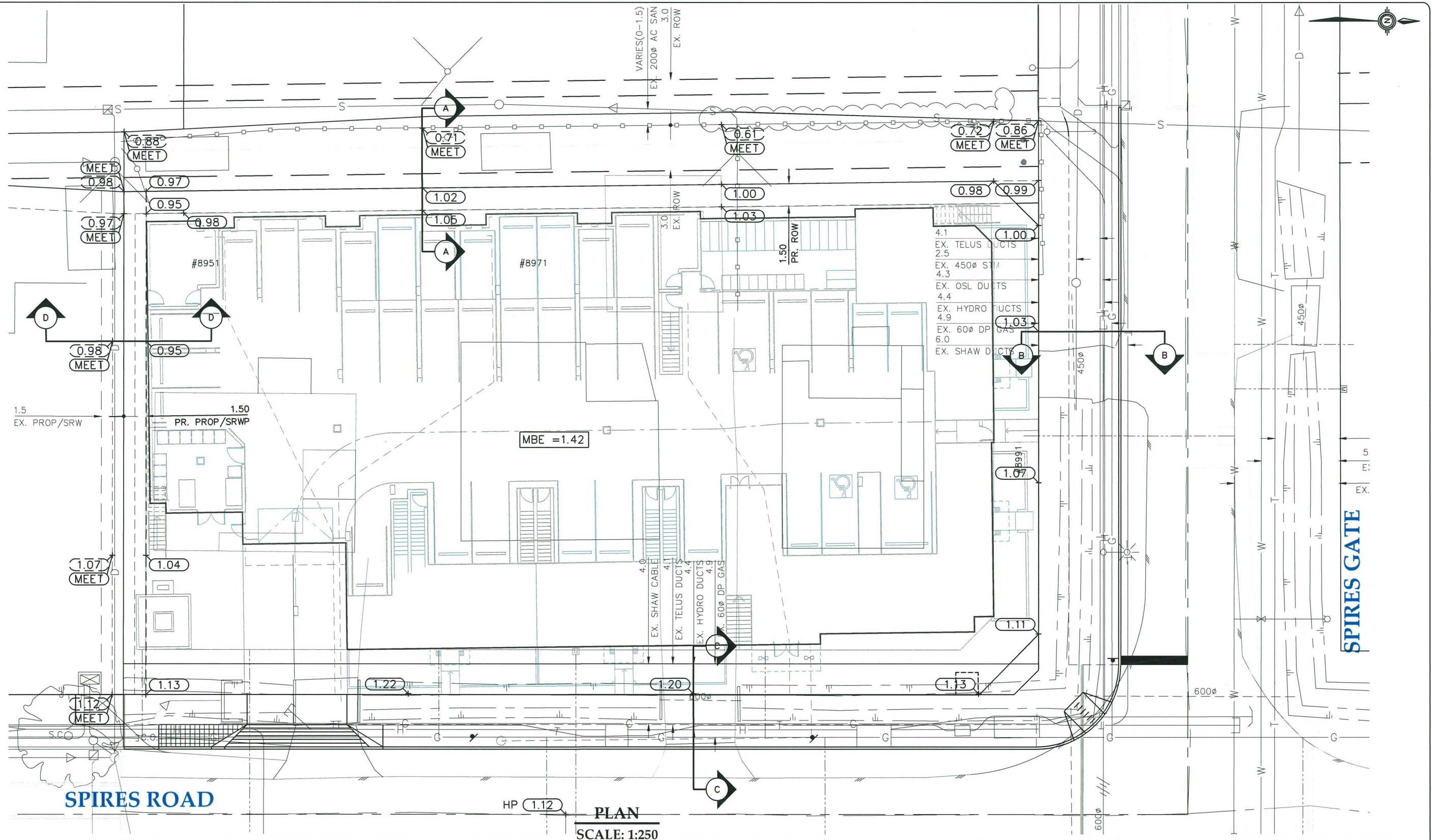
DP 21-932383

Plan #14

April 20, 2023

A1.9

R:\Projects\18051 - Flat Architecture (8951, 8971, 8991 Spires Rd, Richmond)\Design Drawings\18051_Lotgrading Plan.dwg



CoreConcept
CONSULTING LTD.
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e-mail: info@coreconcept.com
#220-2639 Viking Way, Richmond, BC, V6V 3B7
www.coreconcept.com

FLAT ARCHITECTURE
Core Concept Consulting Project No. 18051

DP 21-932383

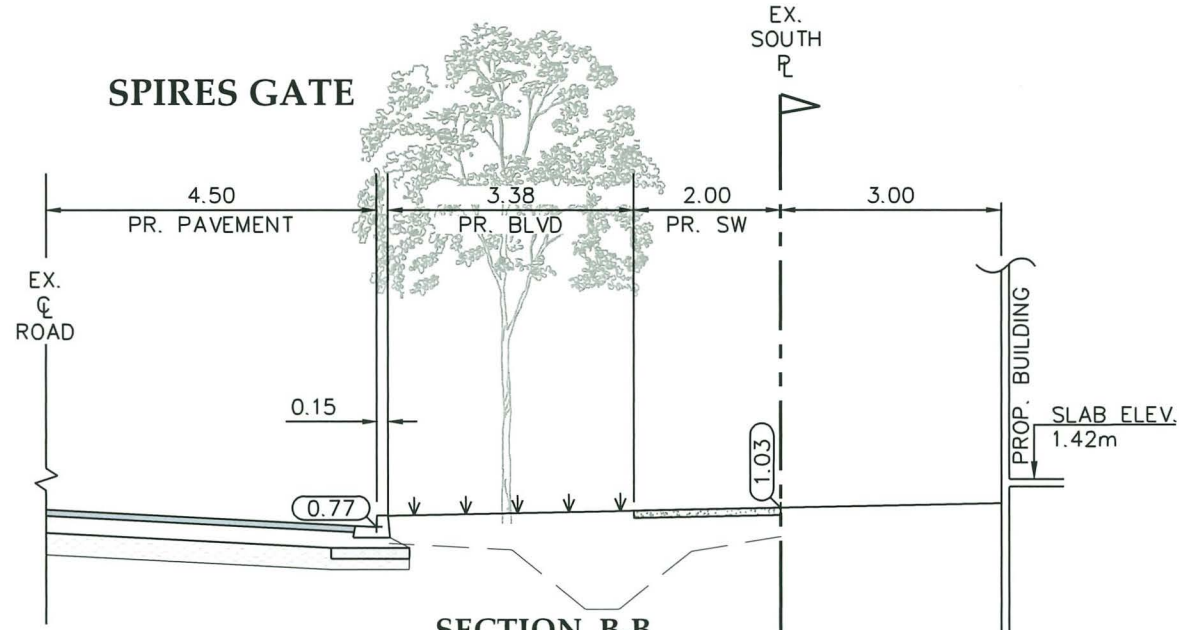
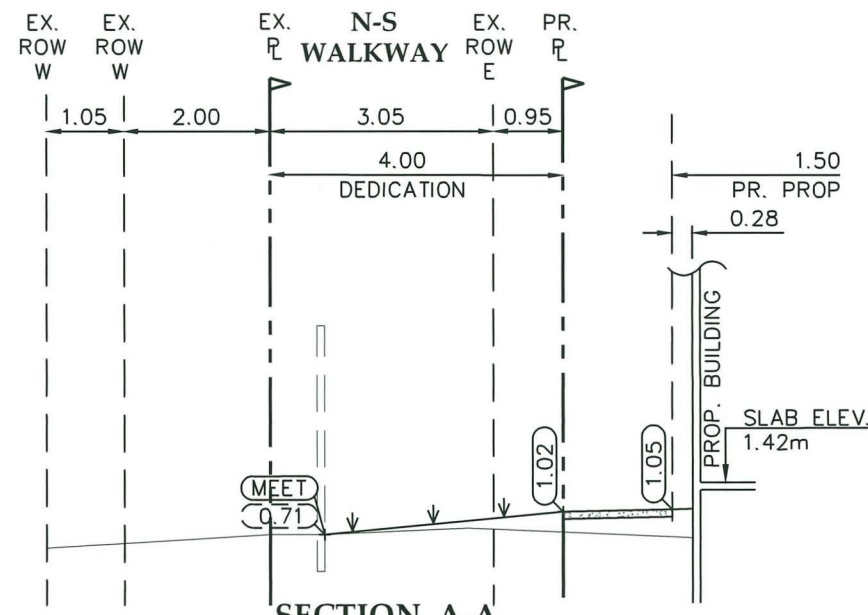
REV'N	DATE	BY	CH.	DESCRIPTION
0.	17 FEB 2023	JH	TS	ISSUED FOR DP

Plan #15 April 20, 2023

17 FEB 2023

TITLE: **LOT GRADING PLAN**
8951, 8971, 8991 SPIRES ROAD

DESIGN: JH	DWG. No.: .
DRAWN: HH	CHECKED: NMM
ENGINEER: TS	SCALE: 1 : 250
SEC. No.: 9-4-6	DATE: APR 2018
SHT No.: 1 OF 2	

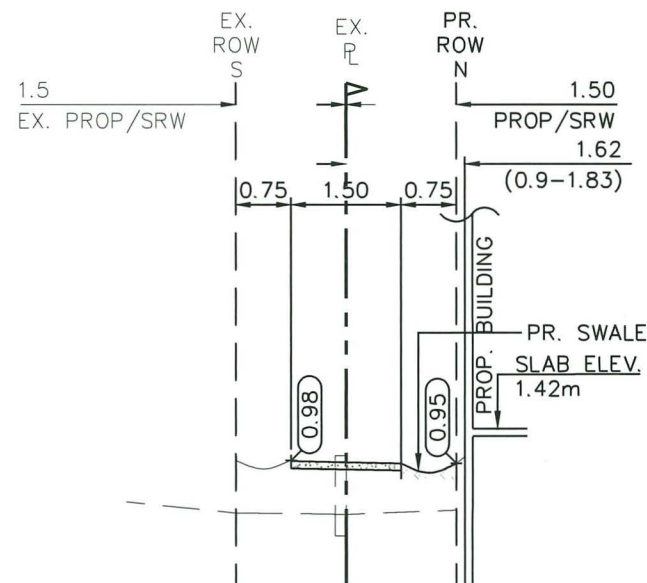
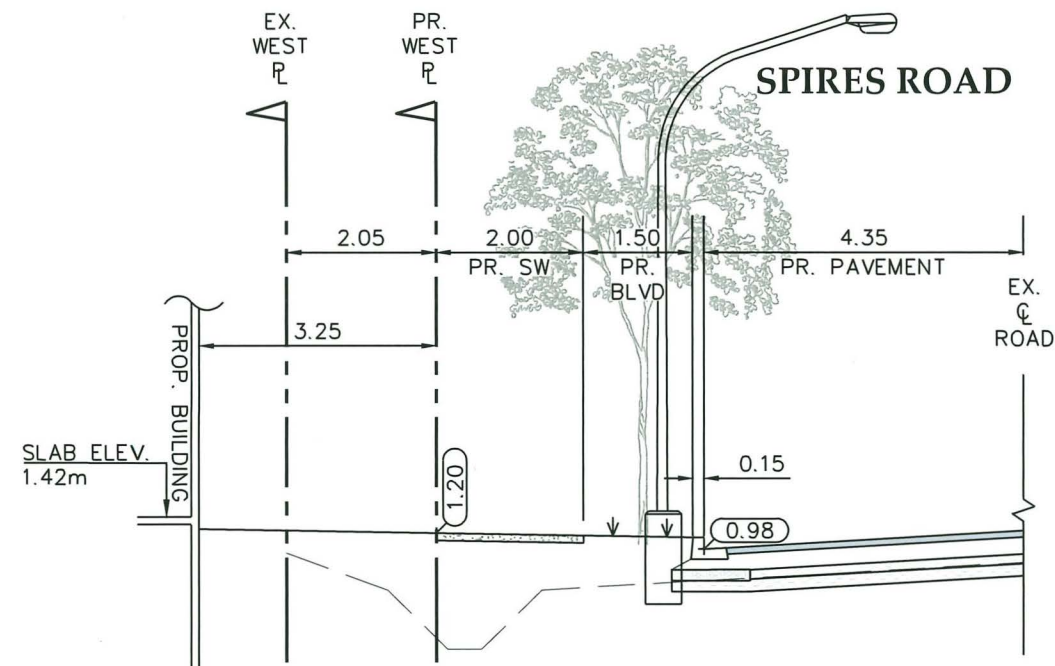


PROPOSED SITE GRADES:
 NW CORNER = 0.99m
 NE CORNER = 1.12m
 SW CORNER = 0.95m
 SE CORNER = 1.13m
 BUILDING 1 SLAB = 1.42m
 BUILDING 2 SLAB = 1.42m
 BUILDING 3 SLAB = 1.42m
 BUILDING 4 SLAB = 1.42m
 PARKADE SLAB AVERAGE = 1.42m
 PROPOSED AVERAGE SITE GRADE = 1.25m

EXISTING SITE GRADES:
 NW CORNER = 0.56m
 NE CORNER = 0.52m
 SW CORNER = 0.48m
 SE CORNER = 0.34m
 EXISTING AVERAGE SITE GRADE = 0.48m

MAX ROAD CENTERLINE GRADE:
 MAX = 1.12m

PROPOSED SITE FILL VOLUME:
 SITE AREA = 1958m²
 EXISTING AVERAGE SITE GRADE = 0.48m
 PROPOSED AVERAGE SITE GRADE = 1.25m
 FILL VOLUME = (1.25m - 0.48m) * 1985m² = 1528.5m³



CoreConcept
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 www.coreconcept.com
 tel. 604-249-5040
 e-mail: info@coreconcept.com

FLAT ARCHITECTURE
 Core Concept Consulting Project No. 18051

DP 21-932383

Plan #16

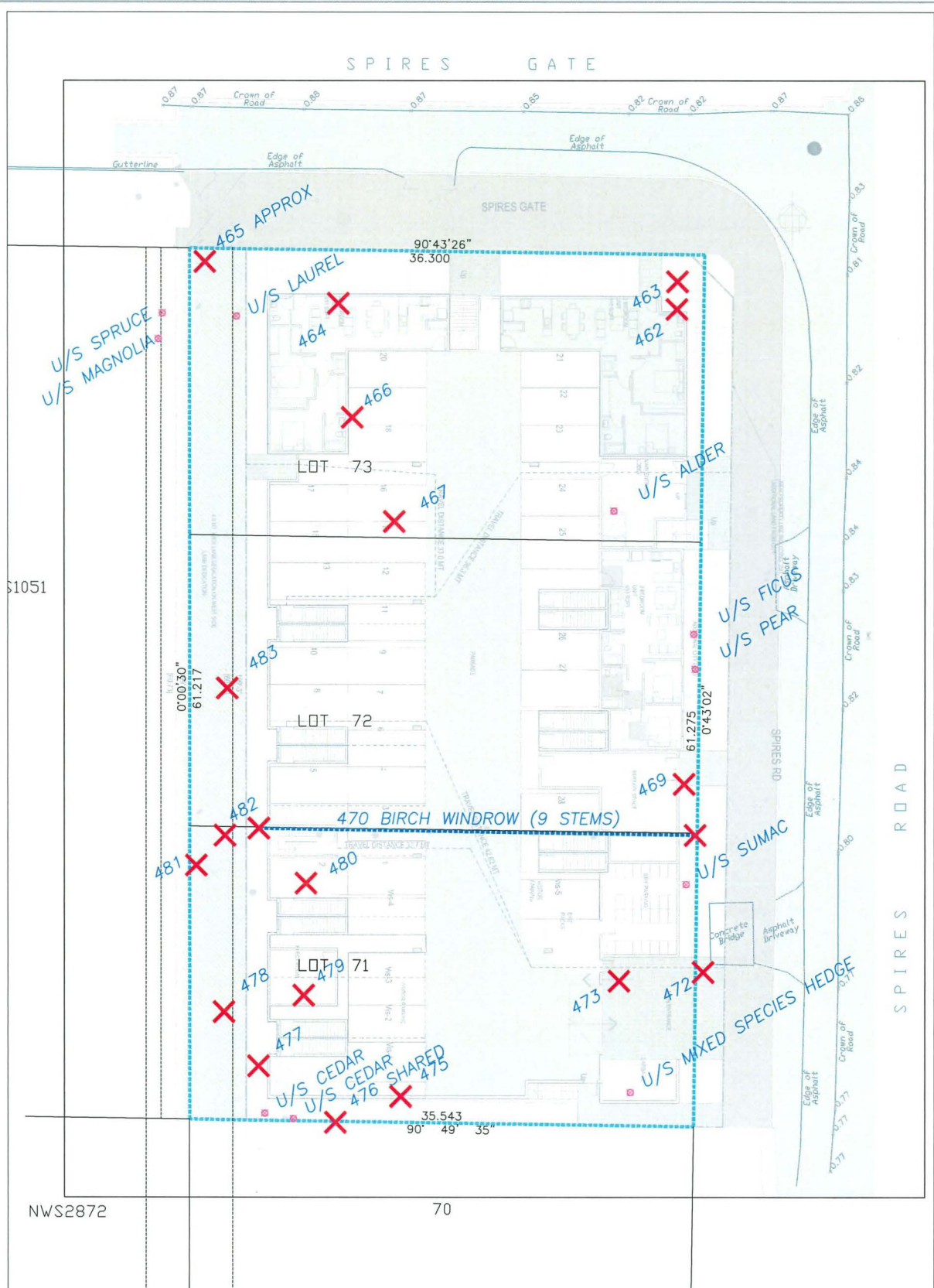
April 20, 2023

REV	DATE	BY	CH.	DESCRIPTION
0.	17 FEB 2023	JH	TS	ISSUED FOR DP
REV	DATE	BY	CH.	DESCRIPTION

17 FEB 2023

TITLE:
LOT GRADING PLAN
 8951, 8971, 8991 SPIRES ROAD

DESIGN: JH	DWG. No.: .	DATE: APR 2018
DRAWN: HH	SCALE: AS SHOWN	SEC. No.: 9-4-6
CHECKED: NMM	DATE: APR 2018	SHT No.: 2 OF 2
ENGINEER: TS	DATE: APR 2018	

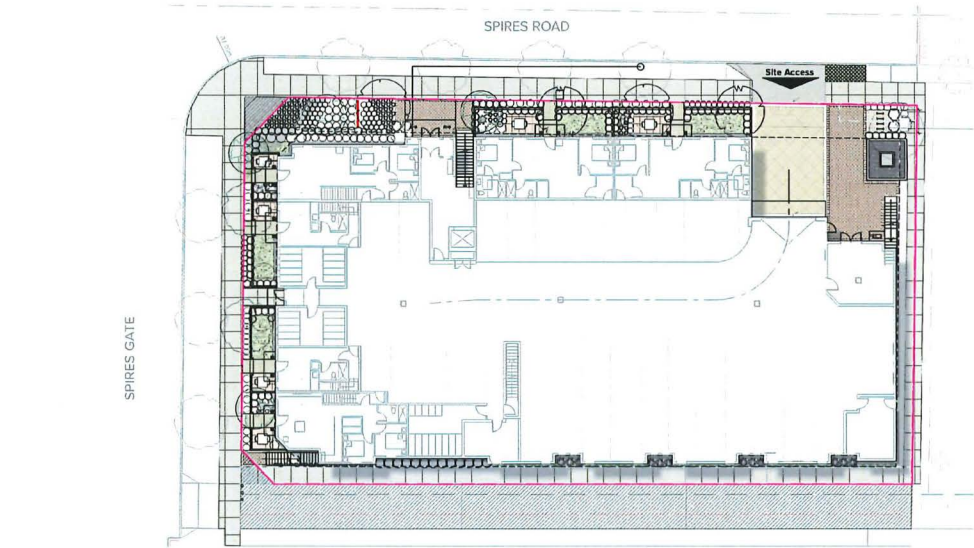


MAGNETIZED PLANT LIST: REPLACEMENT TREES				
Please use historical name when ordering.				
Common abbreviations for plant names and ICA/PA/NA standards apply to: quality, root ball, health, form, flowering, fragrance, pump/irrigation and establishment name.				
CODE	QTY	SIZE	ESTABLISHMENT NAME	COMMON NAME
SHRUBS - SMALL TO MEDIUM SCALE				
AC		16cm	Acacia gum	Peppercorn myrtle
ARES		16cm	Araucaria "Red Sunset"	Red sunset myrtle
DI		16cm	Dawsonia imbricata	Drove tree
SP		16cm	Sapota latifolia	Shorewood bush
SD		16cm	Stenocarpus pseudocarrizosa	Japanese Strowia
CC	3.5m	16cm	Cassia cordata	Redbud
MGF		16cm	Melaleuca glauca	Sheoak (magnolia-like) evergreen
SI		16cm	Strya speciosa	Japanese weebell
VERBENAS - SMALL SCALE				
AMC		3.5m	Abies concolor "Silveta"	Not for sale
POA		3.5m	Picea omorika	Scotch spruce

TREE MANAGEMENT DETAIL

- TRAFFIC PROTECTION ZONE RESTRICTIONS:**
 Buoys that are installed to protect a project must be protected from damage during all phases of development-related work on the site. Any access or construction-related work within the TPZ (ETP, RPT and WPT) requires advance approval, including advance notification and on-site direction or supervision by the project engineer. The following activities are prohibited within the TPZ:
- No skidding or dragging of any equipment or any other objects or materials (e.g., rock, including cut and filled, boulders, shipping or concrete boulders, etc.) through the TPZ.
 - No excavation or operation of machinery, barge, vessel or any equipment (including small craft hauls, skid boats, skid barges, etc.) skid, except on approved and directed by the project engineer, and subject to special measures.
 - No storage of soil, rock, concrete, fill or other materials within the TPZ.
 - No storage or washing of concrete, stones, gravel, portland, or other potentially harmful materials.
 - No removal of vegetation, shrubs, or trees.
 - No skidding, dragging, skis, cables or any other devices to advanced tow.
 - No use of cutting, sawing, or other equipment to cut or remove vegetation by the project engineer, and performed by a qualified barge worker firm employing BA Certified Operators and working to ANSI A300 and ANSI T330 Standards.
 - No use of herbicides or other chemicals that are not listed by the EPA and approved by the project engineer, including spraying or contact, etc., except on approved and directed by the project engineer.

PROJECT:	PROPOSED MULTI-FAMILY DEVELOPMENT		
ADDRESS:	8951, 8971, 8991 SPIRES RD RICHMOND BC		
CLIENT:	JULIAN YUNG - FLAT ARCHITECTURE		
CITY REF:		ACL FILE:	18117
PLOT SIZE:	22"X34"	REV #:	2
		DATE:	OCT 2, 2020



1 Key Plan-Street Level
Scale: 1:300

DESIGN RATIONALE AND SUMMARY

Being an infill development among a mix of other townhouse complexes and rapidly evolving residential lots, the contextual treatment demands sensitivity and appropriate placement of elements.

We are proposing a relatively simple mix of surfaces and their configuration owing to a very small scale of such surfaces such as pathways to the units and the driveways. We have chosen to limit our selection to 2 or 3 chief finishes and reserved a more complex hierarchy of surfaces for the deck level.

The planting on the boulevard edges has been very carefully configured with some matching trees of the surrounding boulevardscape and what might be contextually appropriate with scale and available right of way. Similarly, being cognizant of the space requirements for the deck level planting, we have chosen to limit the trees and place the built up planters to the perimeter where possible for structural reasons. The trees selected for the internal layout are small and relatively less in number.

This development is amidst a rapidly changing area where a number of developments have sprung up in the past few years. Our design concept advocates a sensitive scheme that merges with the general transformation of the area.

The multi-user nature of the residential development demands privacy for the various units and their accessible spaces. The element used to define these spaces (private patios from one another) are emerald cedar (thuja occidentalis smaragd) and Taxus. These columnar hedge plants are used in tandem with smaller hedging material such as the Spiraea and the flowering perennials to allow for multiple layers of textural relief.

The north east corner of the site, and the area by main lobby are treated with multiple layers of ornamental grasses and flowering perennials which are placed in a way that emphasizes the project signee and create a welcoming landscape for those entering the site and building. Some of the proposed plants are PENNISETUM HAMELN, BLUE OAT GRASS and Hemerocallis lilioasphodelus, in addition to a Taxus buffer in the background to provide privacy for adjacent unit.

Vines and trellises are proposed along the west side of the building providing additional visually appealing green elements to the building to be enjoyed by pedestrians.

Outdoor Spaces

The outdoor amenity has been designed with a linear two zone concept. The main constituents are the Social recreational area and a playground. The social area has been augmented with an outdoor kitchen and sustainable elements like the garden plots. These are placed with raised planters c/w spout and work bench for the residents use at the deck level.

Further, we have proposed use of native plants requiring lower water intake and offering trees that encourage bird habitat such as the 'Bitter Cherry' towards the lane.



2 SOME PROPOSED PLANTS

GENERAL NOTES

All materials and workmanship to CLS Standards, latest edition. Soil depths and subgrade preparation, soil quality and plant sizes to meet or exceed that standard.

Plant sizes in this list are specified according to the BC Landscape Standard's latest edition. Container sizes are specified as per "CNTA Standards". Both plant size and container size are the minimum acceptable sizes. The installers are advised to search and review, make plant material available to the Landscape Architect for optional review at the source of supply. Area of search to include Lower Mainland and Fraser Valley. 'Substitutions' must obtain written approval from the Landscape Architect prior to making any substitutions to specified material. Unapproved substitutions will be rejected. Allow a minimum of five working days prior to delivery for request to substitute. Substitutions are subject to the Landscape Standard.

All plant material must be provided from the certified 'Disease Free' nursery. All plant material must conform to the latest edition of the 'BC Landscape Standard'. Provide certification upon request. All landscaping and landscape materials to conform to the latest edition of the CLS standards.

Min. growing medium depths over prepared subgrade shall be:

Lawn areas	300mm
Ground Cover Areas	450mm
Shrub Areas	450mm
Tree Pits	300mm (around root balls)

Growing medium shall have physical and chemical properties as described in the standards for 'Ground' areas, except for the areas over structures where the medium shall conform to the requirements for level 1 applications. Processing and mixing of the growing medium shall be done off-site using a mechanized screening process. Proposed growing medium shall be tested by a recognized laboratory. The contractor shall guarantee that the soil submitted for testing is a sample representative of the soil to be used at the site.

On-Site or imported soils shall satisfy the requirements of the standards for growing medium. Soils shall be virtually free from subsoil, wood including woody plant parts, weed or reproductive parts of the weeds, plant pathogenic organisms, toxic material, stones over 30mm, and foreign objects.

All planting beds shall receive min. 50mm bark mulch.

The contractor shall maintain clean working conditions, remove all refuse and debris and present the site in a safe and clean condition upon completion of all works.

All the Planters are fixed not removable.

Plant species and varieties may not be substituted without the approval of the Landscape architect.

All plant material to be warranted for one year from date of substantial completion.

All wood fences to be cedar, with one coat of clear penetrating preservative.

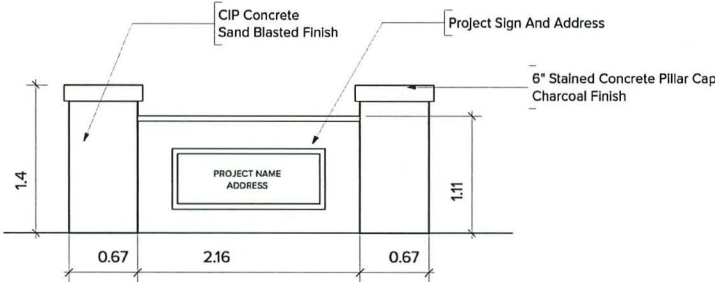
All planted areas to be equipped with automatic irrigation system.

Automatic zoned irrigation system to be provided with following primary zones,

- Street level boulevard areas including the ROW's, setbacks not part of private yards, driveway access etc. These include chiefly inground planting.
- Podium level public areas. This includes planting in planter beds and on slab.
- Individual yards on site level. Mainly inground planting.
- Individual yards on podium level. Mainly planter.
- All amenity areas on podium level. Mainly planter beds.

These have been carefully chosen to address the varying volume of growing medium to be catered for and will employ suitable heads and discharge.

Landscape Plans are prepared based on latest architecture drawings Revision no. 3 on 30 March 2022.



3 PROJECT SIGNAGE DETAIL (F2)
Scale: NTS

SEE L8 FOR SOIL VOLUME CALCULATION OF PODIUM LEVEL PLANTER.	SEE PAVING/SITE FURNISHING LEGENDS ON L4.
SEE L5 FOR PLANTER HEIGHT OF PODIUM LEVEL.	SEE L8 FOR SOIL VOLUME CALCULATION AND PLANTER HEIGHT OF ROOFTOP PLANTERS.



ARCHITECTURE PANEL INC.

ARCHITECTURE | LANDSCAPE ARCHITECTURE | URBAN DESIGN

Unit 206, 1493 Foster Street, White Rock, BC | 6047831450 | ruchir@architecturepanel.com

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Project:
**8951, 8971 Spires Rd,
8991 Spires Gate**

Owner

Sheet Title
KEY PLAN

Total Sheets
18

Sheet No.
L1

Contractors

Consultants
FLAT Architecture

Drawn By
SD

Checked By
RD

AHJ
City of Richmond

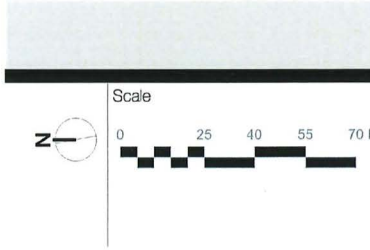
Documents
DP Application

Reviewed By
RD

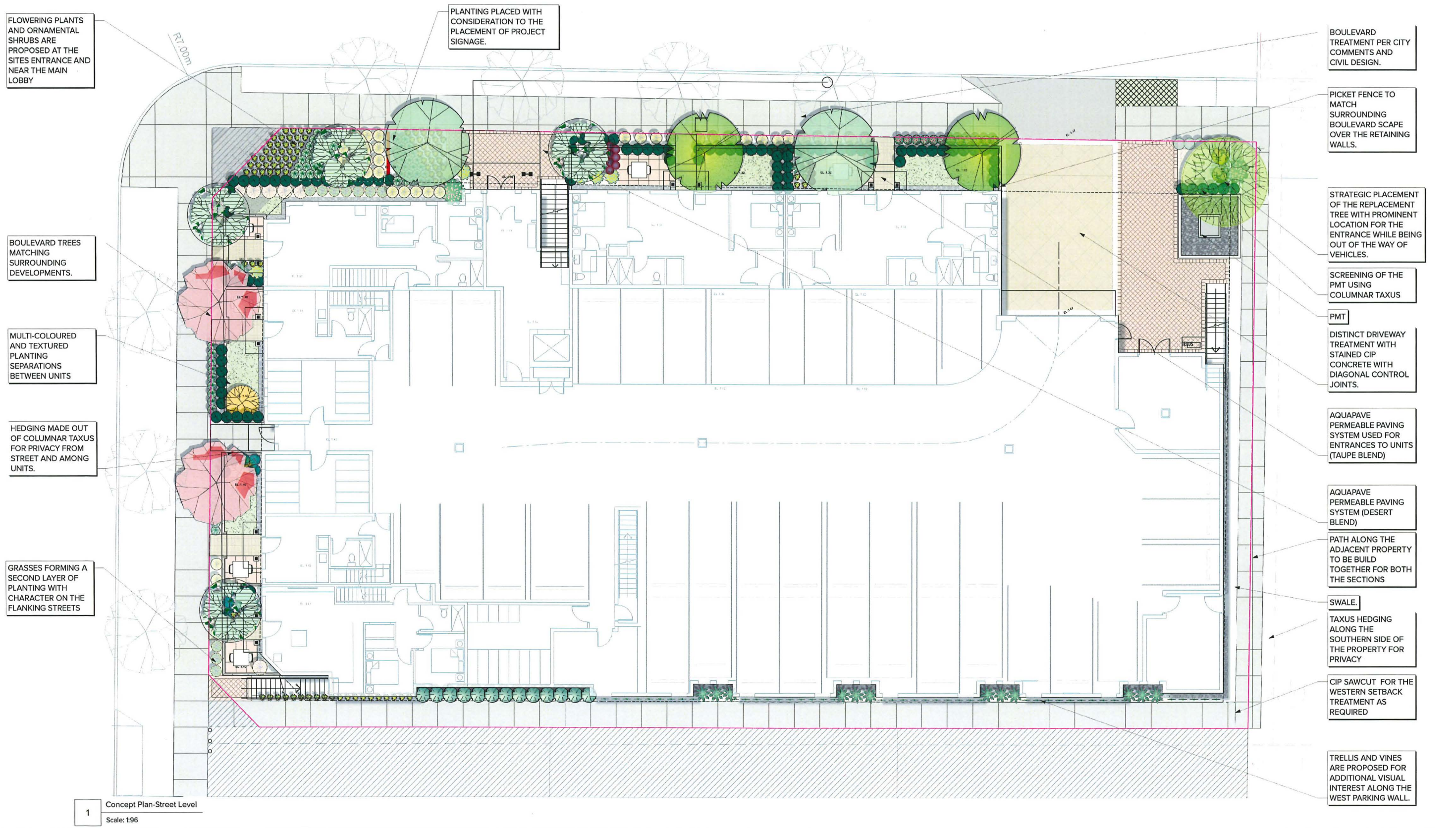
Status

April 20, 2023

No	Date	Issue Notes
K	05-04-22	DP Resubmission
L	05-07-22	DP Resubmission
M	03-10-22	DP Resubmission
N	27-10-22	DP Resubmission
O	20-01-23	DP Resubmission
P	21-03-23	DP Resubmission
Q	03-04-23	DP Resubmission



DP 21-932383 Plan #18





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DP 21-032383

Plan #19

Project
**8951, 8971 Spires Rd,
8991 Spires Gate**

Owner

Sheet Title
CONCEPT (SITE)

Total Sheets
18

Drawn By
SD

Reviewed By
RD

Sheet No.
L2

Checked By
RD

Status
REZONING

Contractors
**AHJ
City of Richmond**


Documents
DP Application

Consultants
FLAT Architecture Inc.

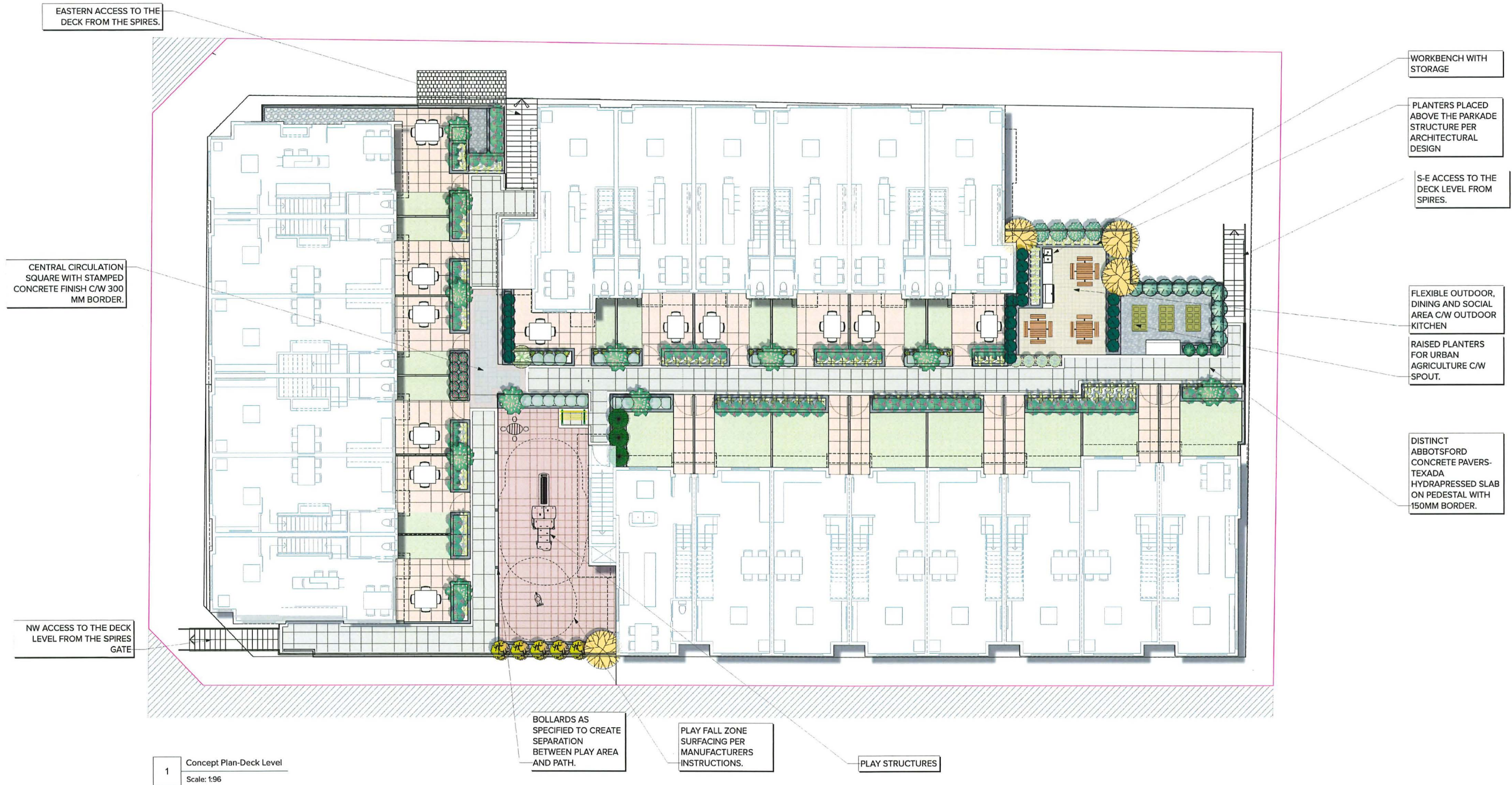
April 20, 2023

No	Date	Issue Notes
K	05-04-22	DP Resubmission
L	05-07-22	DP Resubmission
M	03-10-22	DP Resubmission
N	27-10-22	DP Resubmission
O	20-01-23	DP Resubmission
P	21-03-23	DP Resubmission
Q	03-04-23	DP Resubmission

Scale



0 6 11 16 21 FT



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ARCHITECTURE | LANDSCAPE ARCHITECTURE | URBAN DESIGN

Unit 206, 1493 Foster Street, White Rock, BC | 6047831450 | ruchir@architecturepanel.com

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Project
**8951, 8971 Spires Rd,
8991 Spires Gate**

Owner

Sheet Title
CONCEPT(DECK LEVEL)

Total Sheets
18

Drawn By
SD

Reviewed By
RD

Sheet No.
L3

Checked By
RD

Status
REZONING

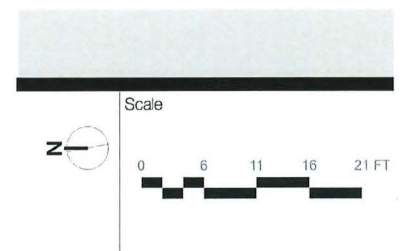
Contractors

AHJ
City of Richmond

Consultants
FLAT Architecture Inc.

Documents
DP Application

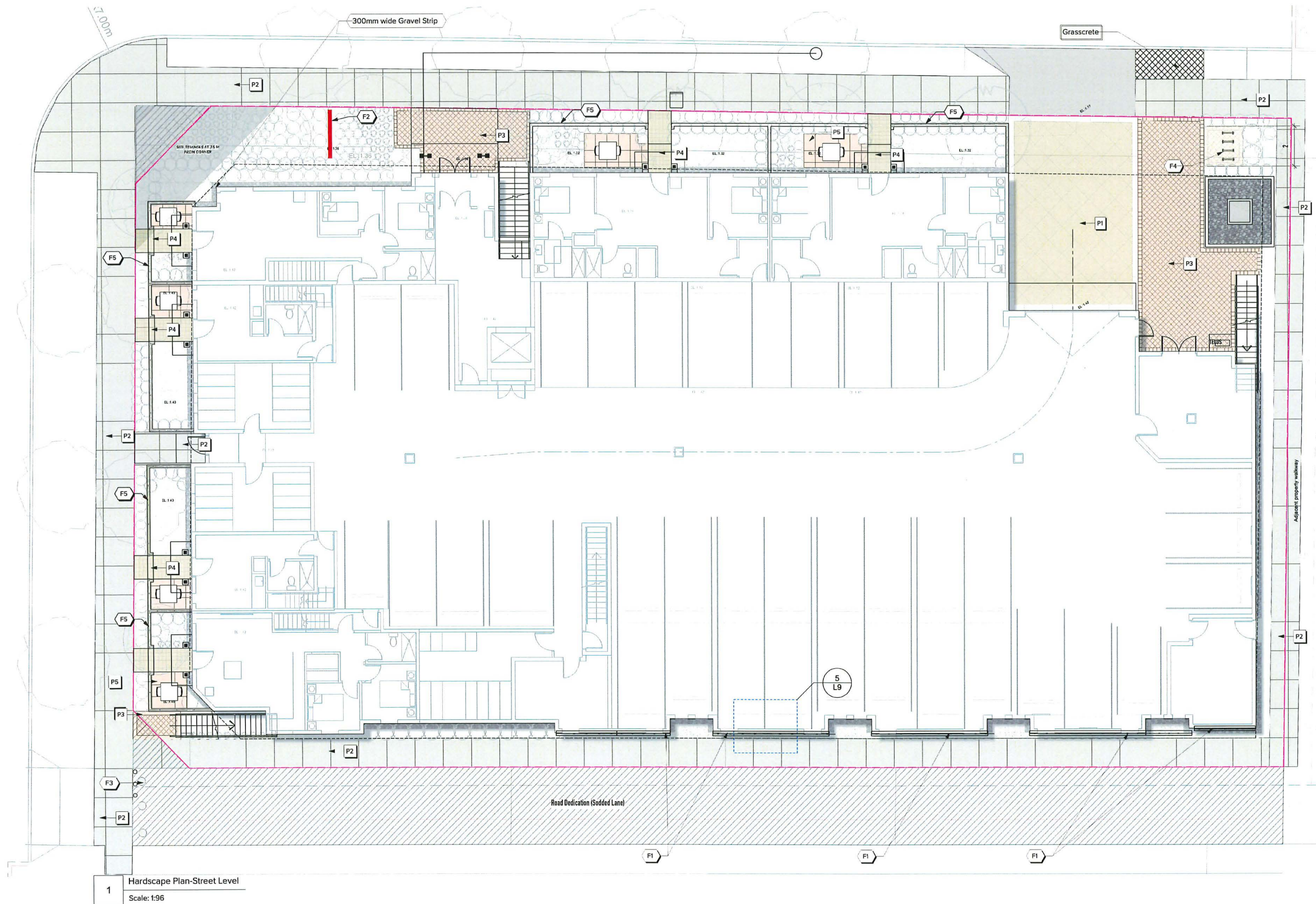
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L	05-07-22	DP Resubmission
M	03-10-22	DP Resubmission
N	27-10-22	DP Resubmission
O	20-01-23	DP Resubmission
P	21-03-23	DP Resubmission
Q	03-04-23	DP Resubmission



DP 21-932383

Plan #20

April 20, 2023

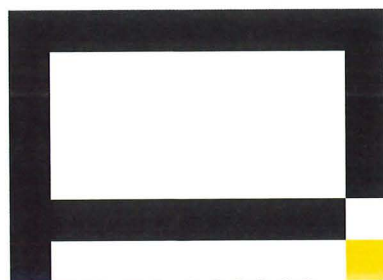


Paving Legend

- P1 Distinct driveway entrance with diagonal control joints. CIP Concrete with Integral Colour Light Broom Finish
- P2 CIP Concrete Light Broom Finish
- P3 Permeable Aquapave System Old Country Style Abbotsford Pavers. Colour (Taupe Blend), Unbroken, diagonal c/w 6" bdr.(L10/3)
- P4 Permeable Aquapave System Old Country Style Abbotsford Pavers. Colour (Desert Blend), Unbroken (L10/4)
- P5 Abbotsford Concrete Slab - Texada Hydrapressed slab on pedestal Desert Sand Finish. (L5/3)
- P6 Fall Zone Spec.Playfall safety surfacing tiles per manufacturer. Terra Cotta (See manufacturer's detail) (L5/2)
- P7 Stamped Concrete.Placed and stamped in Situ. Colour 'Charcoal' c/w 12" border.
- P8 Abbotsford Concrete Slab - Texada Hydrapressed slab on pedestal Natural Finish c/w 6" Charcoal border. (L5/3)

Site Furnishing Legend

- F1 Wall Trellis for the vines. See Detail (L10/5)
- F2 Project Sign Wall. CIP Concrete. Sand Blasted Finish (L10/3)
- F3 Controlled Bollard as per architectural
- F4 Urban rack's bike rack See Attached Brochure (L12/3)
- F5 4' high Metal fence See Attached Brochure (L13/4)
- F6 MAGLIN SQUARE BOLLARD See Attached Brochure (L10/8)
- F7 Entrance gate for the unit
- F8 8" Thick Built in planters (Per Engg. Design) with CIP sandblasted finish. See detail on (L13/5)
- F9 MAGLIN Outdoor Picnic Table See Attached Brochure (L12/2)
- F10 Vegetable planters fabricated on Aluminum Frames. See Details (L10/2)
- F11 Maglin Fence between the units, Black Matte Finish, Pattern option: Kaleidoscope. See Details (L10/7)
- F12 MAGLIN Outdoor Bench See Attached Brochure (L12/1)
- F13 BBQ setup with sink on counter
- F14 Workbench with storage below for vegetable planter. See Detail (L13/1)
- F15 Partition design
- F16 Kompan Kids table with sitting (L11/3)
- F17 Kompan Play Tower with ADA Stairs (L11/1)
- F18 Kompan Stinger (L11/2)



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Project
**8951, 8971 Spires Rd,
8991 Spires Gate**

Owner

Sheet Title
**HARDSCAPE/SITE
FURNISHINGS**

Total Sheets
18

Drawn By
SD

Reviewed By
RD

Sheet No.
L4

Checked By
RD

Status
REZONING

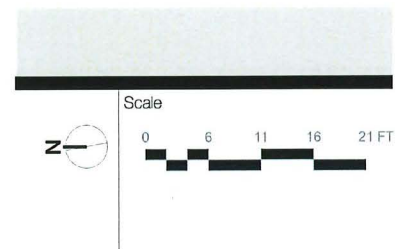
Contractors

AHJ
City of Richmond

Consultants
FLAT Architecture Inc.

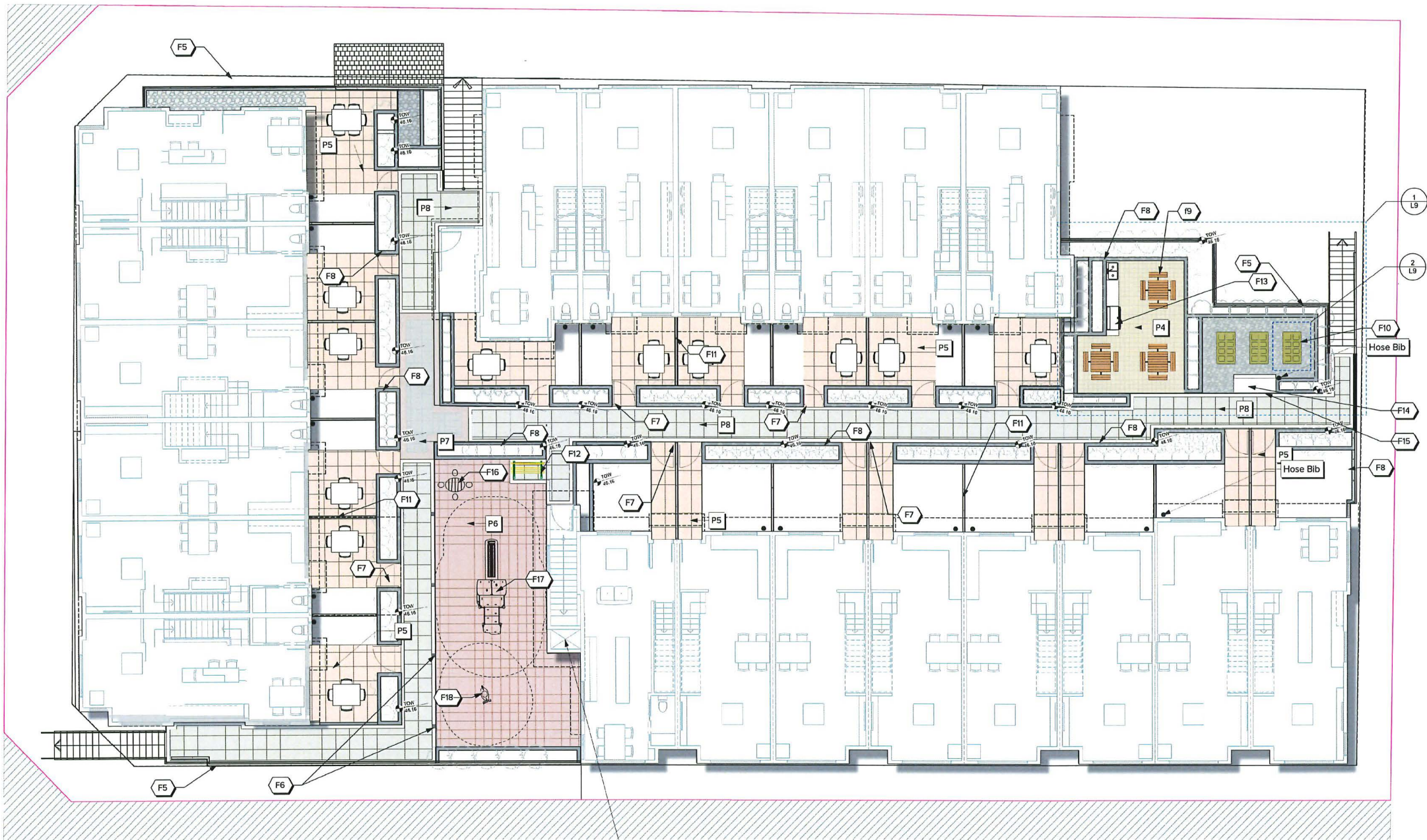
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DP Application

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Q	03-04-23	DP Resubmission



DP 21-932383 Plan #21

April 20, 2023



1 Hardscape Plan- Deck Level
Scale: 1:96



When kids play, they also fall, and that's where PlayFall® comes to the rescue. PlayFall® is designed to meet stringent ASTM requirements for playground fall protection and is available in a variety of thicknesses to match the fall heights of most play equipment and events.

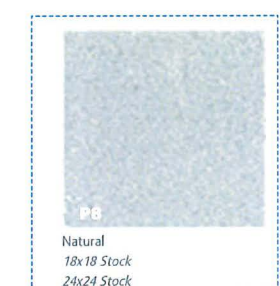
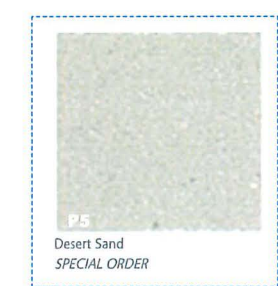
Don't play on anything less!



PlayFall® Tile Details	
<ul style="list-style-type: none">Tiles are 2' x 2' and feature a 1" x 1" cross-hatch surface patternAvailable in 1.75" thickness with PlayPad underlaymentsSlip resistantMinimal maintenancePorous for effective drainageQuick interlocking installation with plastic pins and minimal adhesiveMade from 100% recycled SBR truck tire rubber buffings and granules in a non-toxic polyurethane binder	
PlayPad Details	
<ul style="list-style-type: none">Pads are 4' x 5'Thickness options: 1" or 2"PlayPad products are made from 100% recycled materials100% nonwoven GeotextileNon-toxic and environmentally friendlySuperior drainage rateLong lifespan and stabilityImpact protection and energy absorption	
Drop Height Configurations	
- Tested to ASTM F1292-18 Impact Attenuation Requirements -	
Fall Height	Configuration Required
4'	1.75" PlayFall® Tile
6'	1.75" PlayFall® Tile + 1.0" PlayPad
8'	1.75" PlayFall® Tile + 2.0" PlayPad
10'	1.75" PlayFall® Tile + 1.0" PlayPad + 2.0" PlayPad
<div><div></div><div></div><div></div></div> <div>BlackGreenTerra Cotta</div>	

North West Rubber Ltd 33850 Industrial Avenue Abbotsford, BC Canada V2S 7T9 T 604.859.2002 F 604.859.2009 TF 1.800.663.8724
Revised May 1, 2019

2 PLAYFALL SAFETY SURFACING TILES (P6)
Scale: NTS



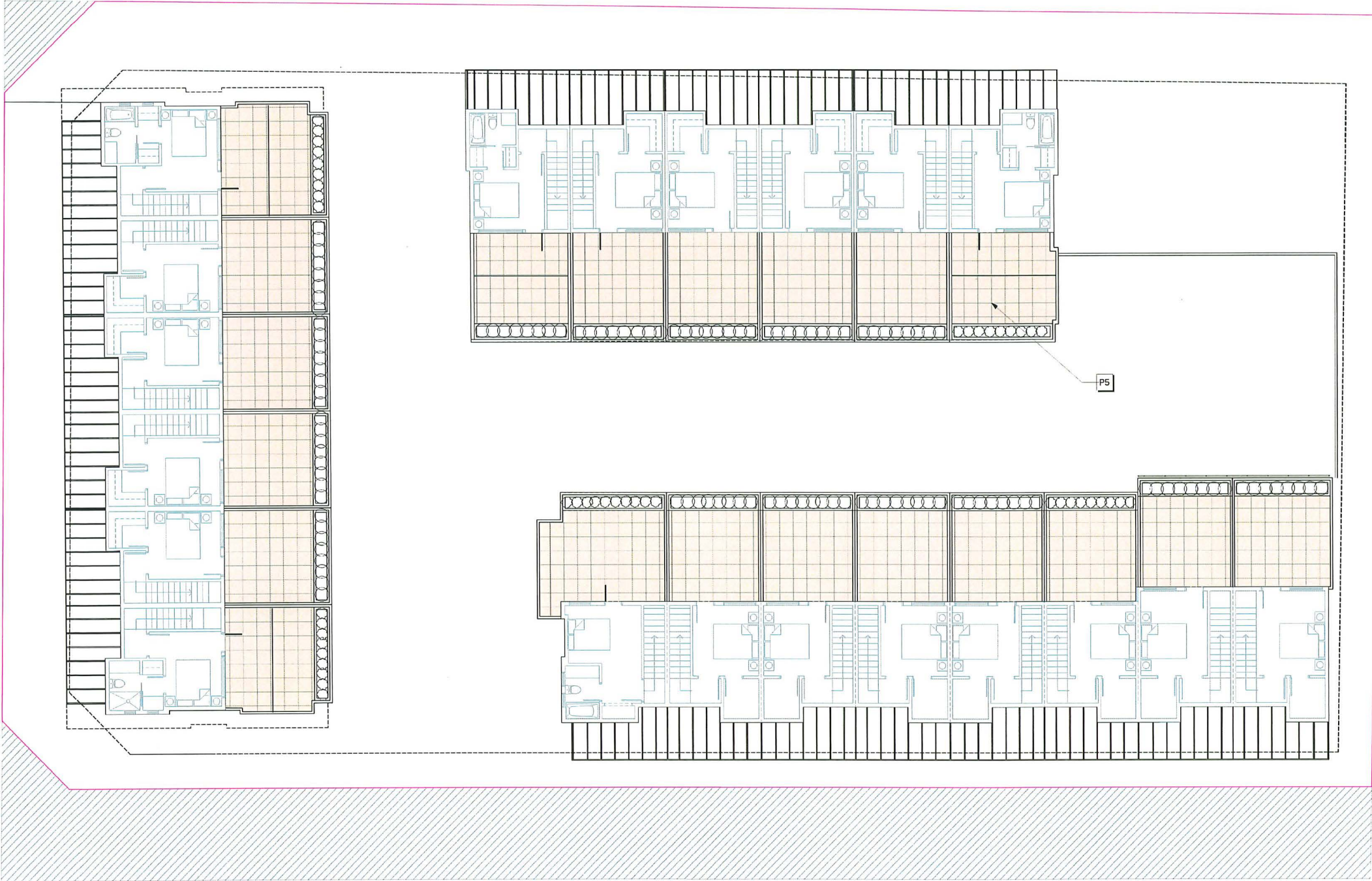
Shapes and Sizes

Standard sizes:

- 610mm x 305mm x 50mm (24" x 12" x 2") - Special Order
- 610mm x 610mm x 50mm (24" x 24" x 2")
- 457mm x 457mm x 40mm (18" x 18" x 1-5/8")

Colours for Texada Hydra Pressed Slab

3 Abbotsford Concrete Slab - Texada Hydrapressed slab on pedestal(P8 & P5)
Scale: NTS



Shapes and Sizes

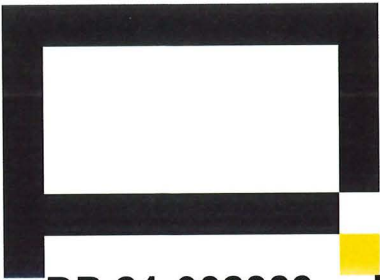
- Standard sizes:
- 610mm x 305mm x 50mm (24" x 12" x 2") - Special Order
 - 610mm x 610mm x 50mm (24" x 24" x 2")
 - 457mm x 457mm x 40mm (18" x 18" x 1-5/8")

Colours for Texada Hydra Pressed Slab

2 Abbotsford Concrete Slab - Texada Hydrapressed slab on pedestal(P8 & P5).
Scale: NTS

1 Planting Plan-Roof Level
Scale: 1:96

A smart irrigation system will be provided to cover all common landscaping areas.

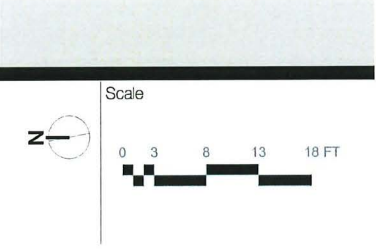


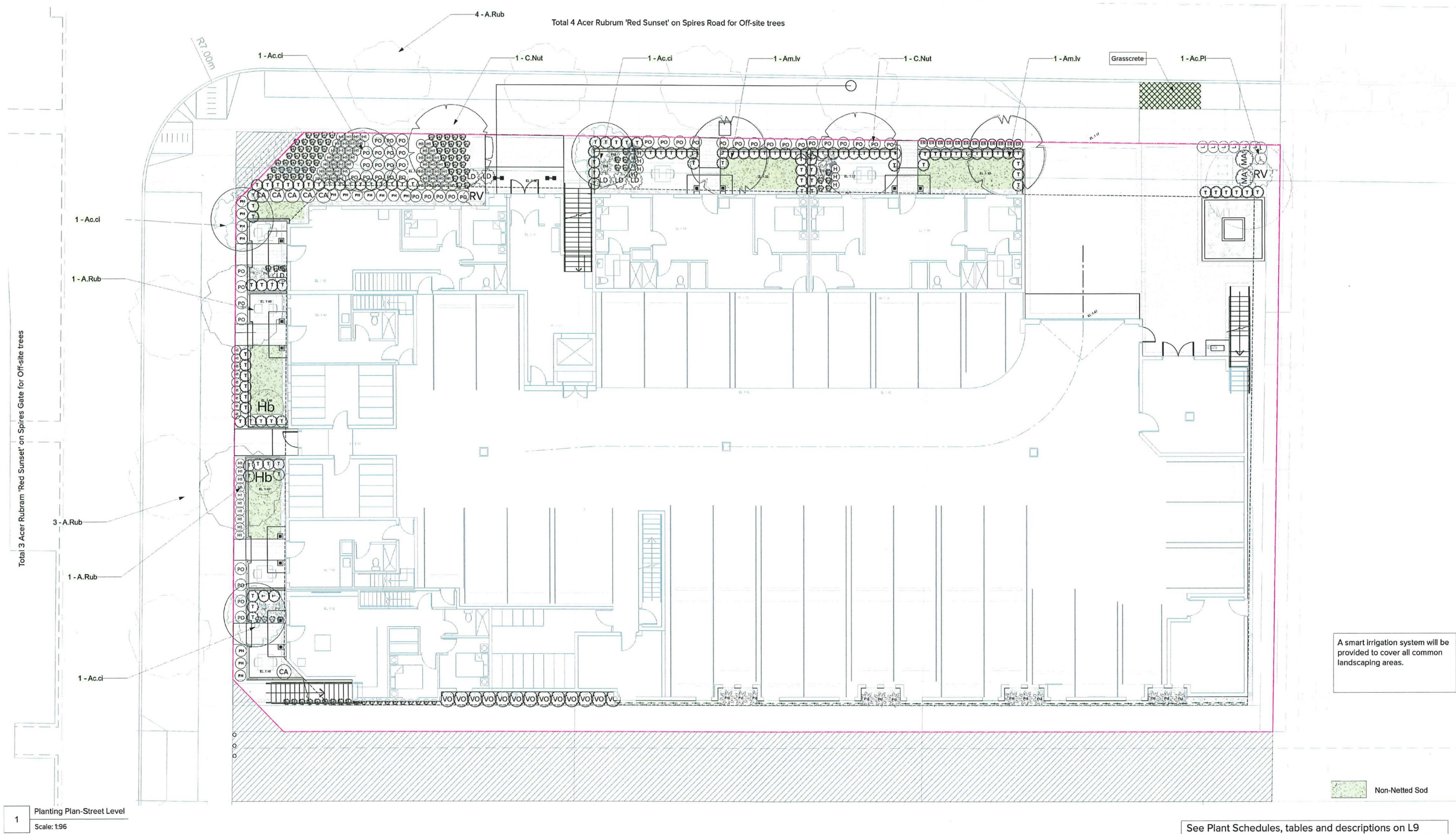
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Owner
Sheet Title
HARDSCAPE ROOF LEVEL

Total Sheets 18	Sheet No. L6	Contractors AHJ City of Richmond	Consultants FLAT Architectural Inc.
Drawn By SD	Checked By RD	Documents DP Application	
Reviewed By RD	Status REZONING		

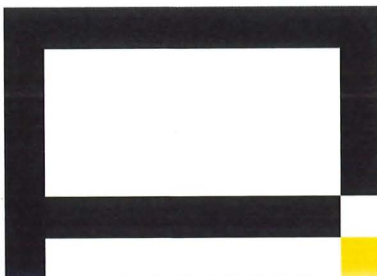
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Q	03-04-23	DP Resubmission





1 Planting Plan-Street Level
Scale: 1:96

See Plant Schedules, tables and descriptions on L9

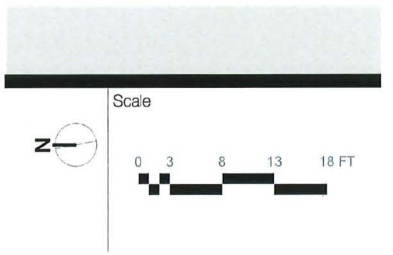


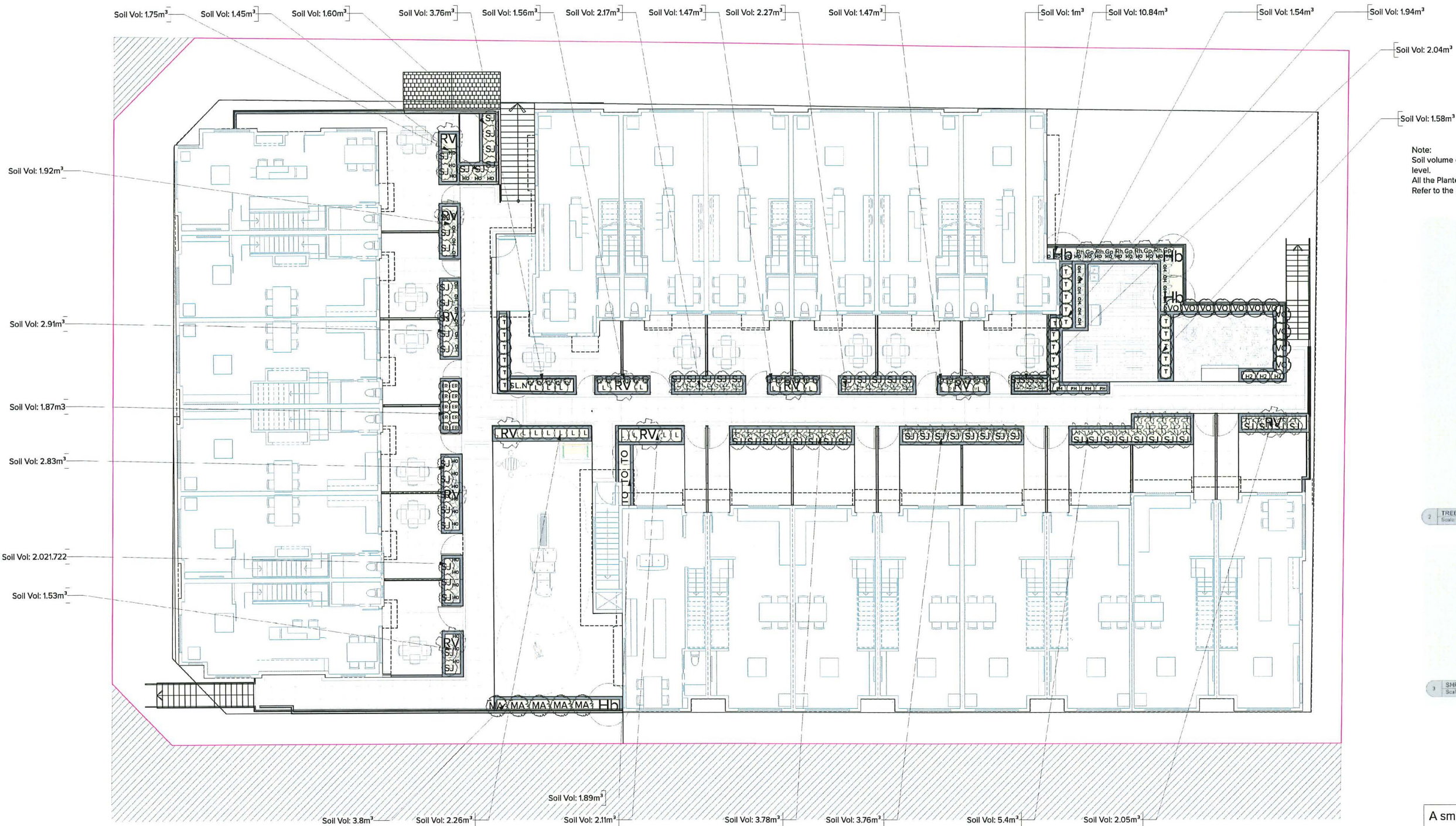
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Project
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Owner
Sheet Title
PLANTING STREET LEVEL

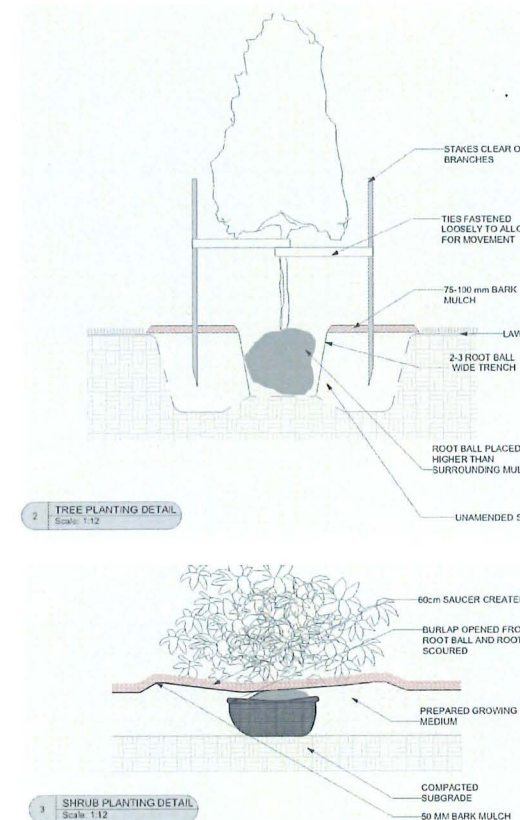
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Q	03-04-23	DP Resubmission





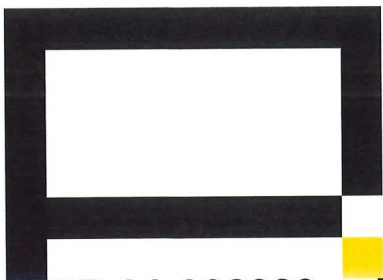
Note:
Soil volume calculations are based on the relevant height of the planters at the deck level.
All the Planters are 750mm high and 300mm deep from the deck finish level.
Refer to the Planter detail on L13.



A smart irrigation system will be provided to cover all common landscaping areas.

1 Planting Plan-Deck Level
Scale: 1:96

See Plant Schedules, tables and descriptions on L9

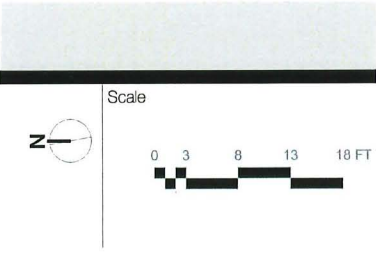


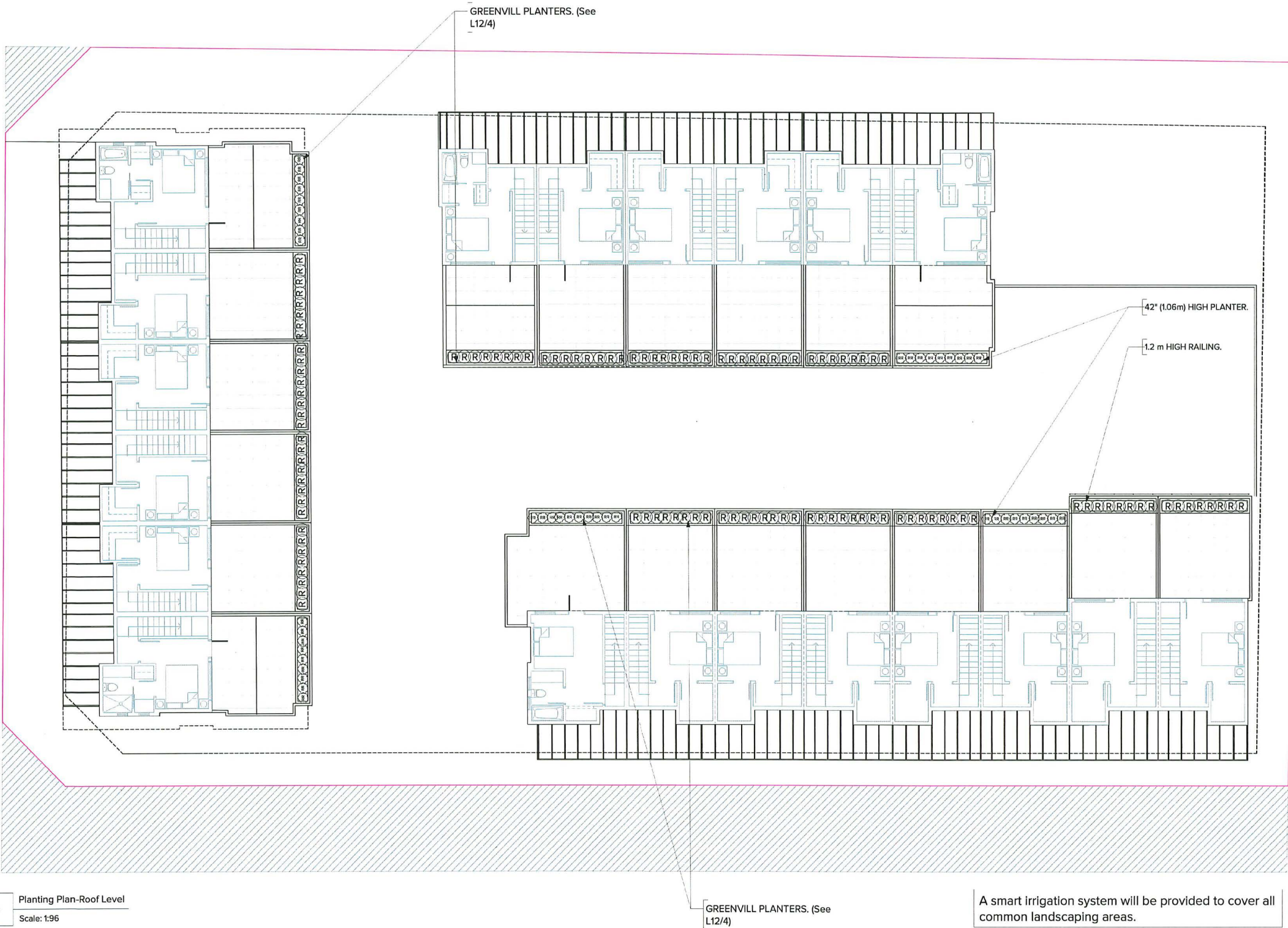
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PLANTING DECK LEVEL

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P	21-03-23	DP Resubmission
Q	03-04-23	DP Resubmission





3 Planting Plan-Roof Level
Scale: 1:96

A smart irrigation system will be provided to cover all common landscaping areas.

List of Shrubs- Ground Level

Image	ID	Quantity	Latin Name	Common Name	Scheduled Size
	CA	6	Calamagrostis x acutiflora 'Karl Foerster'	Foerster's Feather Reed Grass	#2 pot
	PA1	14	Pennisetum alopecuroides 'Hameln'	Hameln Dwarf Fountain Grass	#2 pot
	PO	45	Pennisetum orientale	Oriental Fountain Grass	#3 pot
	E.R	12	Echinacea 'Rosita'	Purple coneflower Rosita (dwarf)	#1 pot
	HS	70	Helictotrichon sempervirens	Blue Oat Grass	#1 pot
	Tx	102	Taxus sp	Yew, hedge variety	1.5 m. ht.
	L.Dn	5	Ligularia dentata 'Brit Marie Crawford'	Brit Marie Crawford Ligularia	#1 pot
	HL	102	Hemerocallis x 'Lemon Yellow' or vars	Lemon Yellow Daylily	#1 pot
	Hv	10	Heuchera vars	Coral bells	#1 pot
	Po.m	16	Polystichum munitum	swordfern	#2 pot
	RV	2	Rhododendron Vulcan	Red Rhododendron	#7 pot
	M.Aqf	2	Mahonia aquafolium	Oregon grapw	#3 pot
	lav	8	Lavendula vars	Lavender	#1 pot
	Hb	2	Hibiscus syriacus 'Lucy'	Lucy Rose Of Sharon	1.5 m. ht.
	Ak.q	48	Akebia quinata	Chocolate vine	#3 pot staked
	vo.th	13	Vaccinium ovatum 'Thunderbird'	evergreen huckleberry	#3 pot
	PM	4	Polystichum munitum	swordfern	#3 pot
	LD	1	Ligularia dentata 'Brit Marie Crawford'	Brit Marie Crawford Ligularia	#1 pot

List of Trees- Ground Level

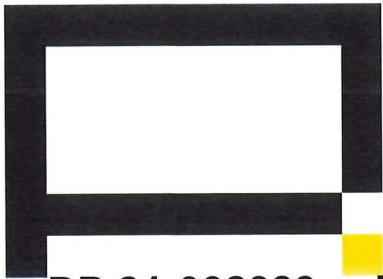
Image	ID	Quantity	Latin Name	Common Name	Scheduled Size
	A.Rub	2	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	8cm. cal.
	C.Nut	2	Coronus nuttallii 'National'	National Dogwood	4.0 m. ht. clump
	Ac.PI	1	Acer palmatum	Japanese Maple	8cm. cal.
	Am.lv	2	Ameianchler laevis	Allegheny Serviceberry	8cm. cal.
	Ac.ci	4	Acer circinatum	Vine maple	4m ht.

List of Shrubs- Podium Level

Image	ID	Quantity	Latin Name	Common Name	Scheduled Size
	SL.N	1	Salix purpurea 'Nana'	Dwarf Arctic Blue Leaf Willow	#3 pot
	HA	51	Hosta x 'Blue Angel'	Blue Angel Plantain Lily	#1 pot
	Tx	22	Taxus sp	Yew, hedge variety	1.5 m. ht.
	E.R	10	Echinacea 'Rosita'	Purple coneflower Rosita (dwarf)	#1 pot
	HL	23	Hemerocallis x 'Lemon Yellow' or vars	Lemon Yellow Daylily	#1 pot
	SJ	66	Skimmia japonica	Japanese Skimmia	#2 pot
	HP	55	Hosta x 'Patriot'	Patriot Plantain Lily	#3 pot
	L	11	Lavendula vars	Lavender	#1 pot
	Rh.Gp	5	Rhododendron 'Gumpo Pink'	Pink Gumpo Azalea	#7 pot
	VO	11	Vaccinium ovatum 'Thunderbird'	evergreen huckleberry	#3 pot
	TO	3	Thuja occidentalis 'Smaragd'	Emerald Cedar	1.5 m. ht.
	PA1	4	Pennisetum alopecuroides 'Hameln'	Hameln Dwarf Fountain Grass	#2 pot
	RV	11	Rhododendron Vulcan	Red Rhododendron	#7 pot
	MA	5	Mahonia aquafolium	Oregon grapw	#3 pot
	Hb	4	Hibiscus syriacus 'Lucy'	Lucy Rose Of Sharon	1.5 m. ht.
	H2	3	Bergenia cordifolia	Heartleaf Bergenia	#1 pot

List of Shrubs- Roof Level

Image	ID	Quantity	Latin Name	Common Name	Scheduled Size
	RR	46	Rosa rugosa 'Champlain'	Champlain Hardy Shrub Rose	#2 pot
	R	120	Rosa Nulkana	Noolka Rose	#2 pot

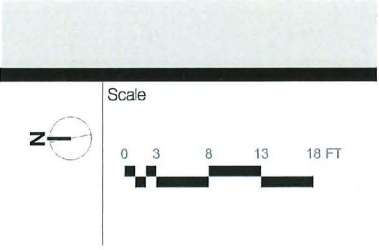


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Project
**8951, 8971 Spires Rd,
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Owner
Sheet Title
PLANTING ROOF LEVEL

Total Sheets 18	Sheet No. L9	Contractors	Consultants FLAT Architecture Inc.
Drawn By SD	Checked By RD	AHJ City of Richmond	Documents DP Application
Reviewed By RD	Status REZONING		

No	Date	Issue Notes
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Q	03-04-23	DP Resubmission



Play Tower with ADA Stairs

PCMI00131

Item no. PCMI00131-0901

General Product Information

Dimensions LxWxH

411x130x221 cm

Age group

2 - 5

Play capacity (users)

2

Colour options

This fantastic play tower will inspire young children to play actively, using their muscles to climb to the top and slide to the ground, again and again. The slide provides an age-appropriate access to the tower that strengthens leg muscles and helps to develop skills at climbing stairs, an important everyday task. The playhouse also offers a space for creative and imaginative play themes. The windows encourage children to look out their friends from on top of the tower, and to imagine that they are in a tree house or a look-out. Active and physical imaginative play helps to support children's creativity and thinking. The study desk on the side of the structure is an additional place for meeting and creating.

together, supporting social skills. Sliding supports posture and balance, all important skills for young children as they grow, and great physical fun.

1 / 9/9/2022

Data is subject to change without prior notice

Play Tower with ADA Stairs

PCMI00131

* Max fall height | ** Total height | *** Safety surfacing area

* Max fall height | ** Total height

PCMI00131

* 5'-4" / 163cm

** 7'-3" / 221cm

*** 243.49" / 31.91'

Click to see TOP VIEW

Click to see SIDE VIEW

5 / 9/9/2022

Data is subject to change without prior notice

Stinger

ELE400020

Item no. ELE400020-01E

General Product Information

Dimensions LxWxH

78x37x70 cm

Age group

2 - 5

Play capacity (users)

1

Colour options

The Stinger with its whimsical, rodeo look attracts toddlers for a shorter or longer ride, again and again. Apart from its appealing shapes, the Stinger offers tactile variation with its rubber hand holds and smooth body. Tactile richness is the main motivator, especially in younger children. It supports their understanding of material characteristics such as weight, smoothness, temperature and flexibility. The slightly sloped seat provides a seating destination which ensures hours, years and decades of fun. The soothing, rocking movement of the Stinger trains the sense of balance and the spatial awareness. These are both crucial for body confidence, e.g. fall prevention. A well-developed sense of balance is fundamental for the ability to sit still and concentrate. The Stinger offers children more than a mere fun ride.

1 / 9/10/2022

Data is subject to change without prior notice

Stinger

ELE400020

* Max fall height | ** Total height | *** Safety surfacing area

* Max fall height | ** Total height

ELE400020

* 1'-5" / 44cm

** 2'-3" / 70cm

*** 164.18" / 14.31'

Click to see TOP VIEW

Click to see SIDE VIEW

5 / 9/10/2022

Data is subject to change without prior notice

Kids Table with 4 Sitting Poles

NRO212

Table

Social-emotional, fine motor place and a space creator. Sharing and cooperation create a social scenario that supports communication and cooperation.

Pole seats

Physical: balancing and jumping from one seat to the next trains balance, proprioception and builds bone density. Social-emotional: sharing, listening when having a break.

2 / 5/4/2022

Data is subject to change without prior notice

Kids Table with 4 Sitting Poles

NRO212

* Max fall height | ** Total height | *** Safety surfacing area

* Max fall height | ** Total height

NRO212

1:100

Click to see TOP VIEW

Click to see SIDE VIEW

5 / 5/4/2022

Data is subject to change without prior notice

1

KOMPAN PLAY TOWER WITH ADA STAIRS (F17)

Scale: NTS

2

KOMPAN STINGER (F18)

Scale: NTS

3

KIDS TABLE WITH SITTING (F16)

Scale: NTS

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Project
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Owner

Sheet Title
DETAILS-2

Total Sheets
18

Drawn By
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RD

Sheet No.
L11

Checked By
RD

Status
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Contractors

AHJ
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Q	03-04-23	DP Resubmission

Scale


DP 21-932383

Plan #28

April 20, 2023

MLB870-W

870 SERIES


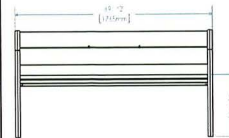


MATERIALS: Bench ends are made from solid cast aluminum. The seat employs the steel slats.

FINISH: All steel components are protected with E-Coat not-priming. The Maglin Powdercoat System provides a durable finish on all metal surfaces.


INSTALLATION: The bench is delivered pre-assembled. Holes (Ø 5") are provided in each foot for securing to base.

TO SPECIFY: Select MLB870-W
Color:
Powdercoat Color



DIMENSIONS:

Height: 32.2" [819mm]
Length: 65.5" [1663mm]
Depth: 21.2" [538mm]
Weight: 121.62 lbs [55.1kg]



T: 877-711-8888
F: 877-242-9292
www.maglin.com
info@maglin.com

Equiparc



EP 2886 Picnic table

SPECIFICATIONS

Frame: Tubing, flat and angles made of steel
Finish: Hot-dipped galvanized
Planks: 51mm X 152mm (2" X 6")
Fasteners: Hot-dipped galvanized

COVERINGS

YRPU	Grey recycled plastic	DFP	Select Douglas fir
SRPU	Sand recycled plastic	JAT	Jatoba
ORPU	Olive recycled plastic	IPE	Ipe
CRPU	Cedar recycled plastic	HWA	Select hardwood
WRPU	Walnut recycled plastic	AL	Painted aluminium

OPTIONS

GP Galvanized and painted frame
HAND-RS Removal of a seat for wheelchair access
PARASOL Modified for parasol

Depth or Length: 2010mm (79") Height: 749mm (29 1/2") Weight: 182 kg (400 lbs)

This table must be anchored.
Our warranty applies when our product is properly assembled and anchored.

ANCHORS

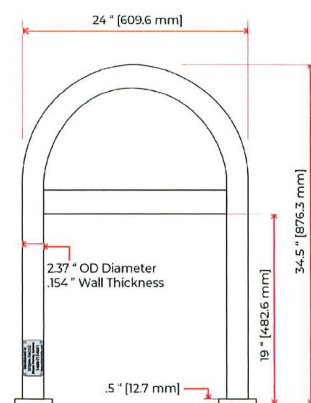
QS 8 stainless steel kwik bolts
QAV 8 drop-in anchors with stainless steel tie/proof bolts

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info@equiparc.com
1001, rue Jeanne-Mance
Saint-Basile-le-Grand, QC, Canada J2K 0Y1

Urban Staple

URBAN RACKS
INNOVATIVE | BICYCLE PARKING



24" [609.6 mm]
23.7" OD Diameter
.154" Wall Thickness
19" [482.6 mm]
34.5" [876.3 mm]
.5" [12.7 mm]

Spacing

Recommended Spacing 36" [762 mm]
Minimum Spacing 24" [610 mm]

Weight

Total Weight 32 lbs [14.5kg]

Materials

Assembly Material Schedule 40 Steel
Pipe Diameter 2.37" [60.2 mm]
Pipe Wall Thickness 0.154" [3.91 mm]
Post-consumer recycled content 70-90%
Pre-consumer recycled content 5-7%

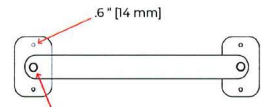
Available Features

Optional Tamper-proof Security Anchors


Available Finishes

Powder Coated
Hot-Dipped Galvanized
304 Stainless Steel
Dacromet

Customization Available




.75" [19 mm] Weep Hole (Either Side)



These drawings are not for construction purposes and are for information purposes only. All information contained herein was current at the time of development but must be reviewed and confirmed by Urban Racks to be considered accurate.

www.urbanracks.com | sales@urbanracks.com
+1 888 717 8881 | @urbanracks

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Perth

69050.36			
L 36"	W 16"	H 42"	
L 914mm	W 406mm	H 1067mm	

69050.48			
L 48"	W 16"	H 42"	
L 1219mm	W 406mm	H 1067mm	



Available in: 



Artificial Grass

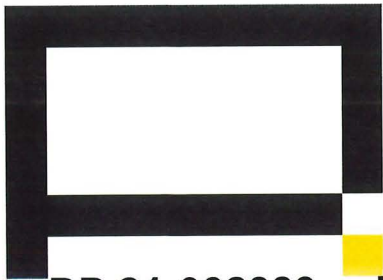
1 PROPOSED OUTDOOR BENCH (F12)
Scale: NTS

2 PROPOSED OUTDOOR DINING SET (F9)
Scale: NTS

3 PROPOSED BIKE RACK (F4)
Scale: NTS

4 PROPOSED ROOF PLANTERS
Scale: NTS

SEE PAVING/SITE FURNISHING LEGENDS ON L4.



ARCHITECTURE PANEL INC.

ARCHITECTURE | LANDSCAPE ARCHITECTURE | URBAN DESIGN

Unit 206, 1493 Foster Street, White Rock, BC | 6047831450 | rich@architecturepanel.com

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Project
8951, 8971 Spires Rd,
8991 Spires Gate

Owner

Sheet Title
DETAILS-3

Total Sheets
18

Drawn By
SD

Reviewed By
RD

Sheet No.
L12

Checked By
RD

Status
REZONING

Contractors

AHJ
City of Richmond

Consultants
FLAT Architecture Inc.

Documents
DP Application

No	Date	Issue Notes
K	05-04-22	DP Resubmission
L	05-07-22	DP Resubmission
M	03-10-22	DP Resubmission
N	27-10-22	DP Resubmission
O	20-01-23	DP Resubmission
P	21-03-23	DP Resubmission
Q	03-04-23	DP Resubmission

Scale

DP 21-932383 Plan #29

April 20, 2023

WORKBENCH WITH STORAGE
Global industrial

This sturdy workbench features an independently locking drawer and cabinet that secures supplies and tools. This all-welded drawer pedestals have full-width aluminum drawer handles and nylon drawer rollers for smooth opening. Secure supplies and tools with this sturdy workbench with independently locking drawer and cabinet. The drawers measure 13"W x 17-3/4"D and have weight capacity of 66 lbs per drawer. It includes four 5-1/2"H drawers and two 12"H drawers. The cabinet has a locking door and an adjustable shelf. The pedestals measure 15-3/4"W x 20"D x 32"H and can be arranged to suit your needs. It has a durable gray powder-coated finish. The workbench includes 1-3/4" thick maple butcher block top. It is easy to assemble.

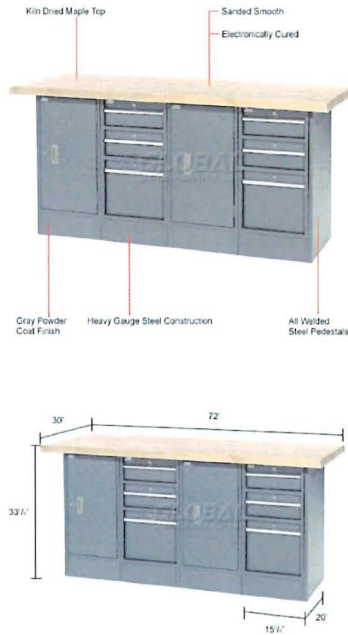
ASSEMBLY

Product Details

Leg Type	Fixed
Assembly Required	Yes
Edge Type	Square
Type	Security Workbench
Top Material	Maple Butcher Block
Brand	Global Industrial
Leg Style	Pedestal Leg
Style	6 Drawers, 2 Cabinet
Manufacturers Part Number	239159
Color Family	Gray

Weights & Dimensions

Depth	30 IN (76.2 cm)
Width	72 IN (182.88 cm)
Height	32 IN (81.28 cm)
Weight Capacity	4000 LBS (1818.18 kg)
Weight	305 LBS (138.64 kg)

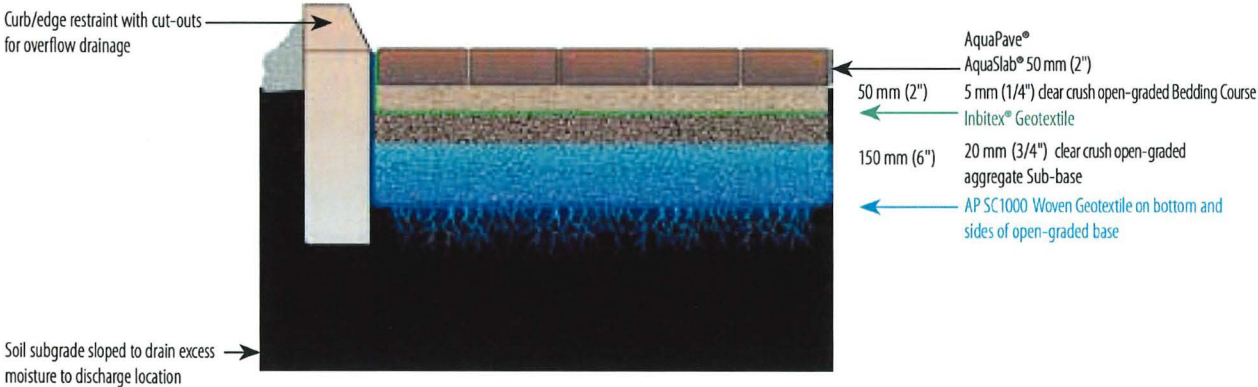


1 Workbench with Storage (F14)
Scale: NTS

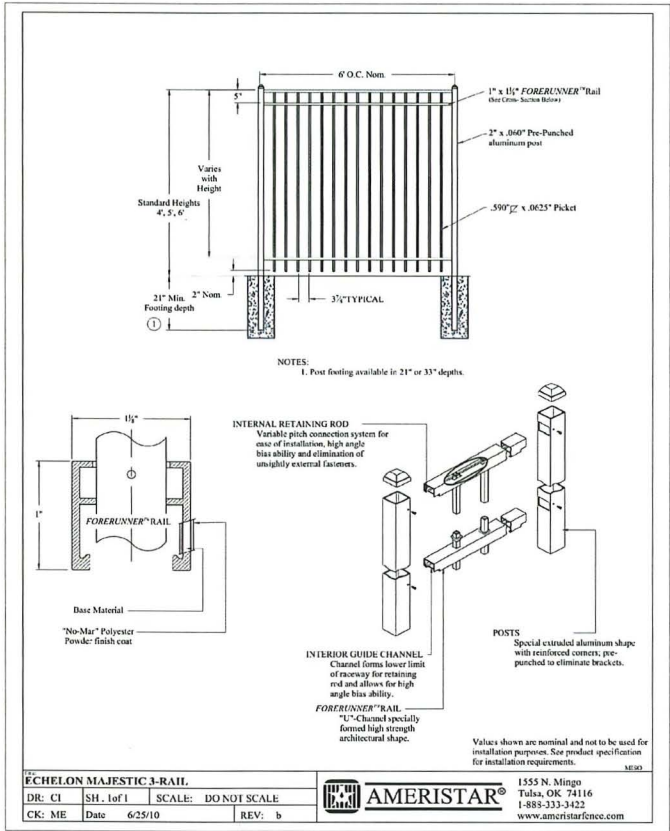


3 Equiparc picnic table (F9)
Scale: NTS

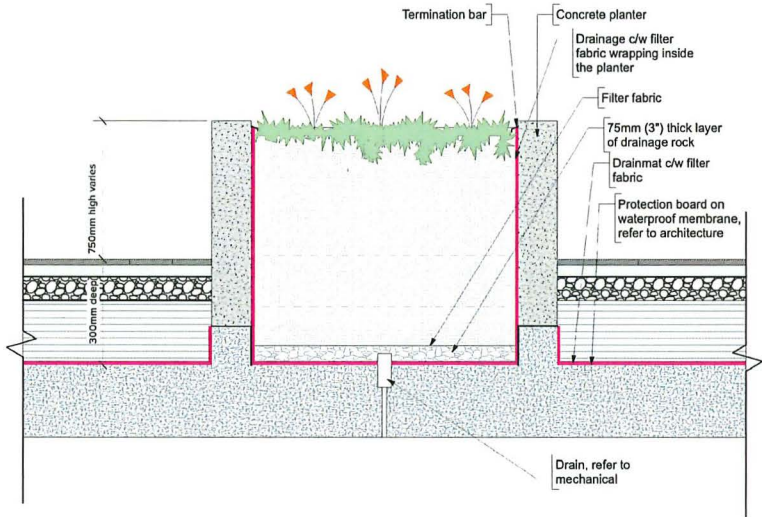
Typical Residential Driveway/Sidewalk Construction



2 AquaPave Typical System Detail
Scale: NTS

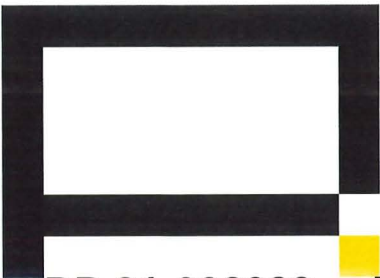


4 4' High Metal Fence detail (F5)
Scale: Actual Size



5 CIP Planter Detail on Slab (F8)
Scale: 1:128

SEE PAVING/SITE FURNISHING LEGENDS ON L4.



ARCHITECTURE PANEL INC.

ARCHITECTURE | LANDSCAPE ARCHITECTURE | URBAN DESIGN

Unit 206, 1493 Foster Street, White Rock, BC | 6047831450 | richir@architecturepanel.com

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Project
8951, 8971 Spires Rd,
8991 Spires Gate

Owner

Sheet Title
DETAILS-4

Total Sheets
18

Sheet No.
L13

Contractors

Consultants
FLAT Architecture Inc.

Drawn By
SD

Checked By
RD

AHJ
City of Richmond

Documents
DP Application

Reviewed By
RD

Status
REZONING

No	Date	Issue Notes
K	05-04-22	DP Resubmission
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M	03-10-22	DP Resubmission
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O	20-01-23	DP Resubmission
P	21-03-23	DP Resubmission
Q	03-04-23	DP Resubmission

Scale

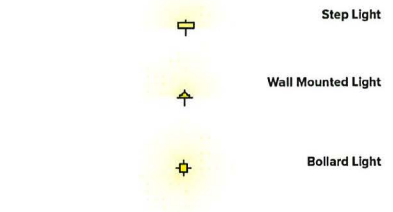
DESIGN RATIONALE OF
SELECTED LIGHTING

On the entrance of the site from East, we want warm, inviting and calm appearance of the site and did not want too many distractions. So, there are wall light mounted at the entrance of the unit at planter wall to create inviting atmosphere for residents. These fixtures has potential for louvered shades to eliminate glare. At the corner of SE bicycle parking is screened from the street walkway and provided with bollard light for safe space and maneuver for cyclists as well as it can provide sufficient lighting to the wheelchair ramp. Rest of the illumination on the East of the site are provided by the building light and wall mounted lights at the exterior walls.

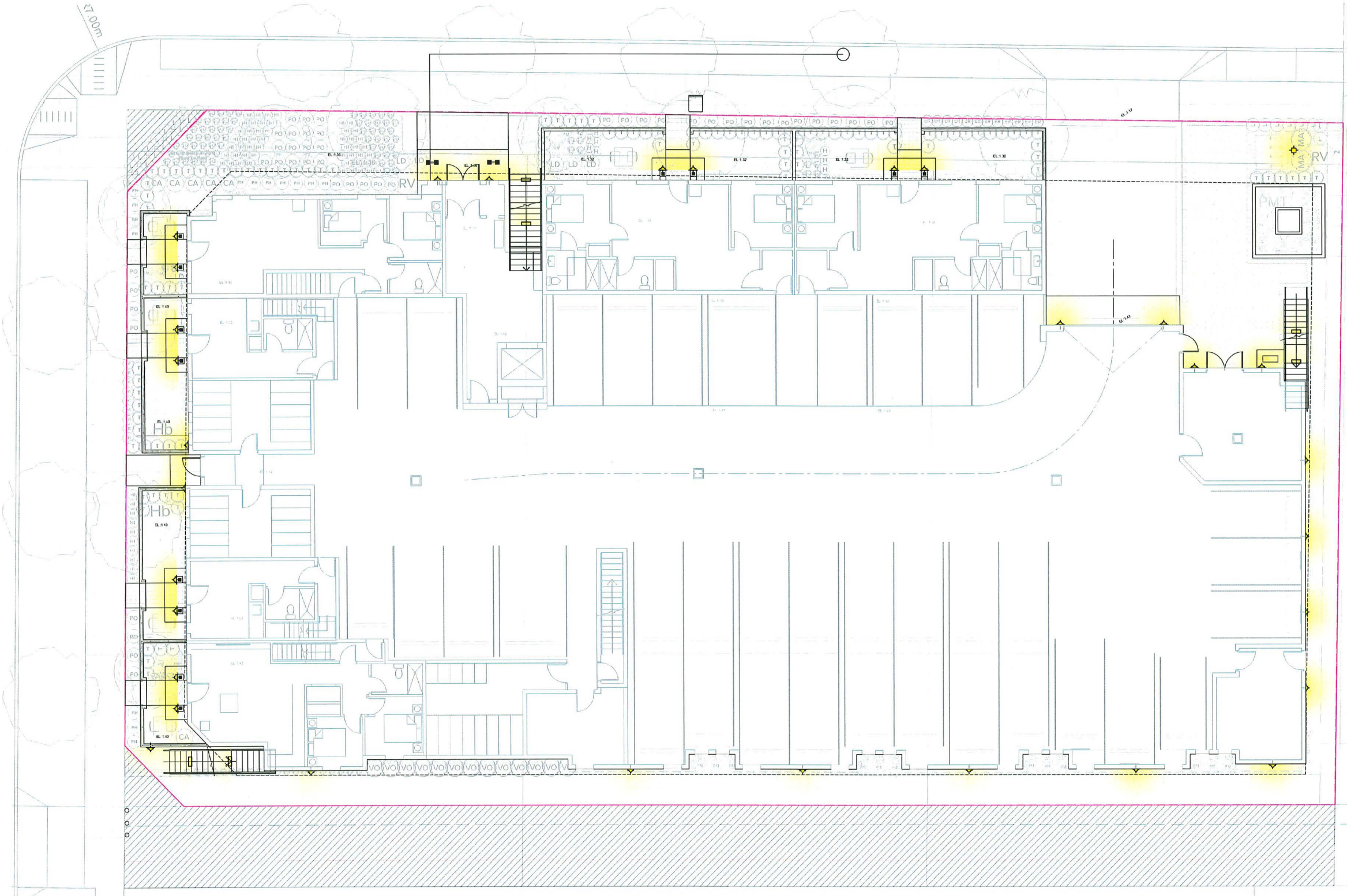
The same concept applied on the North side of the site and wall mounted lights are mounted on building walls.
Lane along the west and south property line with 1.5m walkway is illuminated with wall mounted lights on the building which provide smooth transition and ample lighting for pedestrian for crossing. The step lights are proposed at the stairs going to the deck level for smooth transition.

The main design criteria followed for lighting are as follows:

- *Landscape lights are provided only where building mounted lights are incapable of illuminating any external spaces.
- *Most landscape lights used are indirect and do not offer any unwanted glare with build in anti glare shading systems.
- *No direct lighting fixtures are placed anywhere on the suite that offer security and reduce light pollution.



2 Wall Mounted Light
Scale: NTS



1 Lighting Plan-Street Level
Scale: 1:96

DP 21-932383

Plan #31

ARCHITECTURE PANEL INC.

ARCHITECTURE | LANDSCAPE ARCHITECTURE | URBAN DESIGN

Unit 206, 1493 Foster Street, White Rock, BC | 6047831450 | ruchir@architecturepanel.com

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Project

8951, 8971 Spires Rd,
8991 Spires Gate

Owner

Sheet Title

LIGHTING PLAN (SITE)

Total Sheets

18

Drawn By

SD

Reviewed By

RD

Sheet No.

L14

Checked By

RD

Status

REZONING

Contractors

AHJ
City of Richmond

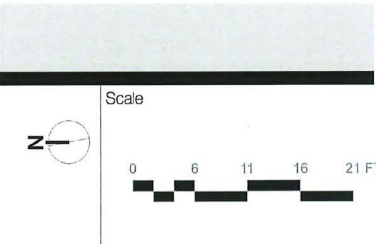
Consultants

FLAT Architecture Inc.

Documents

DP Application

No	Date	Issue Notes
K	05-04-22	DP Resubmission
L	05-07-22	DP Resubmission
M	03-10-22	DP Resubmission
N	27-10-22	DP Resubmission
O	20-01-23	DP Resubmission
P	21-03-23	DP Resubmission
Q	03-04-23	DP Resubmission



April 20, 2023

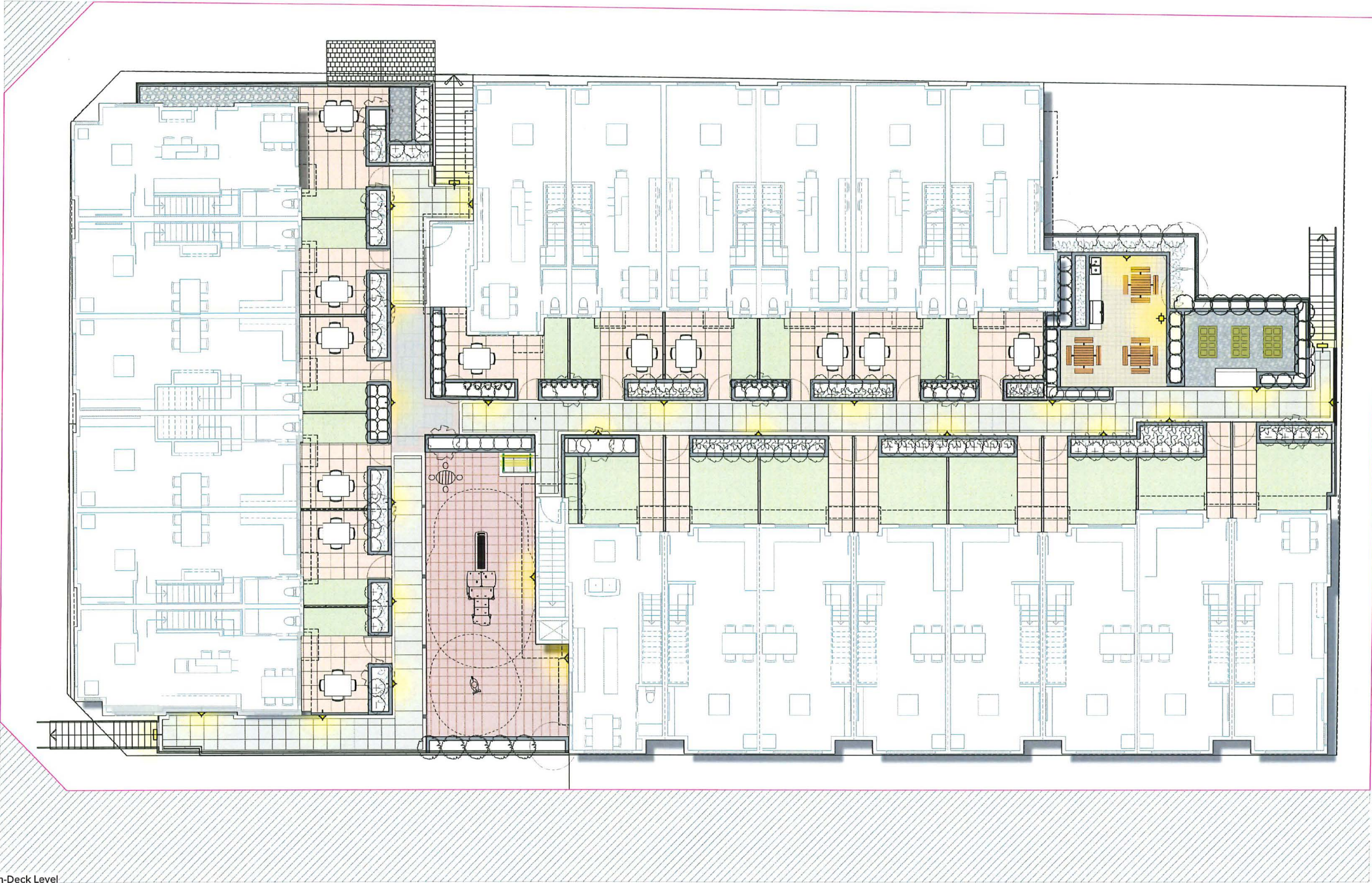
DESIGN RATIONALE OF DECK LEVEL

At the podium level, there is enough light just beside the stairs on NW as well as SE corner. Which helps to provide illumination for movement and by the help of wall where lighting fixtures mounted will eventually helps to reduce the back spill in this case.

North facing units backyard at podium level are illuminated by the building lights and the path to access those units are illuminated with wall mounted lights at the center of the planter wall thorough the east access of the stairs. At the pathway from NW to East stairs access there would be minimum light spill because of the reflectance of the adjacent objects.

To aid the process of enhancing outdoor geathering area there are two bollards lights which can illuminate the fire pit as well as the entrance pathway. Moreover, wall mounted light has been selected for adornment of kitchen seating area.

- The main design criteria followed for lighting are as follows:
- *Landscape lights are provided only where building mounted lights are incapable of illuminating any external spaces.
 - *Most landscape lights used are indirect and do not offer any unwanted glare with build in anti glare shading systems.
 - *No direct lighting fixtures are placed anywhere on the suite that offer security and reduce light pollution.



- Step Light
- Wall Mounted Light
- Bollard Light



WALL MOUNTED LIGHT: CYPHER CY2- RADIUS CURVE

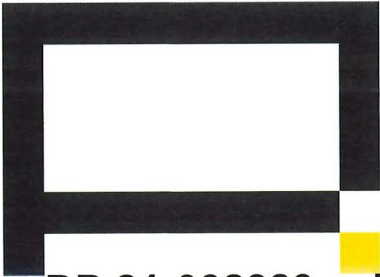


BOLLARD LIGHT: PROVIDENCE BOLLARD LIGHTING



STEP LIGHT: ALCON LIGHTING

1 Lighting Plan-Deck Level
Scale: 1:96



ARCHITECTURE PANEL INC.
ARCHITECTURE | LANDSCAPE ARCHITECTURE | URBAN DESIGN

Unit 206, 1493 Foster Street, White Rock, BC | 6047831450 | ruchir@architecturepanel.com

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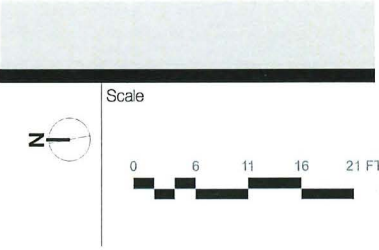
Project
**8951, 8971 Spires Rd,
8991 Spires Gate**

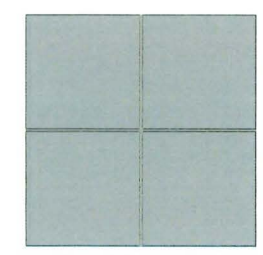
Owner

Sheet Title
**LIGHTNG PLAN (DECK
LEVEL)**

Total Sheets 18	Sheet No. L15	Contractors	Consultants FLAT Architectural Inc.
Drawn By SD	Checked By RD	AHJ City of Richmond	Documents DP Application
Reviewed By RD	Status REZONING		

No	Date	Issue Notes
K	05-04-22	DP Resubmission
L	05-07-22	DP Resubmission
M	03-10-22	DP Resubmission
N	27-10-22	DP Resubmission
O	20-01-23	DP Resubmission
P	21-03-23	DP Resubmission
Q	03-04-23	DP Resubmission

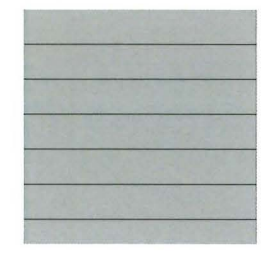




1 TRIM BOARDS / POSTS : WOOD
PAINT TO MATCH AGED PEWTER



2 ASPHALT SHINGLES :
TIMBERLINE HD PEWTER GRAY



3 EXTERIOR HIGH DENSITY FIBRE
CEMENT BOARD C/W EASY TRIMS TO
MATCH
COLOR : AGED PEWTER

4 TRADITIONAL 3 COAT STUCCO
SYSTEM : ARCTIC WHITE



5 MIDNIGHT SKY
BRICK VENEER BY MUTUAL MATERIALS



6 FASCIA AND BARGE BOARD : WOOD
SHERWIN WILLIAMS ELLIE GRAY



7 VINYL WINDOWS- BLACK COLOUR
C/W BLACK FRAME WITH MUNTINS

- PARKADE GATE AND SERVICE DOORS : METAL DOOR- FINISH - BLACK COLOUR
- R.W.L / GUTTERS : GENTEK METTALIC GREY 5P4
- SOFFIT : VINYL WHITE
- RAILING : ALUMINUM PIQUET RAILING - FINISH - BLACK COLOUR

PROJECT INFO:

Townhouse Development at 8951,
8971 Spire Rd., 8991 Spire Gate,
Richmond, BC
CLIENT: Juliana

DATE

23-Feb-23

PROJECT NO:

17-127

SCALE:

As Noted

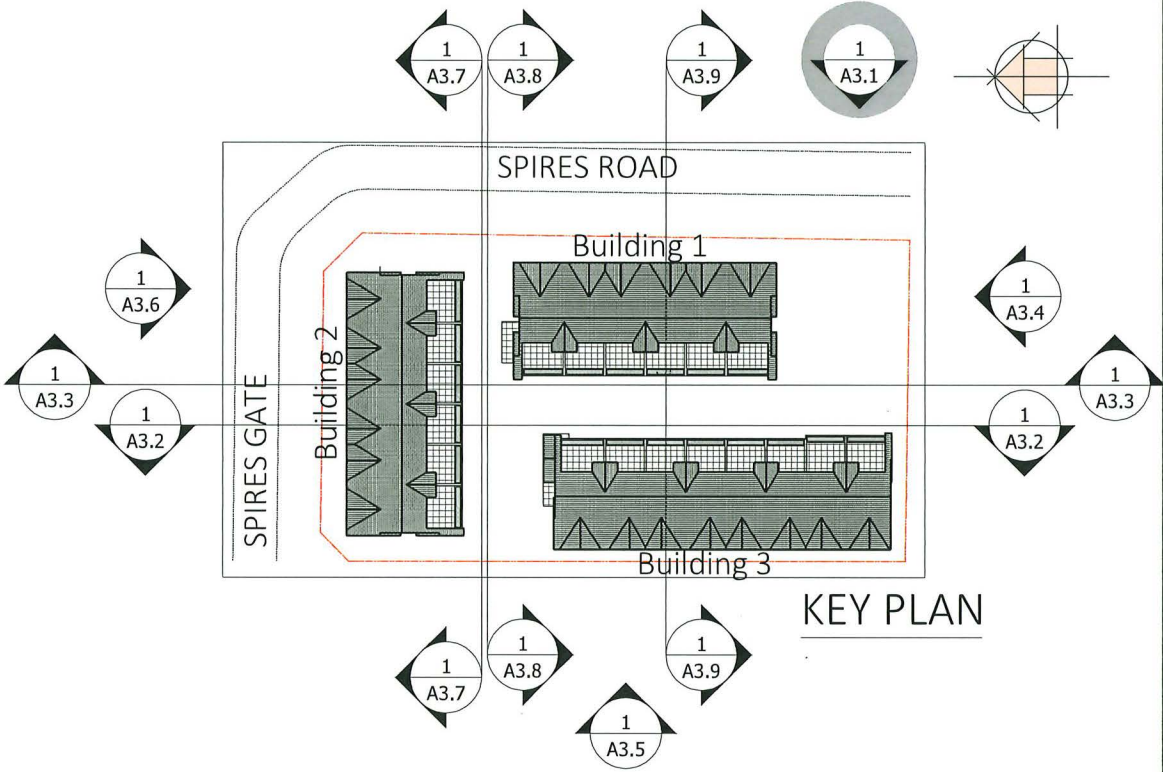
DRAWN BY:

R.W

REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W	02/08/23

MATERIAL BOARD

MATERIAL BOARD PLAN	
TAG NO	
1	TRIM BOARDS/POSTS: PAINT TO MATCH AGED PEWTER
2	ASPHAL SHIRINGLES: TIMBERLINE HD PEWTER GRAY
3	EXTERIOR HIGH DENSITY FIBRE CEMENT BOARD C/W EASY TRIMS TO MATCH: AGED PEWTER
4	TRADITIONAL 3 COAT STUCCO SYSTEM: ARCTIC WHITE
5	MIDNIGHT SKY : MUTUAL MATERIALS
6	FASCIA AND BARGE BOARD: SHERWIN WILLIAM ELLIE GRAY
7	BLACK WINDOWS C/W BLACK FRAME WITH MUNTINS
8	REFER LANDSCAPE DWGS FOR PLANTING/VINES
9	PAVERS: REFER LANDSCAPE DWGS





FLAT!
ARCHITECTURE

Unit 209- 6321 King George Blvd
Surrey BC, V3X 1G1
www.flatarchitecture.ca
contact@flatarchitecture.ca
Ph: 604-503-4484

PROJECT INFO:

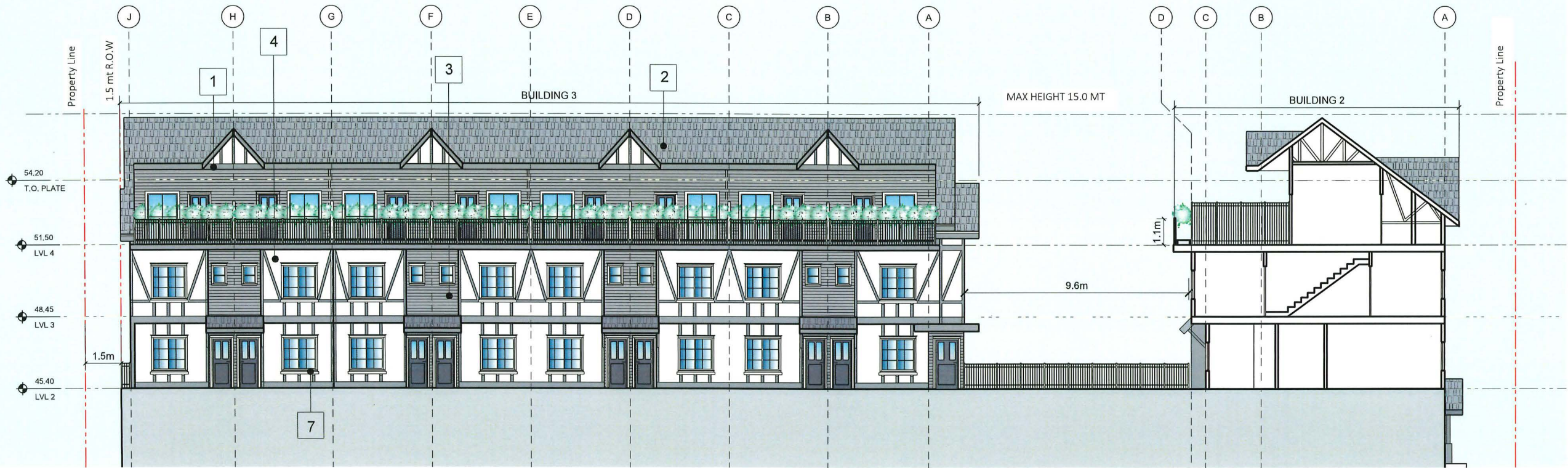
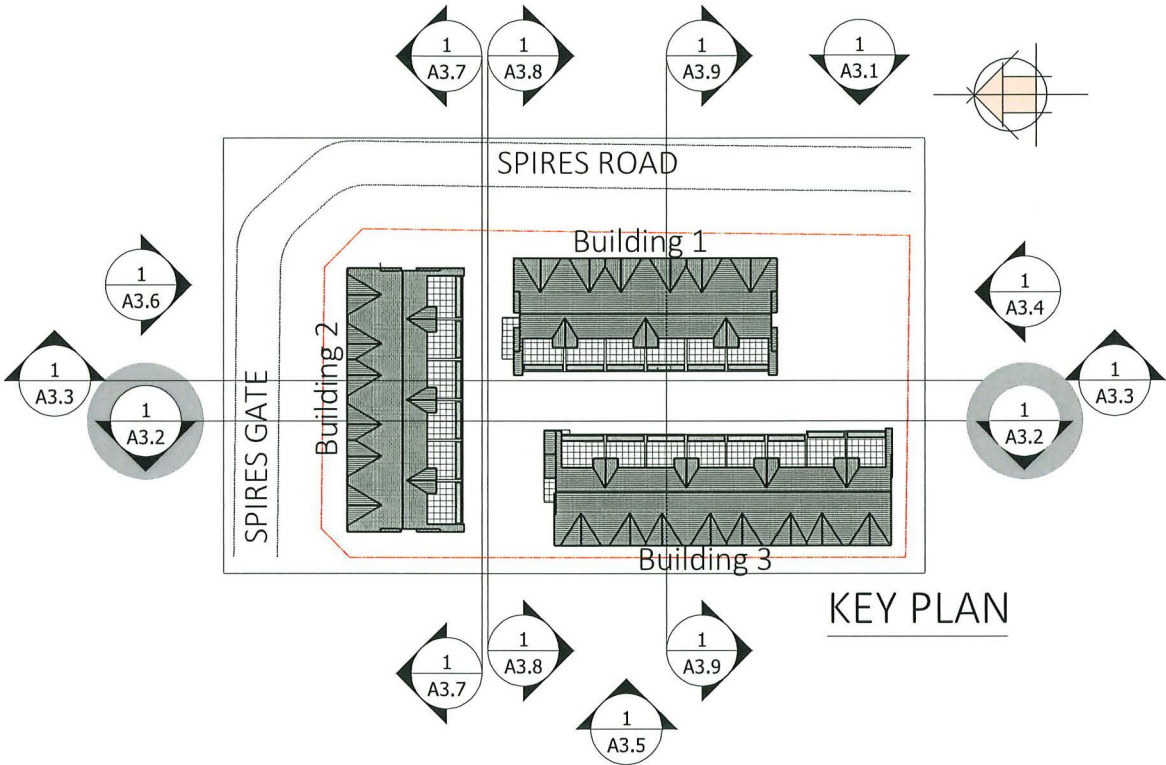
Townhouse Development at 8951,
8971 Spires Rd., 8991 Spires Gate,
Richmond, BC

CLIENT:
Juliana

DATE		29-Mar-23	
PROJECT NO:		17-127	
SCALE:		As Noted	
DRAWN BY:		R.W	
REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W	02/09/22

ELEVATIONS

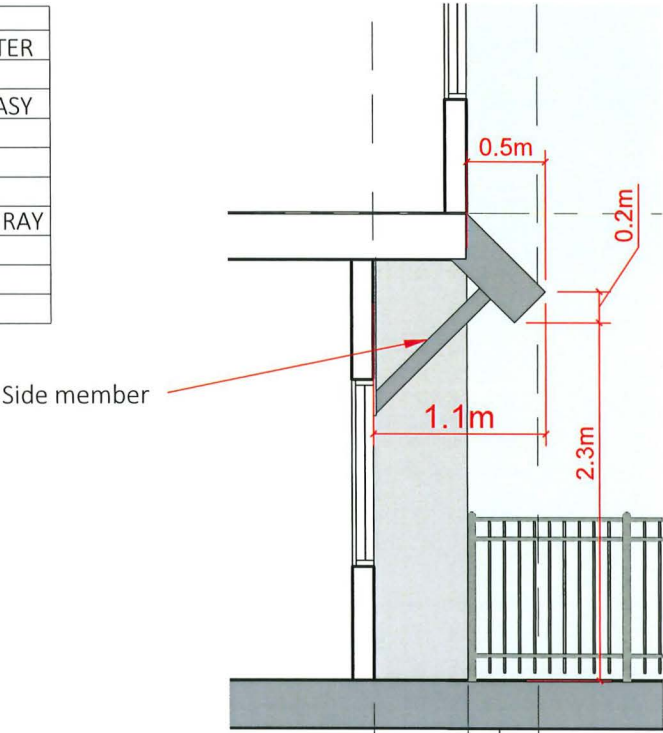
MATERIAL BOARD PLAN	
TAG NO	
1	TRIM BOARDERS/POSTS: PAINT TO MATCH AGED PEWTER
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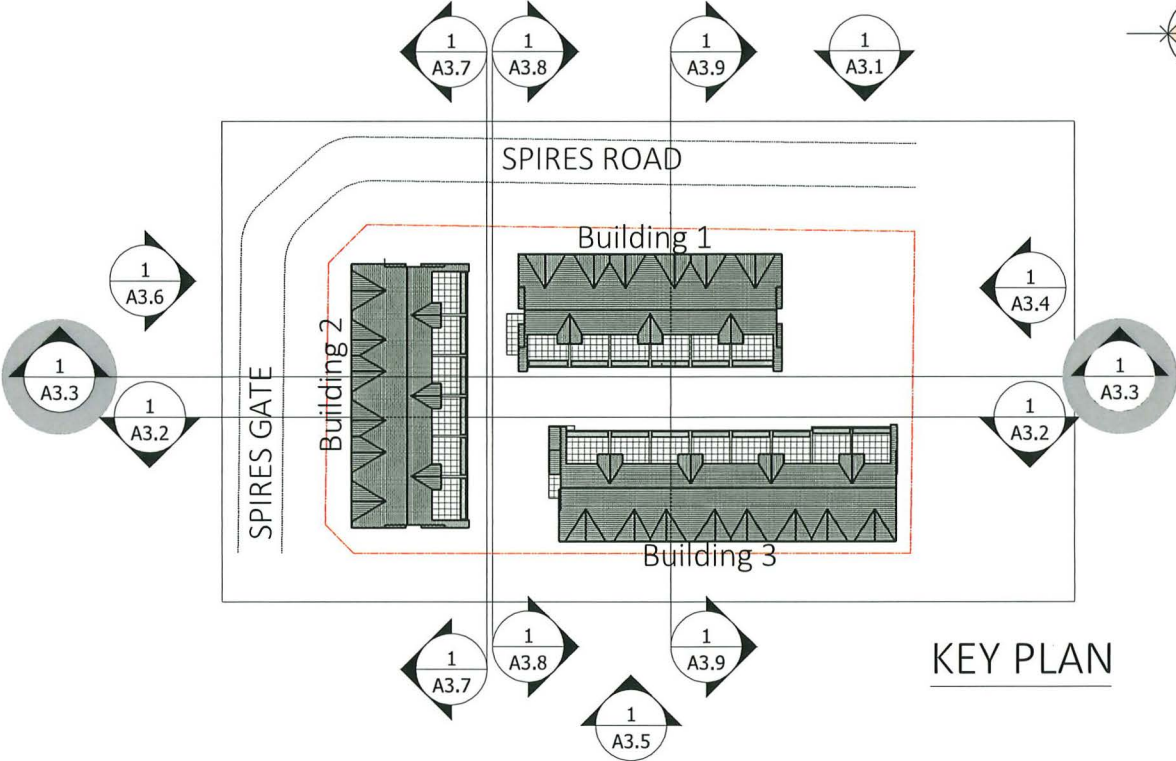
1 PODIUM LEVEL ELEVATION
Scale: 1/16"=1'

REV	DESCRIPTION	DATE	BY
1.	Issued For DP	02/08/22	R.W

MATERIAL BOARD PLAN	
TAG NO	
1	TRIM BOARDERS/POSTS: PAINT TO MATCH AGED PEWTER
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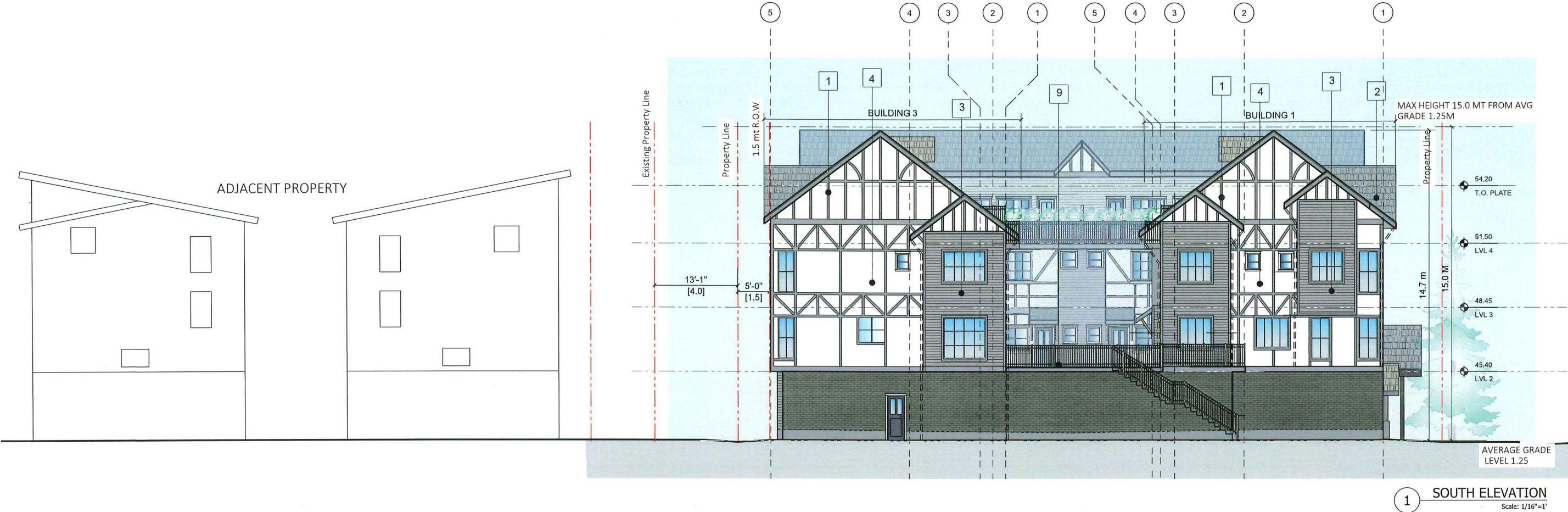
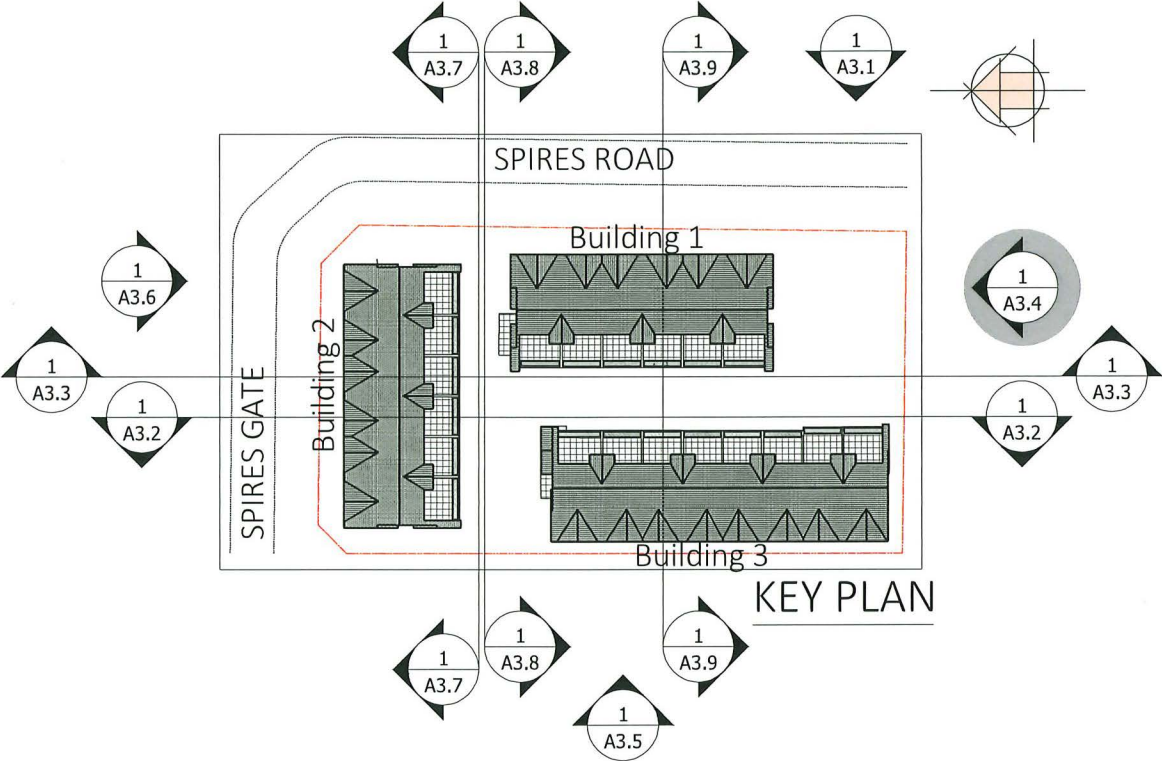
2 Sectional detail of canopy over door
Scale: 1/4"=1'



1 Podium Level Elevations / WEST ELEVATION
Scale: 1/16"=1'

REV	DESCRIPTION	DATE	BY
1.	Issued For DP	02/08/22	R.W

MATERIAL BOARD PLAN	
TAG NO	
1	TRIM BOARDERS/POSTS: PAINT TO MATCH AGED PEWTER
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9	PAVERS: REFER LANDSCAPE DWGS



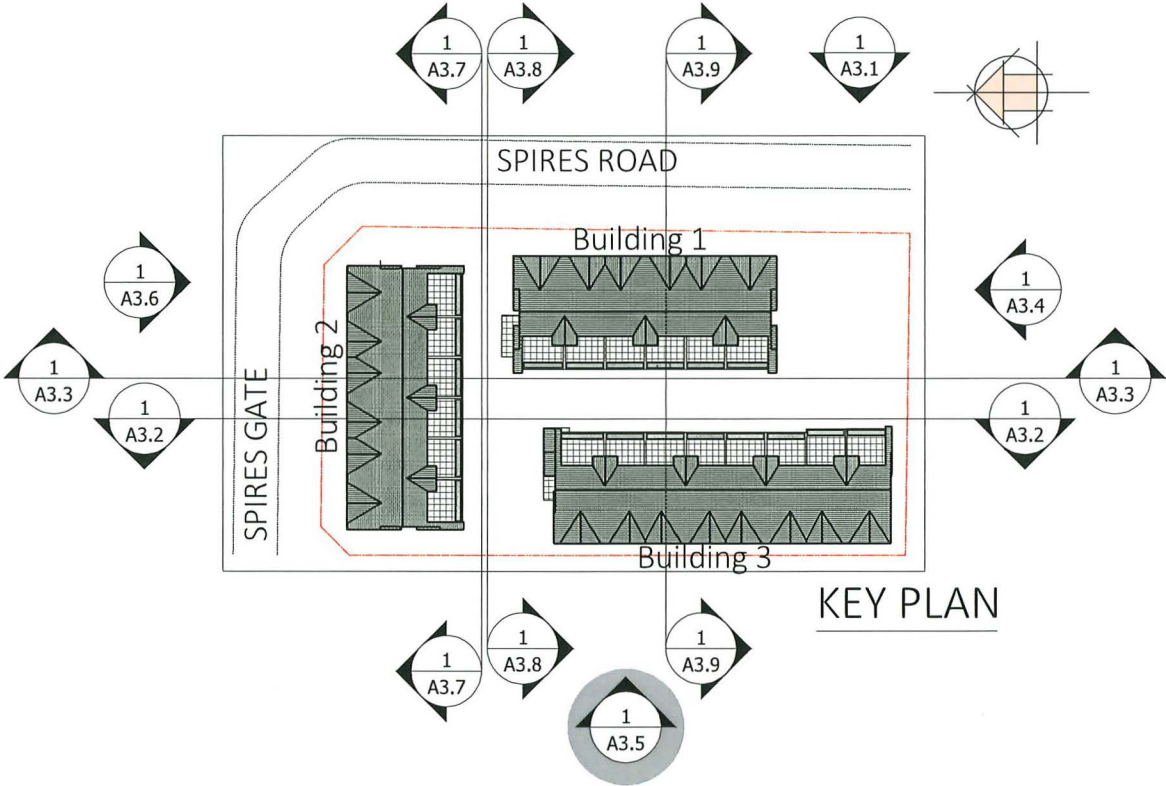
DP 21-932383

Plan #37

April 20, 2023

REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W	02/08/22

MATERIAL BOARD PLAN	
TAG NO	
1	TRIM BOARDERS/POSTS: PAINT TO MATCH AGED PEWTER
2	ASPHAL SHIRINGLES: TIMBERLINE HD PEWTER GRAY
3	EXTERIOR HIGH DENSITY FIBRE CEMENT BOARD C/W EASY TRIMS TO MATCH: AGED PEWTER
4	TRADITIONAL 3 COAT STUCCO SYSTEM: ARCTIC WHITE
5	MIDNIGHT SKY : MUTUAL MATERIALS
6	FASCIA AND BARGE BOARD: SHERWIN WILLIAM ELLIE GRAY
7	BLACK WINDOWS C/W BLACK FRAME WITH MUNTINS
8	REFER LANDSCAPE DWGS FOR PLANTING/VINES
9	PAVERS: REFER LANDSCAPE DWGS



1 WEST ELEVATION/ LANE SIDE
Scale: 1/16"=1'



FLAT!
ARCHITECTURE

Unit 209- 6321 King George Blvd
Surrey BC, V3X 1G1
www.flatarchitecture.ca
contact@flatarchitecture.ca

Ph: 604-503-4484

PROJECT INFO:
Townhouse Development at 8951,
8971 Spires Rd., 8991 Spires Gate,
Richmond, BC
CLIENT:
Juliana

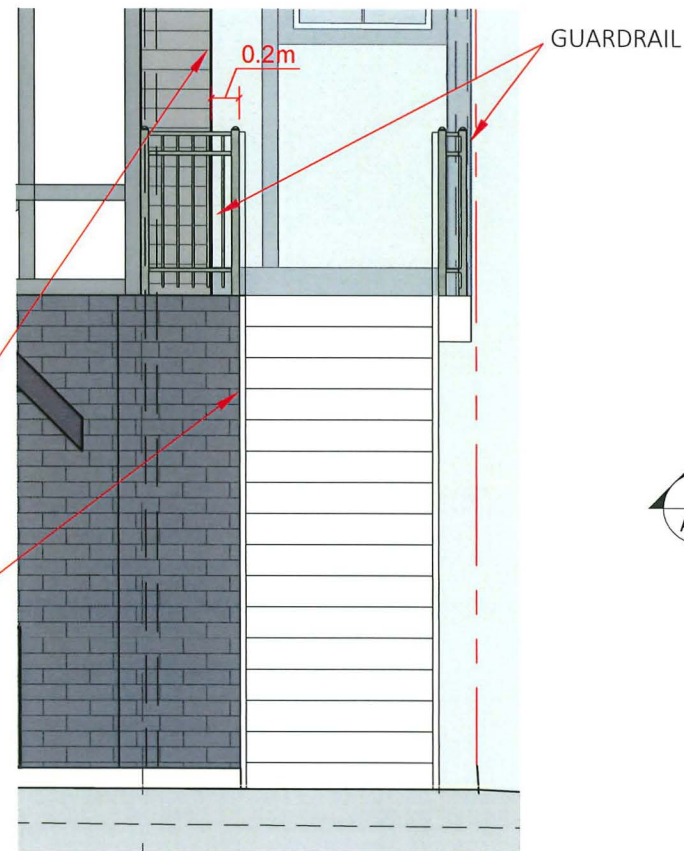
DATE		29-Mar-23	
PROJECT NO:		17-127	
SCALE:		As Noted	
DRAWN BY:		R.W	
REV	DESCRIPTION	DATE	BY
1.	Issued For DP	02/08/22	R.W

ELEVATIONS

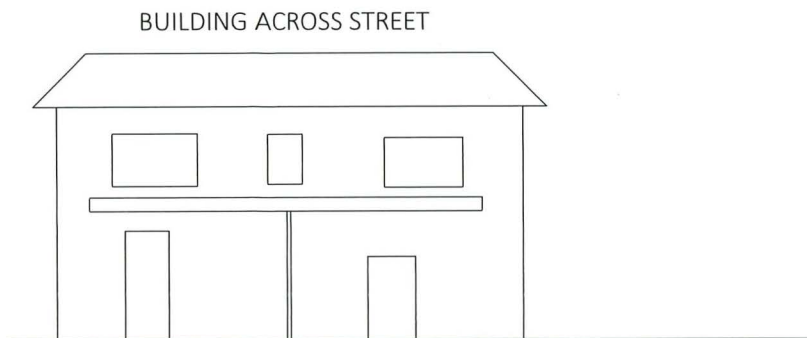
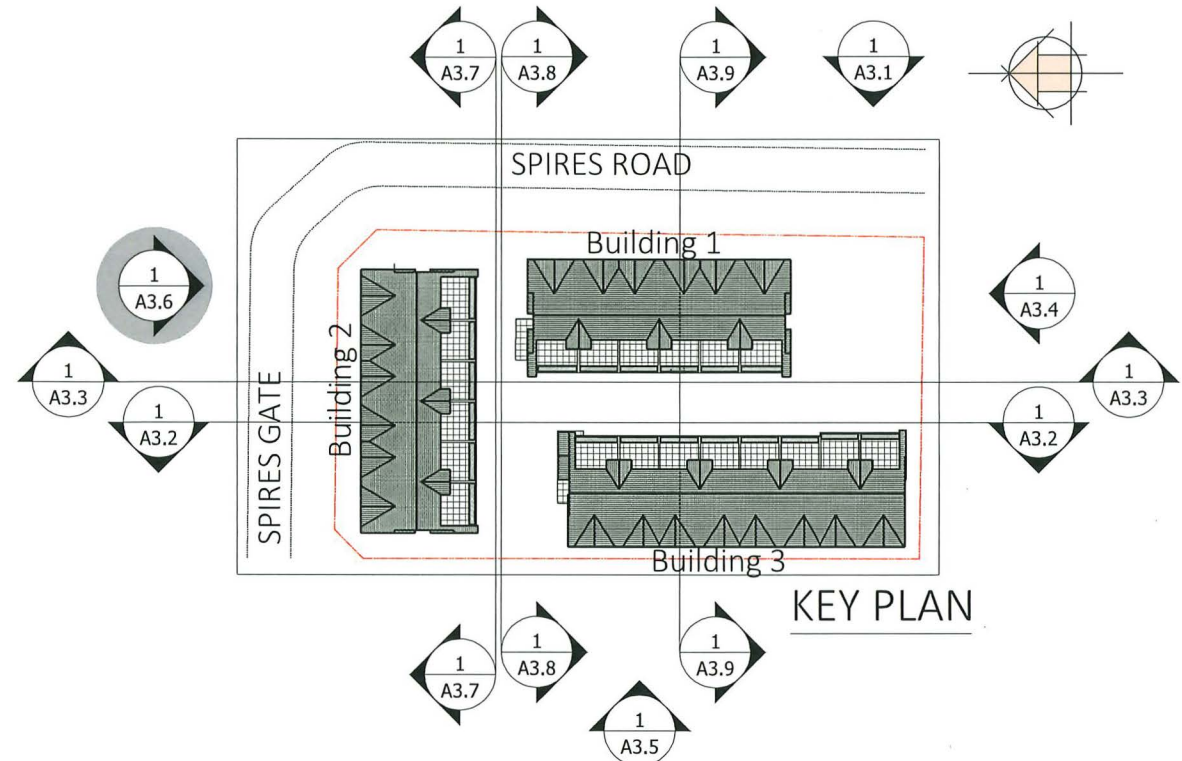
MATERIAL BOARD PLAN	
TAG NO	
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8	REFER LANDSCAPE DWGS FOR PLANTING/VINES
9	PAVERS: REFER LANDSCAPE DWGS

POSITION OF
PODIUM (LVL-2)
WALL

POSITION OF
LVL- 1 WALL



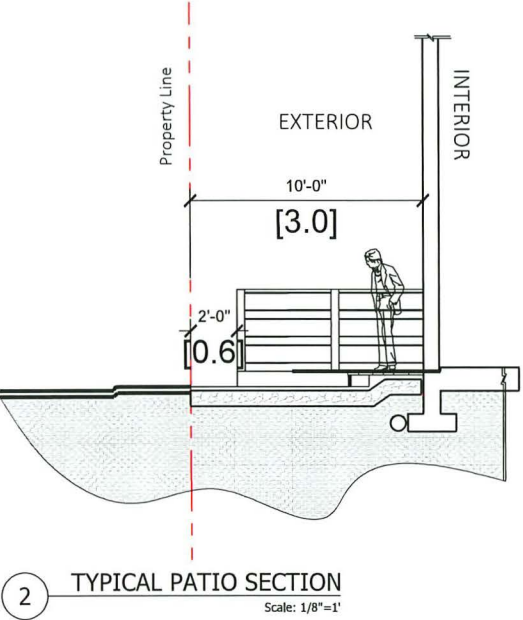
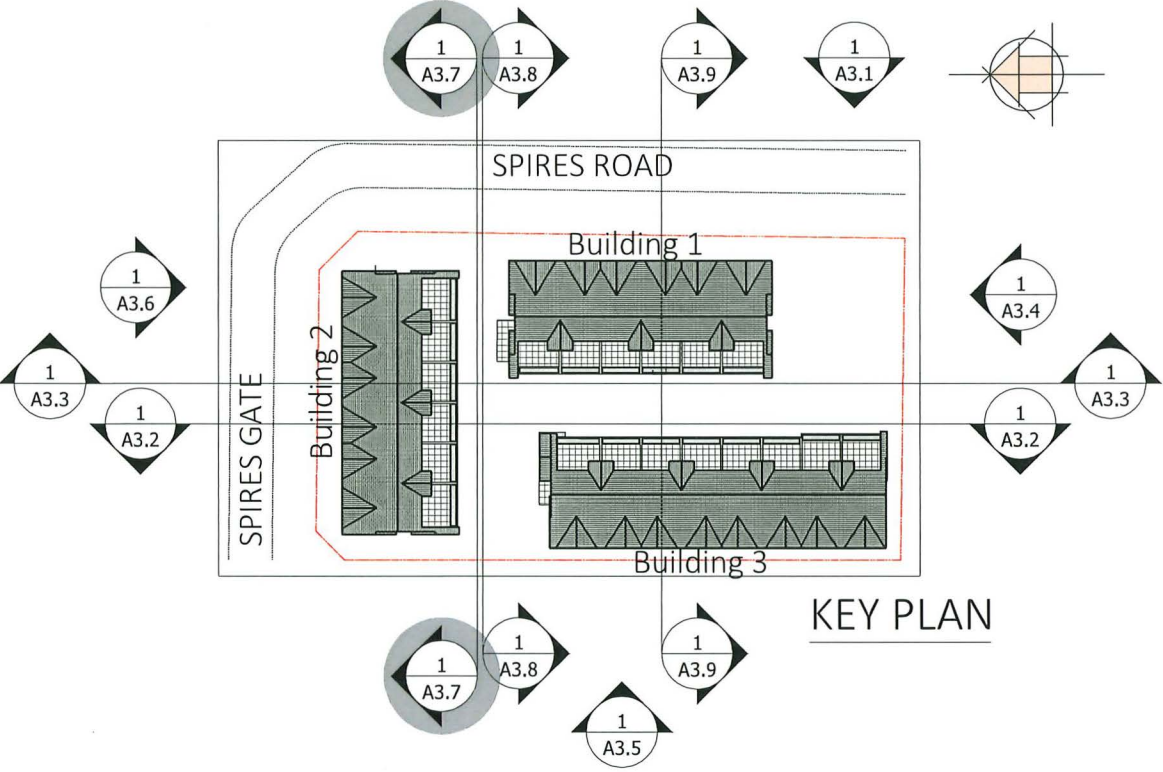
2 DETAIL- wall near exit stair C
Scale: 1/4"=1'



1 NORTH ELEVATIONS- SPIRES GATE
Scale: 1/16"=1'

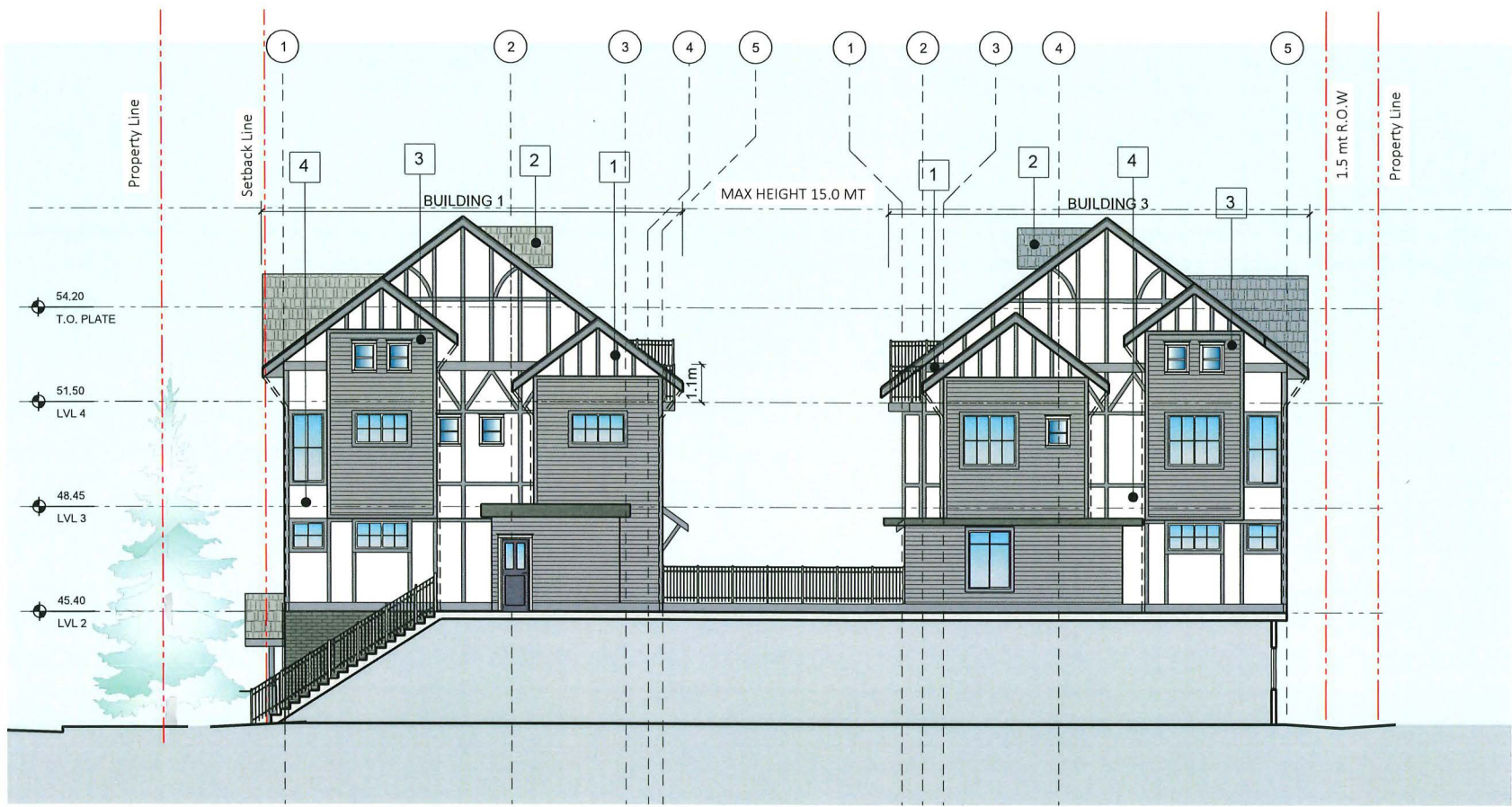
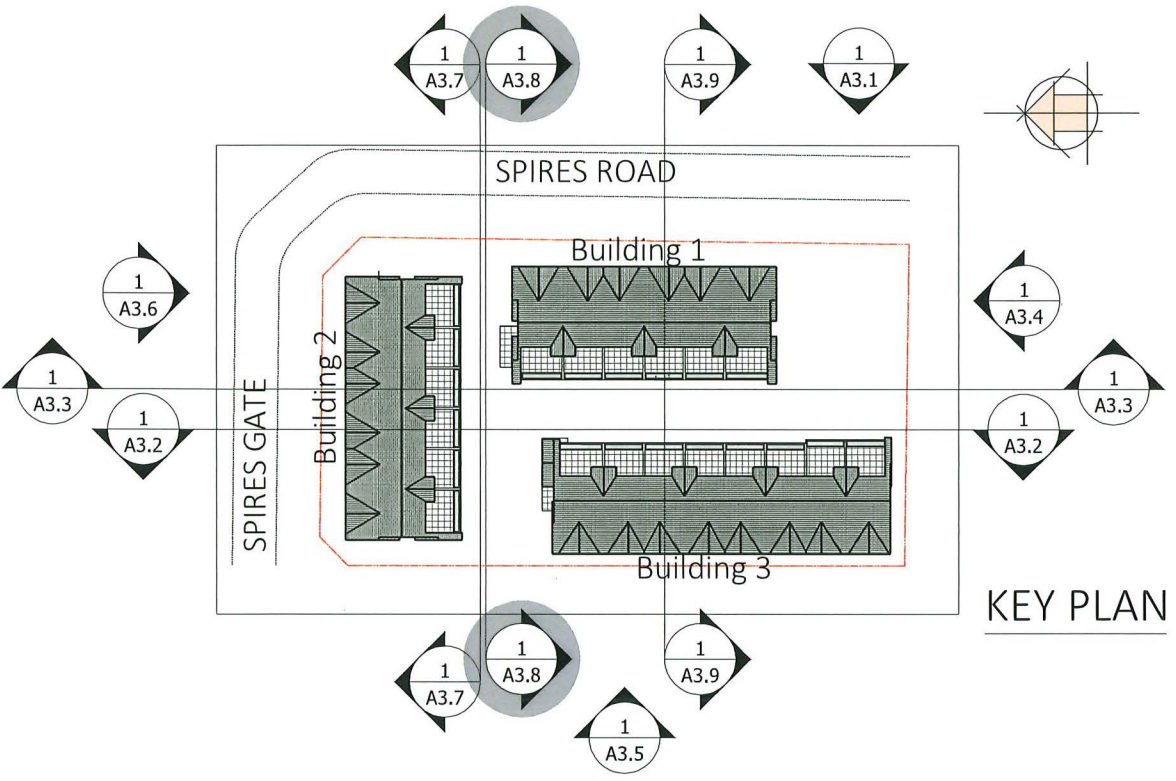
REV	DESCRIPTION	DATE	BY
1.	Issued For DP	02/08/22	R.W

MATERIAL BOARD PLAN	
TAG NO	
1	TRIM BOARDERS/POSTS: PAINT TO MATCH AGED PEWTER
2	ASPHAL SHIRINGLES: TIMBERLINE HD PEWTER GRAY
3	EXTERIOR HIGH DENSITY FIBRE CEMENT BOARD C/W EASY TRIMS TO MATCH: AGED PEWTER
4	TRADITIONAL 3 COAT STUCCO SYSTEM: ARCTIC WHITE
5	MIDNIGHT SKY : MUTUAL MATERIALS
6	FASCIA AND BARGE BOARD: SHERWIN WILLIAM ELLIE GRAY
7	BLACK WINDOWS C/W BLACK FRAME WITH MUNTINS
8	REFER LANDSCAPE DWGS FOR PLANTING/VINES
9	PAVERS: REFER LANDSCAPE DWGS



REV	DESCRIPTION	DATE	BY
1.	Issued For DP	02/08/22	R.W

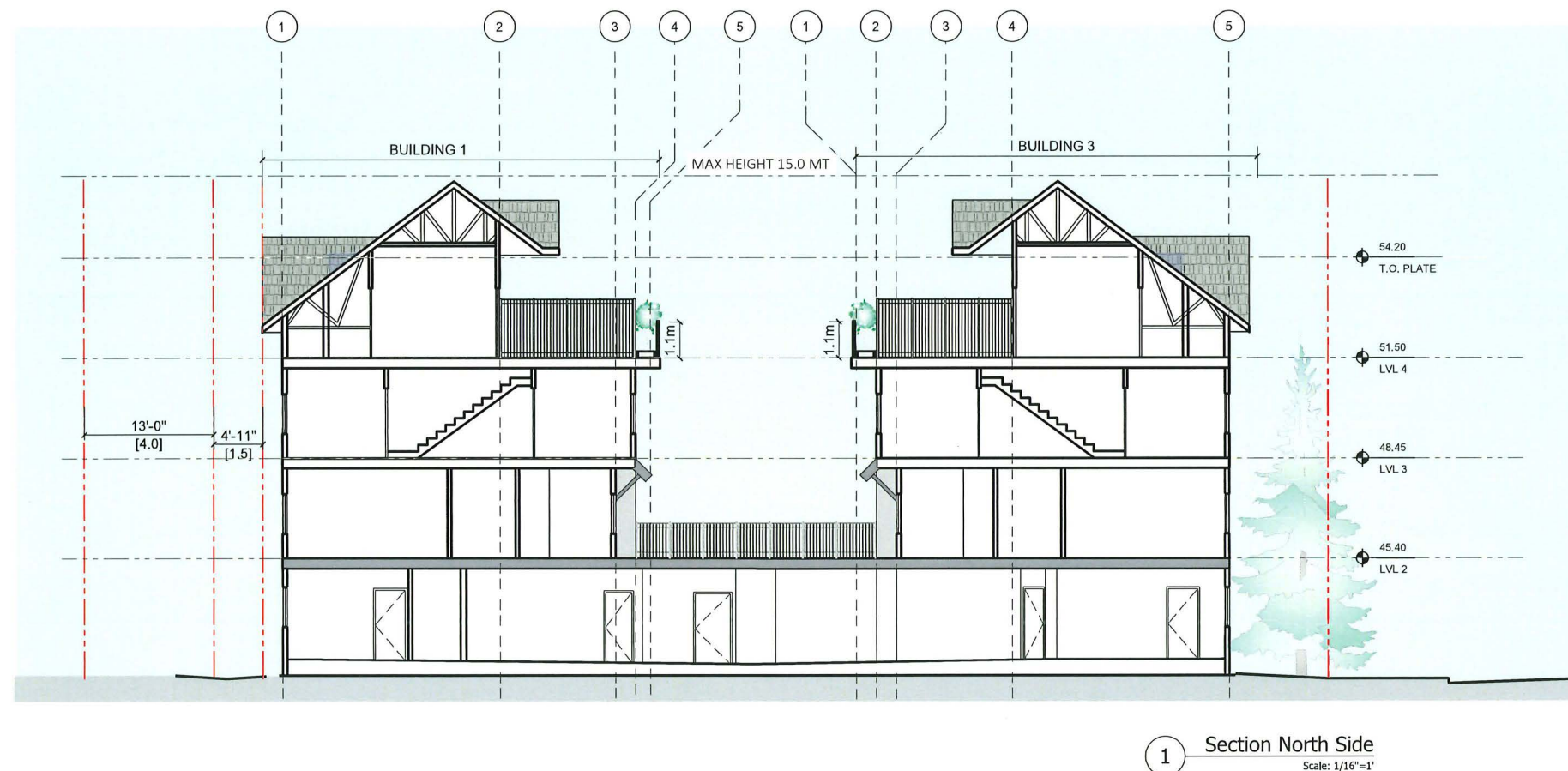
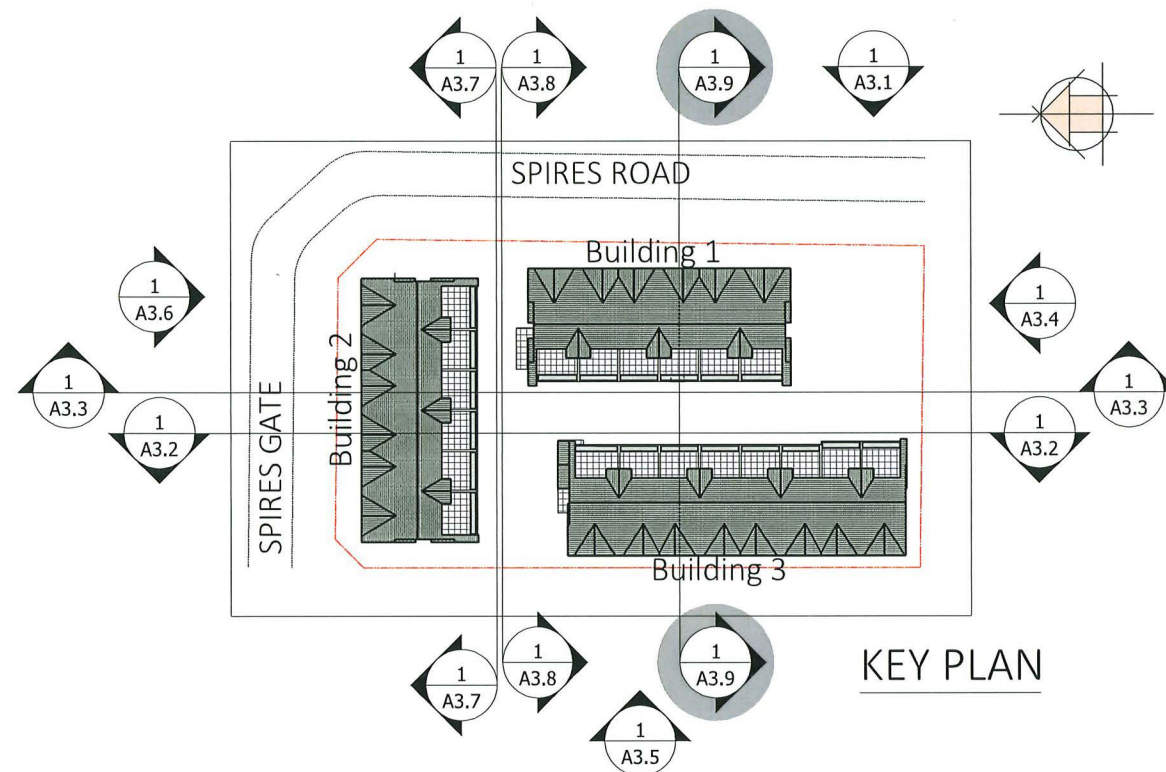
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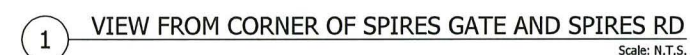


1 North Elevation
Scale: 1/16"=1'

REV	DESCRIPTION	DATE
1.	Issued For DP	02/08/22

MATERIAL BOARD PLAN	
TAG NO	
1	TRIM BOARDERS/POSTS: PAINT TO MATCH AGED PEWTER
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8	REFER LANDSCAPE DWGS FOR PLANTING/VINES
9	PAVERS: REFER LANDSCAPE DWGS







DP 21-932383

Plan #45

April 20, 2023

1 VIEW FROM PODIUM
Scale: N.T.S.



FLAT!
ARCHITECTURE

Unit 209- 6321 King George Blvd
Surrey BC, V3X 1G1
www.flatarchitecture.ca
contact@flatarchitecture.ca
Ph: 604-503-4484

PROJECT INFO:
Townhouse Development at 8951,
8971 Spires Rd., 8991 Spires Gate,
Richmond, BC
CLIENT:
Juliana

DATE
23-Feb-23

PROJECT NO:
17-127

SCALE: As Noted
DRAWN BY: R.W

REV	DESCRIPTION	DATE	BY
1.	Issued For DP	02/08/22	R.W

3D VIEW

A4.3



1 VIEW FROM NORTHWEST CORNER
Scale: N.T.S.



FLAT!
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DRAWN BY: R.W

REV	DESCRIPTION	BY	DATE
1.	Issued For DP	R.W	02/08/23

3D VIEW



City of Richmond

Report to Development Permit Panel

To: Development Permit Panel

Date: April 20, 2023

From: Wayne Craig
Director, Development

File: DP 21-943565

Re: **Application by Orion Construction for a Development Permit at
9800 Van Horne Way**

Staff Recommendation

That a Development Permit be issued which would permit the construction of two multi-tenant light industrial buildings at 9800 Van Horne Way on a site zoned "Light Industrial (IL)".

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

WC:bb
Att. 4

Staff Report

Origin

Orion Construction, on behalf of the owner of the subject property, has applied to the City of Richmond for permission to develop two industrial buildings on the subject lot at 9800 Van Horne Way. The owner intends to sell the buildings as strata titled units after completion of the project. The development site is currently zoned “Light Industrial (IL)” and contains one industrial building as well as accessory storage uses.

A Servicing Agreement is required prior to Development Permit issuance, and includes, but is not limited to, the following improvements:

- decommissioning and replacement of the existing water main located along the Van Horne Way frontage;
- decommissioning and replacement of the existing sanitary main along the Van Horne Way frontage;
- decommissioning and replacement of the storm sewer main located along the Van Horne Way frontage; and,
- frontage improvements to both River Drive and Van Horne Way including the undergrounding of utilities, street lighting as well as widening of the existing boulevard from 1.0m to 1.5m along Van Horne Way.

Development Information

Please refer to attached Development Application Data Sheet (Attachment 1) for a comparison of the proposed development data with the relevant Bylaw requirements.

Background

The subject site and the surrounding area are located in a predominantly industrial neighbourhood within the City Centre Area Plan. Development surrounding the subject site is as follows:

- To the North: Across River Drive, a “Light-Industrial (IL)” zoned property currently operated by South Coast BC Transportation Authority.
- To the South: The CP railway right-of-way (which is identified in the CCAP as a future City road), and further south, an industrial building offering mixed-employment uses on a site zoned ““Light-Industrial (IL)””.
- To the East: A “Light-Industrial (IL)” zoned property containing two warehouse buildings used for storing trailers. The property is subject to an active rezoning application currently at third reading (ZT 16-753545) to allow non-accessory vehicle parking. The property further east is owned and operated by BC Hydro and contains service utility infrastructure.
- To the West: Across Van Horne Way, two “Light-Industrial (IL)” zoned properties used by South Coast BC Transportation Authority.

Related Policies and Studies

Aircraft Noise Sensitive Development Policy

The subject site is located within Aircraft Noise Areas 1A and 2, which would restrict all new noise sensitive uses. The proposed industrial use is not restricted, and noise mitigation is not required. Prior to issuance of the Development Permit, the applicant is required to register an aircraft noise covenant on Title to address public awareness of the potential impact of aircraft noise on the site.

Floodplain Management Implementation Strategy

The proposed redevelopment must meet the requirements of Richmond Flood Plan Designation and Protection Bylaw 8204. Registration of a flood indemnity covenant on Title is required prior to issuance of the Development Permit.

Site Disclosure Statement

The applicant must provide confirmation of compliance and approval from the Ministry of Environment with regard to site investigation for any contaminants due to previous activities on the property prior to the issuance of the Development Permit.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan, City Centre Area Plan and is generally in compliance with the “Light Industrial (IL)” zoning regulations.

Advisory Design Panel Comments

On February 8, 2023, the Advisory Design Panel supported the subject Development Permit application moving forward to Development Permit Panel, subject to consideration of the panel’s comments. The applicant has incorporated a number of design changes in response to the Panel’s comments, including:

- Commitment to install five (5) Electric Vehicle (EV) charging stations in the parking areas. The charging stations are distributed throughout the parking areas with two (2) stations west of Building A, one (1) to the south of Building A adjacent to an outdoor amenity area, and two (2) west of Building B along the central drive aisle between the two buildings.
- Relocating the garbage enclosure to an area south of Building A and away from the edge of the future road south of the site.
- Providing more surface texture and line painting in the parking area to demarcate pedestrian pathways and enhancing pedestrian safety.
- Providing a centrally-located outdoor amenity area south of Building A.
- Providing an additional outdoor landscaped and amenity area immediately east of Building B.

A copy of the relevant excerpt from the Advisory Design Panel Minutes from February 8, 2023 is attached for reference (Attachment 2). The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in '***bold italics***'.

Analysis

Conditions of Adjacency

- The buildings are designed to have a strong visible presence along both River Drive and Van Horne Way.
- Building A, which is the smaller building of the two, is proposed to be closer to the western portion of the site, and would have a strong visible presence along Van Horne Way.
- Both Buildings A and B would have a strong visible presence from trains entering and exiting the City via the Canada Line.
- The buildings are proposed to have similar height to the majority of the industrial buildings in the immediate area.
- The edges of the site would be landscaped through planting of shrubs, flowerbeds and trees in order to provide buffering from the streets as well from the lot south of the property, which is currently hosting the CP railway right-of-way and is earmarked for redevelopment as a future City road.

Urban Design and Site Planning

- The proposed development includes two new two-storey light industrial buildings that are oriented north-south.
- Vehicular access to the site is provided via one driveway off River Drive and two (2) off Van Horne Way. The two buildings are separated by a central drive aisle which contains loading areas as well as the majority of the on-site parking spaces. The proposed access locations and building arrangement has been designed to accommodate on-site truck turning movements.
- Building A will have three (3) painted and textured pedestrian access-ways from the multi-use pathway along Van Horne Way and connect to Building A. Paths of travel for pedestrians to the rest of the site are proposed to be clearly demarcated in order to provide additional pedestrian safety within the site.
- The CCAP identifies a future City road located along the southern portion of the property. In order to accommodate the construction of the future City road, the developer has agreed to provide a minimum 6.94 m wide Statutory Right-of-Way (SRW) along the properties southern frontage. This SRW is consistent with the SRW secured along the southern portion of the adjacent property to the east at 9920 River Road through the associated Zoning Text Amendment process for that property (ZT 16-753545).
- A garbage and recycling enclosure is proposed on the southeast corner of Building A. The proposed enclosure is to be on a concrete slab with steel swing doors finished to match the design character of the buildings.
- Sixty-six (66) Class 1 bicycle spaces are provided within the buildings in individual units. An additional 62 Class 2 bicycle spaces are provided via several bicycle racks grouped into 18 locations near building entrances and outdoor amenity areas.

Architectural Form and Character

- Two industrial buildings with similar design features and appearance are proposed.
- The buildings have a modern industrial appearance, with extensive glazing on all four elevations with a flat roof.
- Full-height vertical elements with accenting materials such as aluminum and metal cladding, break up the horizontal massing along all elevations for both buildings.
- Both buildings will incorporate built-in canopies along their west elevations in front of individual units' entrances in order to provide visually-pleasing façades and weather protection for employees and visitors.
- All elevations will include a variety of building material and colours for accenting as well as cladding to further signify the modern industrial character of the site and in order to integrate the buildings' form and character with the immediate neighbourhood's. Proposed building materials would include concrete, aluminum, steel, and clear and spandrel glazing.

Tree Removal, Replacement and Retention

- There are a total of 21 bylaw sized trees on the subject site. A Tree Management Plan is provided in Attachment 3.
- The applicant proposes to remove fourteen (14) trees. Two (2) trees proposed to be removed, which are located along the south property line, are in poor condition. Nine (9) trees proposed to be removed are adjacent to the existing on-site building and their retention would be impacted by the demolition of the existing building and associated construction works to accommodate any on-site development in the future. Three (3) trees, which are in fair to good condition, have been identified for removal due to conflict with the proposed Building B envelope.
- The City's 2:1 replacement ratio would require a total of 28 bylaw sized trees to be planted in lieu of the proposed trees' removal. The applicant is proposing to plant 40 bylaw sized trees on-site, which would exceed the minimum requirement of 28 replacement trees. The proposed replacement trees would include a mix of coniferous and deciduous species. Deciduous trees are proposed in close proximity to the parking areas to allow for clear sight lines, while eight (8) coniferous trees are to be planted along Van Horne Way frontage, clustered with other plantings.
- The applicant proposes to retain seven (7) trees (Tag #936, 937, 949, 5059, A, B, C) along the south property line. Prior to Development permit issuance, the applicant shall submit to the City a copy of a signed contract with a Certified Arborist to confirm the supervision of all works conducted within or in close proximity to tree protection zones. The contract must include the scope of work required, the number of proposed monitoring inspections at specified stages of construction, any special measures required to ensure tree protection, and a provision for the arborist to submit a post-construction impact assessment to the City for review.
- Prior to demolition of the existing building on the subject site, installation of tree protection fencing around all trees would be required. Tree protection fencing must be installed to City standard in accordance with the City's Tree Protection Information Bulletin Tree-03 prior to any works being conducted on-site, and remain in place until construction and landscaping on-site are completed.

The applicant is required to provide security deposit of \$70,000.00 for the protection and retention of the aforementioned seven (7) on-site trees.

Landscape Design and Open Space Design

- The focal pedestrian access to the site would be through the northwest at the corner at the intersection of Van Horne Way and River Drive. The entry point would include an outdoor amenity space designed to function as a plaza, comprising of seating as well as a landscaped area with a mix of shrubs, plants and flowers. The plaza area would also include a public art installation, which is required as part of the City of Richmond's Public Art policy for development proposals of this scale (See Public Art section below for more detail).
- The landscaping buffer of 3 meters fronting Van Horne Way will include a mix of deciduous trees as well as native plants and shrubs in addition to the eight (8) coniferous trees noted earlier, providing a diverse and seasonally varied landscaped area.
- Landscaping buffer of 3 meters fronting River Drive, north of Buildings A and B, will include a mix of deciduous trees and native plants and shrubs that are layered to provide seasonal variation and texture.
- An enlarged landscaped and outdoor amenity area is provided immediately east of Building B fronting River Drive. The landscaped area would include shrubs and plants around a central seating space which includes picnic tables and benches. The area would be accessible from both River Drive and via Building B.
- There are twelve (12) smaller landscape amenity areas in front of several individual units in both buildings. These spaces would contain benches and bicycle racks. Four of the areas in front of Building A would be landscaped with perennial shrubs and plants and each space would contain one (1) deciduous tree.
- An enlarged landscaped outdoor area is provided south of Building A. This space would contain a mix of trees and shrubs and would include several benches and bicycle racks.
- A landscaped outdoor area is provided on the southeast corner of the site bordering the edge of the future road planned for the CP railway right-of-way. This area would be landscaped with several deciduous trees as well as shrubs and plants, and would include benches and a picnic table for use by future employees and visitors.
- The applicant is required to submit an acceptable security for landscaping in the amount of \$126,108.30 plus applicable taxes, inclusive of a 10 per cent contingency cost, prior to the issuance of the Development Permit.
- Irrigation is to be provided for all soft landscaped areas with the utilization of a high efficiency irrigation system.

Sustainability

- The buildings are designed to achieve a minimum 10% saving on energy cost budget from the BC Building Code baseline standard (ASHRAE 90.1), which would be confirmed through an energy model, and outdoor lighting will be high efficiency LED to aid building energy efficiency (Attachment 4).
- Both buildings have been designed to allow for the installation of future solar photovoltaic roof mounted panels by individual tenants in the future, should the future tenant choose to do so.

- The proposed bicycle parking exceeds the requirements in the Zoning Bylaw and electrical outlets would be installed near several bicycle racks along buildings' walls to promote e-bike usage.
- All units would have the potential for Electric Vehicle charging stations through Electric Vehicle rough-in installations. This would enable the installation of charging stations for approximately 88 parking stalls in the future, which would be 46 per cent of the total number of on-site parking spaces proposed. In addition, the applicant has agreed to install five (5) Electric Vehicle (EV) charging stations through the parking areas. The charging stations would provide active charging to ten (10) vehicles.
- The landscaping plan includes drought-resistant species with minimal water usage requirements.

Crime Prevention Through Environmental Design

- The site has three (3) access points for vehicles and five (5) access points for pedestrians. Pedestrian pathways have clear sightlines from individual units in both buildings.
- Outdoor lighting will consist of wall-mounted LED lighting around both buildings and will also include surface-based lighting in front of units and loading areas. Lighting fixtures would be installed so as to ensue that lighting is directed downward thus limiting light spillover onto the adjacent sites.
- Outdoor amenity areas are to be built in areas with high visibility from various units in both buildings.
- The outdoor amenity area east of Building B would be visible from River Drive and would be accessible via Building B as well as from River Drive. The area would be well-lit with surface and wall-mounted LED lighting and landscaping would be done in such manner as to promote high visibility into and within the area.

Public Art

- As per the City's Public Art policy the developer is providing a voluntary contribution to Public Art in the City. The applicant has committed to provide a public art installation on-site at the northwest entry plaza area. The public art installation will be in the form of a multi-coloured surface mural throughout the entry plaza area and was endorsed by the City of Richmond's Artist Selection Panel on December 13, 2022. A legal agreement and letter of credit securing commitment to the installation and maintenance of the art installation will be registered between the owner and the City prior to the issuance of the Development Permit.

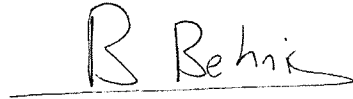
Site Servicing

- The applicant is required to enter into a Servicing Agreement prior to Building Permit issuance for the design and construction of the required site servicing and off-site work including but not limited to:
 - Road frontage improvements along Van Horne Way and River Drive
 - Drainage upgrades,
 - Sanitary system analysis, and
 - Watermain upgrade.

Conclusions

As the proposed development is consistent with the applicable policies and Development Permit Guidelines, staff recommend that the Development Permit be endorsed, and issuance by Council be recommended.

The list of Development Permit Considerations is included in Attachment 5, which has been agreed to by the owner (signed concurrence on file).

A handwritten signature in black ink, appearing to read "B Behnia", written over a horizontal line.

Babak Behnia
Planner 2
(604-204-8639)

BB:cas

- Att. 1: Development Application Data Sheet
 2: Excerpt from the Meeting minutes of the Advisory Design Panel (February 8, 2023)
 3: Tree Management Plan
 4: Sustainability Strategy
 5: Development Permit Considerations

**DP 21-943565****Attachment 1**Address: 9800 Van Horne WayApplicant: Orion ConstructionOwner: 1321791 BC LTDPlanning Area(s): City Centre

	Existing	Proposed
Site Area:	36 379.78 m ²	No change
Land Uses:	Industrial	No change
OCP Designation:	Industrial	No change
Zoning:	Light Industrial (IL)	No change
Number of Units:	1	44 industrial units in two (2) buildings

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	1.2	0.62	None permitted
Gross Floor Area	43,603.2 m ²	22,609 m ²	None
Lot Coverage for Buildings:	Max. 80%	48.6%	None
Setback – Front Yard:	Min. 3 m (north)	3 m	None
Setback – Side Yard:	Min. 0 m (east)	1.2 m	None
Setback – Exterior Side Yard:	Min. 3 m (west)	13 m	None
Setback – Rear Yard:	Min. 0 m	Building A: 15.7 m Building B: 15.8 m	None
Height (m):	Max. 16 m	Building A: 9.9 m Building B: 10.3 m	None
Off-street Parking Spaces – Regular/Commercial:	146	190	None
Off-street Parking Spaces – Accessible:	3	5	None
Amenity Space – Outdoor:	N/A	706 m ²	None

Excerpt from the Meeting minutes of the Advisory Design Panel (February 8, 2023)

Panel Discussion

Comments from Panel members were as follows:

- understand the constraints of the long and narrow site from a design perspective;
- consider incorporating different levels of electric vehicle (EV) charging stations either spread out or concentrated in one area of the subject site considering the size of the proposed industrial development and the potential needs of tenants;

There will be several level 2 EV charging stations installed at the development. They have been dispersed appropriately. Level 2 chargers are a widely accepted standard and is an appropriate level of charging for a workplace.

- ensure that the proposed outdoor storage space adjacent to the property owned by BC Hydro does not become unsightly (e.g. a depository for garbage and junk) and follow the City's guidelines for outdoor storage spaces; consider installing a fence for the outdoor storage space; also consider incorporating an amenity space in the outdoor storage space;

The outdoor storage area has been placed further from the road providing room for an amenity space and landscaped area. A 6' high fence is also provided around this storage yard, which will support the City or Richmond and ADP comment to screen this area. Privacy slates have been specified to screen the outdoor storage. All design and materials decisions pertaining to the SRW, including the provision of amenity spaces and fencing, are subject to the approval of BC Hydro. The proposed landscaped area, amenity space, and storage yard are subject change.

- consider relocating the proposed garbage and recycling enclosure to the north and adjacent to Building A as the future road could become a busy road in the future and would be highly visible to the public; also consider other interim uses for the road-right-of-way, e.g. use the space for community gardens as there is demand for this type of outdoor amenity space;

The garbage enclosure has been moved adjacent to Building A per the ADP's recommendation.

- consider incorporating a more focused, dedicated and substantial landscaped area in the subject site at the front of the subject site to create a more visually appealing entrance to the site; consider shifting Building B to the south to provide space for this landscaped area without reducing the buildable area in the project;

The landscape area north of the buildings includes different sizes and colors of plant species to provide a visually appealing buffer along River Drive. Attractively landscaped amenity areas have been provided at the north-east of Building B and at the north-west of Building A to increase the landscape area near the roadway.

- consider installing tastefully designed line painting on the internal drive aisles of the subject site to demarcate pedestrian and vehicular circulation routes, e.g. “pedestrians only”, “cyclists only”, “no parking” pavement signs to enhance the safety of pedestrians and cyclists safety on the site;

For the street connections, from the multiuse path to the front of Building A on the west of the property, the drive aisle is proposed to be saw-cut with a colour contrasting finish. This will provide an obvious visual and tactile route of travel. For the pedestrian paths of travel between the buildings, line painting is proposed to demarcate the anticipated locations of pedestrian travel to pedestrians and vehicles.

- appreciate the legal agreement registered on Title that includes safeguarding the long-term durability/maintenance of the proposed public art in the project; the public art artist/designer is encouraged to use sustainable materials for long-term use or materials that can be replaced economically to ensure the long-term maintenance of the proposed public art;

Durability and sustainability have been considered to date. The project team will continue to work with the artist and art consultant to ensure sustainability and economical replacement are key consideration during material selection.

- appreciate the applicant’s focus on public art considering the industrial use of the site; the proposed public art would provide an interesting visual experience from Canada Line;
- review the location of the seating area in the corner plaza at the northwest corner and consider the safety of users from trucks turning at the corner; consider increasing the size of the corner plaza considering the size of the proposed industrial development, e.g. convert two adjacent parking stalls into a landscaped area to become part of the plaza;

The north corner amenity plaza is within the site and the City of Richmond’s engineering staff have considered the turning radius in the design of the road and multi-use pathway adjacent to our site at this corner.

- support the Panel comment to relocate the garbage and recycling enclosure elsewhere on-site and utilize the future road ROW for community gardens in the interim; also support the Panel comment to relocate the garbage and recycling enclosure to the space adjacent to Unit 126 in Building A;
- does not agree with the applicant's approach to provide more parking stalls as a marketing strategy; consider providing just the required minimum number of parking stalls and turn the extra parking stalls into an amenity space; the project could attract more tenants by providing more amenity spaces;

The project team are confident that the design has managed to strike a balance between providing attractive amenity spaces dispersed across the property and providing parking for employees and visitors. There are 44 units planned for the site. The users of these units have not been identified. Providing the site with ample parking ensures consumer facing businesses have adequate parking and will ensure there are no conflicts between users for spaces.

- proposed location for garbage and recycling enclosure is an ideal location for an outdoor amenity space as it is centrally located; consider relocating the garbage and recycling enclosure to a more hidden area in the subject site;

The garbage enclosure has been moved adjacent to Building A per the ADP's recommendation.

- agree with the Panel comment that the proposed corner plaza at the northwest corner is too small considering the size of the project; concerned about the usability of this amenity space as its location does not provide privacy to users;

The plaza is designed to be open and welcoming, with multiple lines of sight. Excessive privacy measures for amenity spaces have the potential to create safety concerns outside of peak hours.

The plaza is a prominent site entrance with adequate seating and landscaping, balancing its need to act as a transitory pedestrian space and amenity area. The size and configuration suits both of these competing priorities. As well, increasing the plaza size would inhibit entry to Unit 101 in Building A. Adding the proposed amenity space to the south of Building A should help relieve concerns with the size of the plaza.

- support Panel comments regarding too many extra parking stalls on the site; consider the possibility that some workers would be using public transit and could access the subject site at the southwest corner from Canada Line Bridgeport Station that would result in some pedestrian movement along the south side of Building A; look at ways to mitigate conflict between pedestrian and vehicular traffic on the site;

A street connection at the south side of Building A has been provided to allow for users to enter the site and safely cross the drive aisle to get to the building sidewalk.

- consider installing an outdoor amenity space on the south side of Building A as it is centrally located; also consider multiple smaller landscaped areas in selected areas on the site with opportunities for planting of trees to provide shade for users during summer especially in landscaped areas located on the west side of the two buildings;

The amenity area on the South of Building A has also been expanded to provide a second large amenity area that is accessible to both Buildings A and B.

- consider relocating the proposed garden and recycling enclosure elsewhere on-site; however, should the proposed location be retained, consider providing adequate landscaping around the enclosure;
- appreciate the applicant's improved sustainability strategy and comments regarding the use of bioswales and on-site water storage systems;
- review the design of the high SRI building rooftops, e.g. review the size of the ballasts and how it would be visually experienced from Canada Line;

The proposed roofing system is a 12lb per sq.ft. ballast comprised of smooth river rock. This roof system's appearance is not drastically affected by weathering like other materials. The smooth river rock is and will remain an attractive ballast material.

During our review of the Canada Line's adjacency, we determined that the train's height is similar to that of the building height, which will minimize sightlines to the roof. The roofing materials, combined with the height of the building and the speed that the SkyTrain will be traveling at make us confident the roof system's visual experience from the SkyTrain will be inoffensive and in conformance with other industrial developments along the Metro Vancouver's SkyTrain routes.

- support the Panel comment regarding the interim use of the ROW for the future road for outdoor amenity spaces such as community gardens;

The various amenity areas provided across the site satisfy the need for attractive outdoor amenity spaces. A community garden space presents a potential conflict between the tenants and customers of the industrial site and the users of the gardens. As well, this project's location away from significant residential development make demand for a garden minimal.

- future road ROW along the south side of the subject site could provide a linear park that provides connection to the site in the interim especially if there is still no plan to develop the future road; the proposed garbage and recycling enclosure on the south side needs to be relocated elsewhere on-site;

The development's extensive amenity and landscaping area eliminate the need for a linear park along the ROW.

- support the Panel comment to distribute the amenity spaces on the site so there would be fewer but more substantial smaller nodes throughout the site;

- irrigation for the public realm should be provided longer than what was previously required due to climate change; consider introducing water management strategies, e.g. water surge to allow plants to access water through capillary action;

The irrigation strategy proposed will be a high efficiency irrigation system. The plant selection includes native and adaptive plants material to response to water management strategy. Irrigation is noted for boulevard area as well as on site.

- the proposed development is better than a lot of industrial complexes in the City;
- the project is unique for a light industrial development;
- consider enhancing the project's sustainability strategy and integrating further landscaping into the proposed development;

The majority of the plant material is native and drought tolerant species in response to sustainability strategy. The plant locations have been studied to ensure the light requirements for particular plant species have been respected, providing a sustainable environment for plants.

The project's sustainability strategy is strong for an industrial development. It considers elements of building design and siting, energy usage, material choices, transportation sustainability, landscaping and natural considerations, and waste control and reduction measures. The sustainability strategy has incorporated applicable City of Richmond policies.

- support the Panel comment regarding the choice of materials to be used for the proposed public art to ensure long-term maintenance and durability; and
- proposed landscaping treatment in front of Building A is more successful than in front of Building B; investigate further landscaping opportunities in front of Building B, e.g. installing more tree canopies, considering that the number of proposed parking stalls is more than what is required.

Plant material has been carefully chosen to provide four season interest and softening the development, on both the streetscape and in nodes of planting at building B entrances. The area in front of Building B hosts parking and large truck bays, presenting a conflict with exorbitant landscaping.

In addition to the above comments from the Panel, the following written comments were submitted by Panel member Pam Andrews and were read into the record by Viren Kallianpur:

- the two multi-tenant light industrial buildings and parking look good.

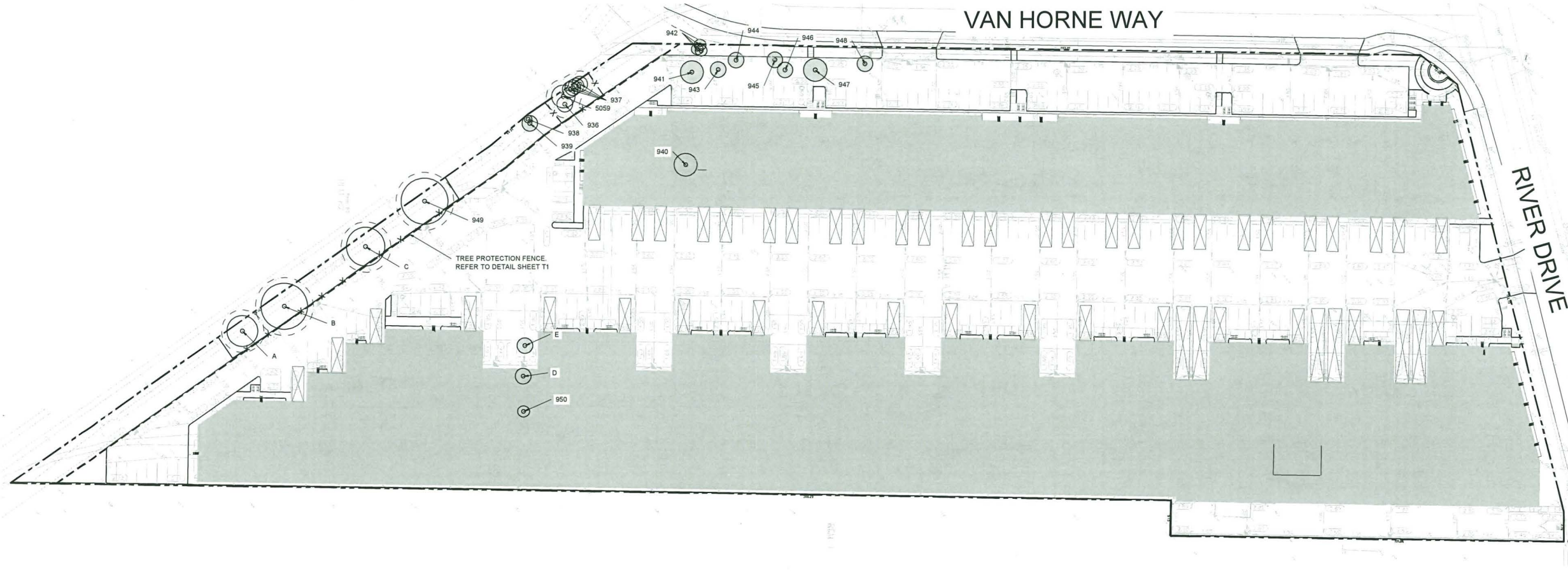
Panel Decision

It was moved and seconded

That DP 21-943565 be supported to move forward to the Development Permit Panel subject to the applicant giving consideration to the comments of the Advisory Design Panel.

CARRIED

- LEGEND
- EXISTING TREE PROPOSED FOR REMOVAL
 - EXISTING TREE TO BE RETAINED
 - TREE PROTECTION FENCING
 - TREE TAGING
 - TREE PROTECTION ZONE 1.5m OFFSET FROM CANOPY



NO.	DATE	REV.	DESCRIPTION
1	04/10/21	ISSUED FOR PERMIT	
2	27/09/21	ISSUED FOR REVIEW	
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Assessment Done Sept. 24, 2021
By Reed Moss I.S.A. #FN-8960A

TABLE 2. RETAINED TREE INVENTORY

*The tree health and structural condition ratings are as follows and are based on factors that could include one or a combination of:
Poor Condition - Severe canopy dieback, significant lean, decayed missing leader, significant disease or parasitic plant presence
Fair Condition - Moderate canopy dieback and/or lean, and defects, multiple stems, moderate foliage damage from stress, moderate damage from disease or parasite
Good Condition - Healthy vigorous growth, no or minor visible defects or damage

TAG/TREE	BOTANICAL NAME	COMMON NAME	DBH (cm)	CANOPY Hgt. (m)	TRE Hgt. (m)	CONDITION	COMMENTS	RECOMMENDATION
936	Thuja plicata	Western Red Cedar	35.25	2	3.5	Good		Retain and Protect
937	Thuja plicata	Western Red Cedar	30.25	2	3.5	Good	4 trees growing as a hedge	Retain and Protect
940	Populus trichocarpa	Black Cottonwood	47	6	7.5	Good		Retain and Protect
949	Thuja plicata	Western Red Cedar	33	3	4.5	Good		Retain and Protect
A	Populus trichocarpa	Black Cottonwood	54	6	5.5	Good		Retain and Protect
B	Populus trichocarpa	Black Cottonwood	75	6	7.5	Good		Retain and Protect
C	Populus trichocarpa	Black Cottonwood	65	5	6.5	Good		Retain and Protect

PROTECTING AND MANAGING TREES DURING CONSTRUCTION

- Upon receiving the necessary approvals and prior to the commencement of tree removals, all areas designated for preservation must be flagged in the field. All designated preservation areas must be left standing and undamaged during the removals work. All tree removals must be felled into the development area. The removals are to be completed outside of the migratory bird nesting season which is generally between mid-March to mid-April. A Qualified Environmental Professional must provide a report indicating the presence or absence of bird nests for any permit submissions for tree removals during this time of the year.
- Upon completion of the tree removals, all felled trees are to be removed from the site, and all brush chipped and removed, unless otherwise directed by the Project Manager. No lumber or brush from the clearing is to be stored on the site, all brush, roots and wood debris must be shredded into pieces.
- Tree Protection Fencing will be installed along retained tree areas adjacent to areas where construction will encroach into the adjacent tree edge. Refer to detail provided by Arborist and/or Municipality.
- Areas within the drip line of the trees designated for preservation are not to be used for any type of storage (e.g. storage of debris, construction material, surplus soils, and construction equipment). No trenching or tunneling for underground services shall be located within the tree protection zone or drip line of trees designated for preservation within or adjacent to construction zone.
- Trees shall not have any rigging cables or hardware of any sort attached or wrapped around them, nor shall any contaminants be dumped within the protective areas. Further, no contaminants shall be dumped or flushed where they may come into contact with the feeder roots of the trees.
- In the event that it is necessary to remove additional limbs or portions of trees, after construction has commenced, to accommodate construction, the Consulting Arborist or project administrator is to be informed and the removal is to be executed carefully and in full accordance with arboricultural techniques, by a certified and licensed Arborist.
- During excavation operations in which roots are affected, the Contractor is to prune all exposed roots cleanly. Pruned root ends shall point obliquely downwards. The exposed roots should not be allowed to dry out. The Contractor shall discuss watering of the roots with the Owner and Contract Administrator prior to pruning to ensure that so that optimum soil moisture is maintained during construction and backfilling operations. Backfilling must be completed with clean, uncontaminated native topsoil.

DISCLAIMER

The assessment of the trees presented within this report has been prepared using accepted arboricultural techniques. These include a visual examination of the above-ground parts of each tree for structural defects, scars, external indications of decay, evidence of insect presence, the general condition of the trees and the surrounding site, as well as the proximity of property and people. None of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

Notwithstanding the recommendations and conclusions resulting from the assessment, it must be realized that trees are living organisms and their health and vigour is constantly changing. They are not immune to changes in site conditions or seasonal variations in the weather.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy, no guarantees are offered or implied, that these trees or any part of them will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behavior of any single tree or group of trees in all circumstances. Inevitably a standing tree will always pose some risk. Most trees have the potential for failure provided with the necessary combinations of stresses and elements. This risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate the trees should be re-assessed periodically. The assessment presented here is valid at the time of inspection.

CONSTRUCTION MITIGATION AND MANAGEMENT

POTENTIAL CONSTRUCTION IMPACTS TO TREES

Trees are living organisms that react to changes in their environment. Trees can be damaged during construction without showing signs of damage until some years later. Many of the problems relate to the roots and result in slow death of the tree through its inability to absorb sufficient water and nutrients.

SOIL COMPACTION

The leading cause of construction damage to trees is compaction of the soil around the roots. Equipment entering into a preservation zone compresses the air pockets around the roots inhibiting the tree from absorbing nutrients and water. This damage ultimately reduces the health of the tree. Accordingly, during the removal stage, equipment use within the preservation zones should be restricted to ensure that the tree's roots are not disturbed, thereby assisting to maintain their continued health.

MECHANICAL DAMAGE

Equipment can also physically damage the trees through striking the trunk, limbs and/or roots. Felled trees can also cause damage during the tree removal stage of development. Some damage is unavoidable due to the density of the trees, however, through the use of proper equipment and best management practices the damage can be minimized. The contractor should be held responsible for all avoidable damage to the trees during all stages of development.

ROOT DAMAGE

Tree preservation is dependent not only on protecting the root zone from compaction and damage, but it is also critical to ensure that the structural roots within the root plate are not disturbed. Impacts to this area may result in a failure of the trees.

During construction, there are situations where work must be completed within a protection zone that will have an impact to the roots of the preserved trees. The most common root injury is cutting typically caused by trenching for utilities. The feeder roots of a tree are typically situated within the upper 30 cm of the soil profile. Any trenching or excavation within this zone will damage roots. Roots play a critical role in anchoring a tree. If major support roots are severed the tree is more susceptible to wind throw damage and could pose a hazard to adjacent structures and people.

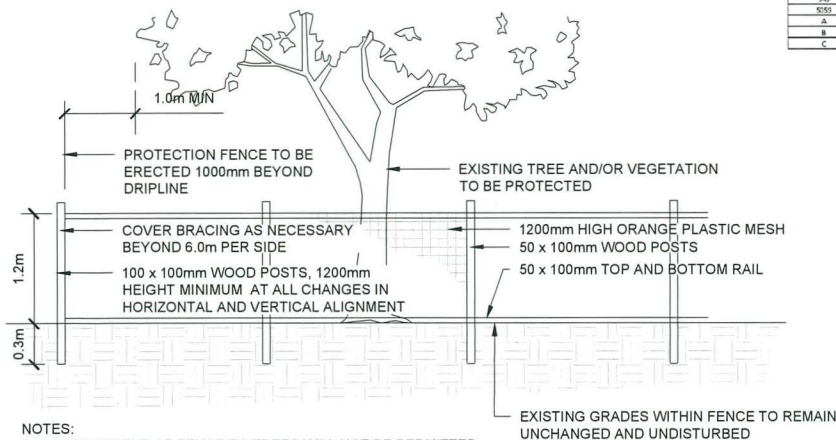
SMOTHERING ROOTS WITHIN THE TREE PROTECTION ZONE

Tree roots require space and air to absorb water and minerals. When grades are increased the feeder roots are no longer able to effectively function. Grade changes of only ten centimeters can kill the fine roots of some trees.

SUMMARY: RICHMOND
21 TREES ASSESSED
21 ON SITE TREES

14 ON SITE TREES PROPOSED FOR REMOVAL

7 ON SITE TREES PROPOSED FOR RETENTION



NOTES:

- ATTACHMENT OF FENCE TO TREES WILL NOT BE PERMITTED.
- ANY EXPOSED ROOTS ARE TO BE HAND PRUNED USING PROPER ARBORICULTURAL PRACTICES.
- UNDER NO CIRCUMSTANCES SHALL ANY CONSTRUCTION MATERIALS, EQUIPMENT OR VEHICLES BE PLACED WITHIN THE TREE PROTECTION ZONE.
- ALL TREE PROTECTION TO BE ERECTED PRIOR TO ANY CONSTRUCTION ACTIVITY AND IS TO REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS BEEN COMPLETED. OBTAIN WRITTEN APPROVAL FROM CONTRACT ADMINISTRATOR PRIOR TO REMOVAL OF FENCING.



SIGNAGE TO BE ATTACHED TO AT LEAST 2 SIDES OF FENCING. SIGNAGE TO BE MINIMUM 11"X14"



PROJECT TITLE

CEDAR COAST VAN HORNE

PROJECT ADDRESS

9800 VAN HORNE WAY,
RICHMOND, BC

DRAWING TITLE

OVERALL TREE MANAGEMENT PLAN

SCALE	NTS
DRAWN	RM
CHECKED	JT
PROJECTING	210569-L

DRAWING NO.

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Sustainability Strategy

As one of the largest industrial builders in the Lower Mainland, Orion Construction and our team of consultants are familiar with the City of Richmond's goal of sustainable development. We strive to incorporate as many sustainable initiatives in our projects as possible within the limitations of applicability and feasibility. Orion Construction has created our own approach to sustainability which is consistent with and complements the City's own goals. As project designs are finalized in the coming months, the project team will pay close attention to City of Richmond feedback and looks forward to working with staff on creating an exemplary industrial development.

1. Building design features include:

- The buildings' simple massing design and unit configurations not only allow for efficient commercial uses but also enhances thermal performance and building system performance*
- Limited window-to-wall ratio (WMR) to reduce solar heat gain*
- Enhanced thermal performance of the building envelope by utilizing variation in colour, materials, and pattern in lieu of complex massing and architectural features*
- Construct exterior envelope walls as fully insulated sandwich panel design to increase energy efficiency. Anticipated r-value of 11.69
- Incorporate extensive Low-E glazing in office areas to maximise building efficiency
- Maximise solar reflectivity on walls through the use of a high albedo paint, accounting for up to 70 percent of vertical building surfaces on a typical project
- Selecting materials that have long-life and low maintenance properties to extend the lifespan of the building and reduce future obsolescence of building elements
- The roofing system will utilise a 12lb per square foot ballast. This assembly has been found to provide a solution exceeding the performance of a high-SRI roof (such as TPO) for solar reflectance

2. Energy sustainability features include:

- Both buildings will be designed as solar ready to allow for future installations by tenants. This includes ensuring the building structure can withstand anticipated panel array loads
- Use of water efficient plumbing fixtures*
- Demonstrate through an energy model a minimum 10 percent saving on energy cost budget from ASHRAE 90.1 baseline
- Design all outdoor lighting as high efficiency LED to maximise building efficiency
- Base building electrical will support tenant installation of high efficiency LED interior lighting and mechanical systems
- Building commissioning activities will ensure base building mechanical and electrical systems are functioning efficiently

3. Transport sustainability features:

- Efficient parking and bay design reduces the amount of vehicle idling and driving on site
- Provide 100% of units with an Electric Vehicle rough-in. This translates to approximately 88 stalls being EV ready, which is nearly 80% of the required parking spaces. This exceeds the City's requirements by 8:1 and future proofs the site against growing EV use. The rough-ins may support the charging of light-duty vehicles
- Meet or exceed bicycle parking requirements and provide bike parking throughout. The project creates visible connections to the surrounding cycling network to promote commuting and visits by bicycle
- Include exterior electrical outlets near select bike parking locations to promote charging of e-bikes (locations TBD as building designs are finalized)

- The development is located within walking distance to bus stops and the Bridgeport SkyTrain and contains a pedestrian-only entrance beautified by public art, thus promoting commuting and visits by transit and by foot

4. Landscaping and natural considerations include:

- Design for reduced water usage through selecting drought resistant species and minimizing use of sod*
- Select endemic flora and ensure alien or invasive species are not installed
- Maximised canopy cover in car parking areas through selected tree species
- Significant amenity areas throughout the project, promoting activation of spaces and eliminating potential dead-zones
- Limiting the removal of trees and planting new trees will improve Richmond's urban tree canopy

5. Waste control and reduction features include:

- Use local and recycled building materials, including concrete and steel for foundations, slabs and exterior walls*
- Provide facilities to encourage three stream waste separation and recycling*
- Garbage and waste materials will be stored in weatherproof and animal resistant containers. These containers will be visually screened from adjacent sites and current public thoroughfares*
- Create a waste disposal and recycling services plan to guide demolition operations. This plan will promote diversion of waste from landfills and include measures for recycling and reuse of demolished materials
- When necessary, dispose of any contaminated soils in a fully compliant and environmentally respectful manner

*** Policies from the City's DP Guidelines for Green Buildings and Sustainable Infrastructure**



Development Permit Considerations

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

Address: 9800 Van Horne Way

File No.: DP 21-943565

Prior to approval of the Development Permit, the developer is required to complete the following:

1. Receipt of a Letter of Credit for landscaping in the amount of \$126,108.30 plus taxes, inclusive of a 10% contingency cost (as per the landscape cost estimate provided by KD Planning & Design Ltd., on June 14, 2022).
2. Submission of a Contract entered into between the applicant and a Certified Arborist for supervision of any on-site works conducted within the tree protection zone of the trees to be retained. The Contract should include the scope of work to be undertaken, including: the proposed number of site monitoring inspections, and a provision for the Arborist to submit a post-construction assessment report to the City for review.
3. Submission of a Tree Survival Security to the City in the amount of \$70,000.00 for seven (7) trees to be retained (Trees Tag #936, 937, 949, 5059, A, B, C). A legal agreement is to accompany the Tree Survival Security to set the terms for its use and release.
4. 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.
5. City acceptance of the developer's offer to make a voluntary contribution towards the City's Public Art Fund, the terms of which shall include the following:
 - a) The value of the developer's voluntary public art contribution shall be based on the Council-approved rates for residential and non-residential uses and the maximum buildable floor area permitted under the subject site's proposed zoning, excluding floor area associated with affordable housing and market rental, as indicated in the table below.

Building Type	Rate	Proposed Floor Area (after exemptions)	Minimum Voluntary Cash Contribution
Industrial	\$0.29 (2023 rate)	243,783 SF	\$70,697.07

- b) In the event that the contribution is not provided within one year of the application receiving endorsement from the Development Permit Panel (i.e. the Development Permit Panel meeting date), the contribution rate (as indicated in the table in item a) above) shall be increased annually thereafter based on the Statistics Canada Consumer Price Index (All Items) – Vancouver yearly quarter-to-quarter change, where the change is positive.
- c) Prior to Development Permit approval by Council, the developer shall submit a Public Art Plan, for the subject site, to the satisfaction of the Director, Arts Culture and Heritage Services. The Public Art Plan shall be:
 - (1) Prepared by an appropriate professional.
 - (2) Based on a contribution value of at least the total amount indicated in the table in item a) above.
 - (3) Consistent with applicable City policies and objectives (for example, the Richmond Public Art Program, City Centre Public Art Plan, Capstan 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.
 - (4) Presented for review(s) by the Public Art Advisory Committee and endorsement by Council, as required by the Director, Arts, Culture, and Heritage Services.

NOTE: For contributions with a cumulative budget over \$250,000, the Public Art Plan is presented for Council approval prior to Building Permit issuance.

Initial: _____

- (5) Implemented by the developer, as required by legal agreement(s) registered on Title to prior to Development Permit approval.
- d) Prior to Development Permit approval, the developer shall enter into a legal agreement for the provision of on-site Public Art, the terms of which shall include:
- (1) "No building" shall be permitted on the subject site, restricting Building Permit issuance for any building on the lot, in whole or in part (excluding parking), until the developer, to the City's satisfaction:
 - (a) 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 subject site 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 Development Permit approval).
 - (b) Submits a Letter of Credit or cash security or cash contribution (as determined in the sole discretion of the City) to secure the developer's implementation of the Public Art Plan, the collective value of which shall be at least \$70,697.07, including \$3,534.9 as a cash contribution equal to 5% of the total amount indicated in the table in item a) above (\$70,697.07) and a Public Art security Letter of Credit in the amount of (\$70,697.07) being the total amount identified in item a) above.
 - (2) "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 subject site until:
 - (a) The developer, at the developer'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 site, if expressly permitted by the City in writing and pre-approved by Council, or within a statutory right-of-way on the subject site (which right-of-way shall be to the satisfaction of the City and secured by one or more legal agreements for rights of public passage, public art, and related purposes including maintenance, in accordance with the City-approved Public Art Plan and, as applicable, Detailed Public Art Plan).
 - (b) The developer, at the developer's sole cost and expense and within 30 days after the date on which the applicable public art is installed in accordance with the City-approved Public Art Plan, 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 corporation if on the subject site (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 developer upon acceptance of the artwork based on an agreement solely between the developer and the artist and that these interests will in turn be transferred to the City, subject to approval by Council to accept the transfer of ownership of the artwork.
 - (c) The developer, at the developer's sole cost and expense, has submitted a final report to the City, to be submitted promptly after completion of the installation of the public art in accordance with the City-approved Public Art Plan, which report, to the satisfaction of the Director of Development and Director, Arts, Culture, and Heritage Services, includes:
 - (i) 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;
 - (ii) A statutory declaration, satisfactory to the City Solicitor, confirming that the developer's financial obligation(s) to the artist(s) have been fully satisfied;
 - (iii) The maintenance plan for the public art prepared by the artist(s);
 - (iv) 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 of public art on-site, the developer 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 c) through e) above will not apply.

Initial: _____

6. Registration of an Aircraft Noise covenant on Title (Areas 1A and 2).
7. Discharge previous Flood Covenant BE227221 from title.
8. Registration of a Flood Indemnity Covenant on Title (2.9 m GSC).
9. Registration of a legal agreement to secure the building energy performance target achieving a minimum 10% saving on energy cost budget from ASHRAE 90.1 baseline standards and requiring outdoor lighting installation of high efficiency LED to aid building energy efficiency. The legal agreement would also include requirements that both buildings would be designed to allow for the installation of future solar photovoltaic roof mounted panels by individual tenants in the future.
10. Registration of an Electric Vehicle (EV) Charging Infrastructure covenant on title, securing the owner's commitment to voluntarily provide, install, and maintain five (5) EV charging equipment (including charging stations) for a total of ten (10) vehicles to be used by tenants and others, on-site. More specifically, the five (5) required charging stations must be designed to the specifications of Level 2 EV standards and ability to provide charging to ten (10) vehicles simultaneously. The covenant shall also require that, in addition to the ten (10) stalls noted above, a minimum of 88 parking stalls (being a min. of 1 stall per unit) shall feature conduits and pre-ducting in order to support future EV charging installation.
11. Confirmation of compliance and approval from the Ministry of Environment with regard to site investigation for any contaminants due to previous activities on the property prior to the issuance of the Development Permit.
12. Registration of a legal agreement on Title identifying that the property is located in an industrial area and that land use of the property must be consistent with the Zoning Bylaw, and requiring that the owner provide an acknowledgement of the same in all purchase and sale agreements.
13. Granting a Statutory Right-of-Way of 6.94 m width along the south portion of the site in order to secure the area for the future road connecting Van Horne Way to No. 4 Road.

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

1. Enter into a Servicing Agreement for the design and construction of site servicing and off-site works and frontage improvements. A Letter of Credit or cash security for the value of the Service Agreement works, as determined by the City, will be required as part of entering into the Servicing Agreement. Works include, but may not be limited to:

Water Works:

- a) Using the OCP Model, there is 756.0 L/s of water available at a 20 psi residual at the River Dr frontage. Based on your proposed development, your site requires a minimum fire flow of 250 L/s.
- b) The developer is required to:
 - i) Subject to funding approval, the City will pay for the replacement of the existing water main located along the Van Horne frontage. The existing water main is to be replaced by the developer with approximately 250m of new water main located on the roadway.
- c) At Developer's cost, the Developer is required to:
 - i) Install a new 100mm water service connection extending from the newly proposed new water main replacement, complete with water meter and water meter box as per standard city specifications.
 - ii) 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.
 - iii) Provide a right-of-way for the water meter. Minimum right-of-way dimensions to be the size of the meter box (from the City of Richmond supplementary specifications) + any appurtenances (for example, the bypass on W2o-SD) + 0.5 m on all sides. Exact right-of-way dimensions to be finalized during the building permit process (or via the servicing agreement process, if one is required).

Initial: _____

d) At Developer's cost, the City will:

- i) Complete all tie-ins for the proposed works to existing City infrastructure.

Storm Sewer Works:

a) At Developer's cost, the Developer is required to:

- i) Decommission the existing storm sewer main along the Van Horne Way frontage and replace it with a new 600mm minimum storm sewer main or OCP size as per the City's specifications. The new storm sewer shall be installed within the roadway.
- ii) Install a new 150mm storm service connection extending from the newly proposed storm main replacement, complete with IC.

b) At Developer's cost, the City will:

- i) Complete all tie-ins for the proposed works to existing City infrastructure.

Sanitary Sewer Works:

a) The Developer is required to:

- i) Subject to funding approval, the City will pay for the replacement of the existing sanitary main located along the Van Horne frontage. Sanitary sewer main is to be replaced by the developer with approximately 220m of new sanitary sewer main located on the roadway. The new sanitary main diameter will be confirmed through the servicing agreement design. The proposed sanitary main replacement is required to extend from the south west face of the existing manhole located at the North West corner of the lot until where it will tie into a manhole located along the south PL of 9800 Van Horne Way. The new sanitary main will require a junction and the installation of an additional manhole to accommodate the realignment of the main unto the roadway.
- ii) Subject to funding approval, the City will pay for the installation of a new manhole located along the south PL of 9800 Van Horne Way where the newly proposed sanitary main will tie into the existing sanitary main.

b) At Developer's cost, the Developer is required to:

- i) Not start onsite excavation or foundation construction until completion of rear-yard sanitary works by City crews.
- ii) Install a new 150mm sanitary service connection extending from the newly proposed sanitary main replacement, complete with IC

c) At Developer's cost, the City will:

- i) Complete all tie-ins for the proposed works to existing City infrastructure.

Street Lighting:

a) At Developer's cost, the Developer is required to:

- i) Review street lighting levels along all road and lane frontages, and upgrade as required.

Frontage Improvements and General Items:

a) At Developer's cost, the Developer is required to:

- i) Complete other frontage improvements as per Transportation requirements.

Initial: _____

- ii) Underground utility upgrade works that are required beyond the development frontages (subject to the model run results) shall be eligible for a latecomer agreement.
- iii) Van Horne frontage: Widen existing grass boulevard (varying width +/- 1.0m) to 1.5 m and provide street trees. Existing 3.0 m wide multi-use pathway will need to be shifted into the site to maintain the existing width.
- iv) River Drive frontage: install a new curb and gutter along the existing road edge and enhance the existing boulevard to include trees/grass, while maintaining existing multi-use pathway.
- v) Coordinate with BC Hydro, Telus and other private communication service providers:
 - (1) To pre-duct for future hydro, telephone and cable utilities along all road frontages.
 - (2) Before relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
 - (3) To underground overhead service lines.
- vi) Locate/relocate all above ground utility cabinets and kiosks required to service the proposed development and proposed undergrounding works, 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 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
- vii) 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.
- viii) If required, submit a proposed strategy at the building permit stage for managing excavation de-watering. Note that the City's preference is to manage groundwater onsite or by removing and disposing at an appropriate facility. If this is not feasible due to volume of de-watering, the Developer will be required to apply to Metro Vancouver for a permit to discharge into the sanitary sewer system. If the sanitary sewer does not have adequate capacity to receive the volume of groundwater, the Developer will be required to enter into a de-watering agreement with the City wherein the developer will be required to treat the groundwater before discharging it to the City's storm sewer system.

Initial: _____

- ix) Provide a video inspection report of the existing utilities along the road frontages prior to start of site preparation works or within the first servicing agreement submission, whichever comes first. A follow-up video inspection, complete with a civil engineer's signed and sealed recommendation letter, is required after site preparation works are complete (i.e. pre-load removal, completion of dewatering, etc.) to assess the condition of the existing utilities and provide recommendations to retain, replace, or repair. Any utilities damaged by the pre-load, de-watering, or other ground preparation shall be replaced or repaired at the Developer's cost.
 - x) Conduct pre- and post-preload elevation surveys of all surrounding roads, utilities, and structures. Any damage, nuisance, or other impact to be repaired at the developer's cost. The post-preload elevation survey shall be incorporated within the servicing agreement design.
 - xi) 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.
 - i) Not encroach into City rights-of-ways with any proposed trees, retaining walls, or other non-removable structures. Retaining walls proposed to encroach into rights-of-ways must be reviewed by the City's Engineering Department.
 - ii) Coordinate the servicing agreement design for this development with the servicing agreement(s) for the adjacent development(s), both existing and in-stream. The developer's civil engineer shall submit a signed and sealed letter with each servicing agreement submission confirming that they have coordinated with civil engineer(s) of the adjacent project(s) and that the servicing agreement designs are consistent. The City will not accept the 1st submission if it is not coordinated with the adjacent developments. The coordination letter should cover, but not be limited to, the following:
 - (a) Corridors for City utilities (existing and proposed water, storm sewer, sanitary and DEU) and private utilities.
 - (b) Pipe sizes, material and slopes.
 - (c) Location of manholes and fire hydrants.
 - (d) Road grades, high points and low points.
 - (e) Alignment of ultimate and interim curbs.
 - (f) Proposed street lights design.
 - iii) 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.
2. At the Owner's cost via City Work Order*, design and construct/install utility connections and frontage improvements, works include, but not be limited to water works and storm sewer works.
 3. The owner is required to review street lighting levels along all road frontages and upgrade as required.
 4. 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.

Initial: _____

5. Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.
6. Additional width along Van Horne Way for frontage improvement to be secured through an SRW.

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.

[Signed copy on file]

Signed

Date



City of Richmond

Development Permit

No. DP 21-943565

To the Holder: 1321791 BC Ltd.
Property Address: 9800 Van Horne Way
Address: Orion Construction
Unit 104 - 3950 191 Street
Surrey, BC V6C 0A6

1. This Development 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 Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. Subject to Section 692 of the Local Government Act, R.S.B.C; buildings, and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 -29 attached hereto.
4. Sanitary systems, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
5. As a condition of the issuance of this Permit, the City is holding the security in the amount of \$126,108.30 plus applicable taxes 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. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
6. 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.
7. 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.

This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO.
DAY OF , .

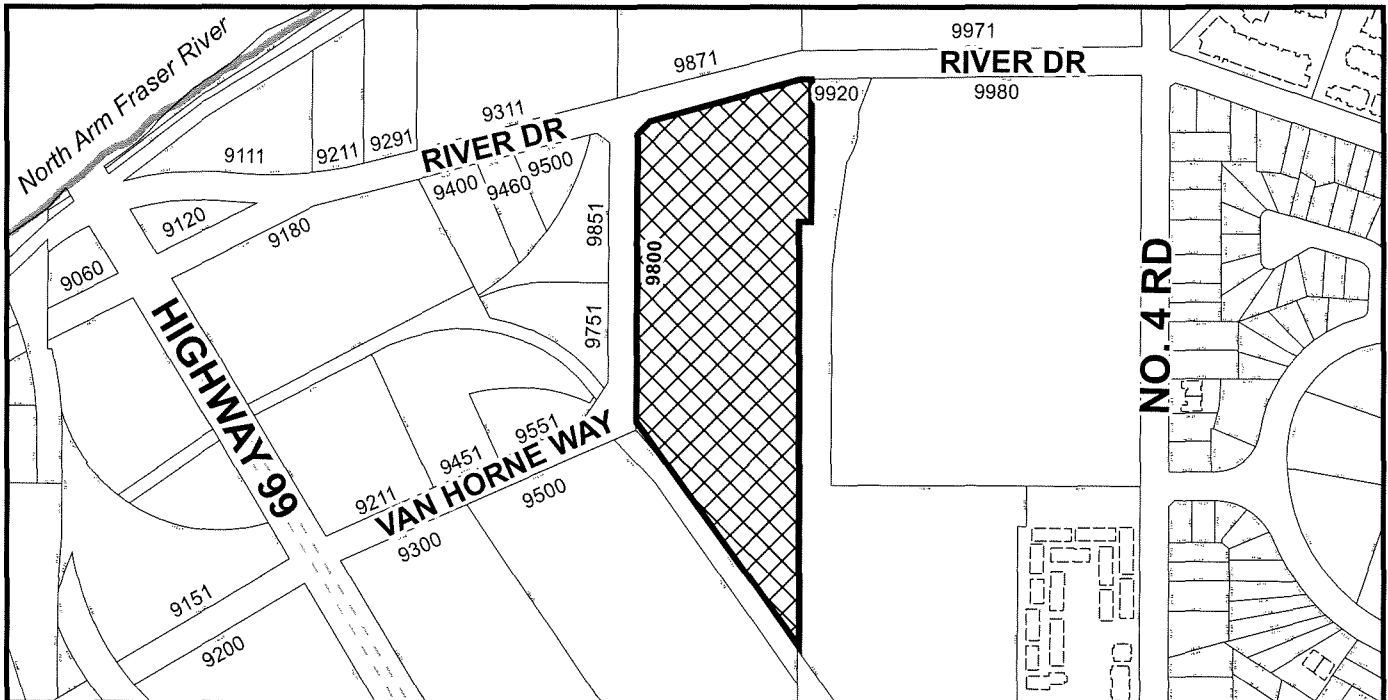
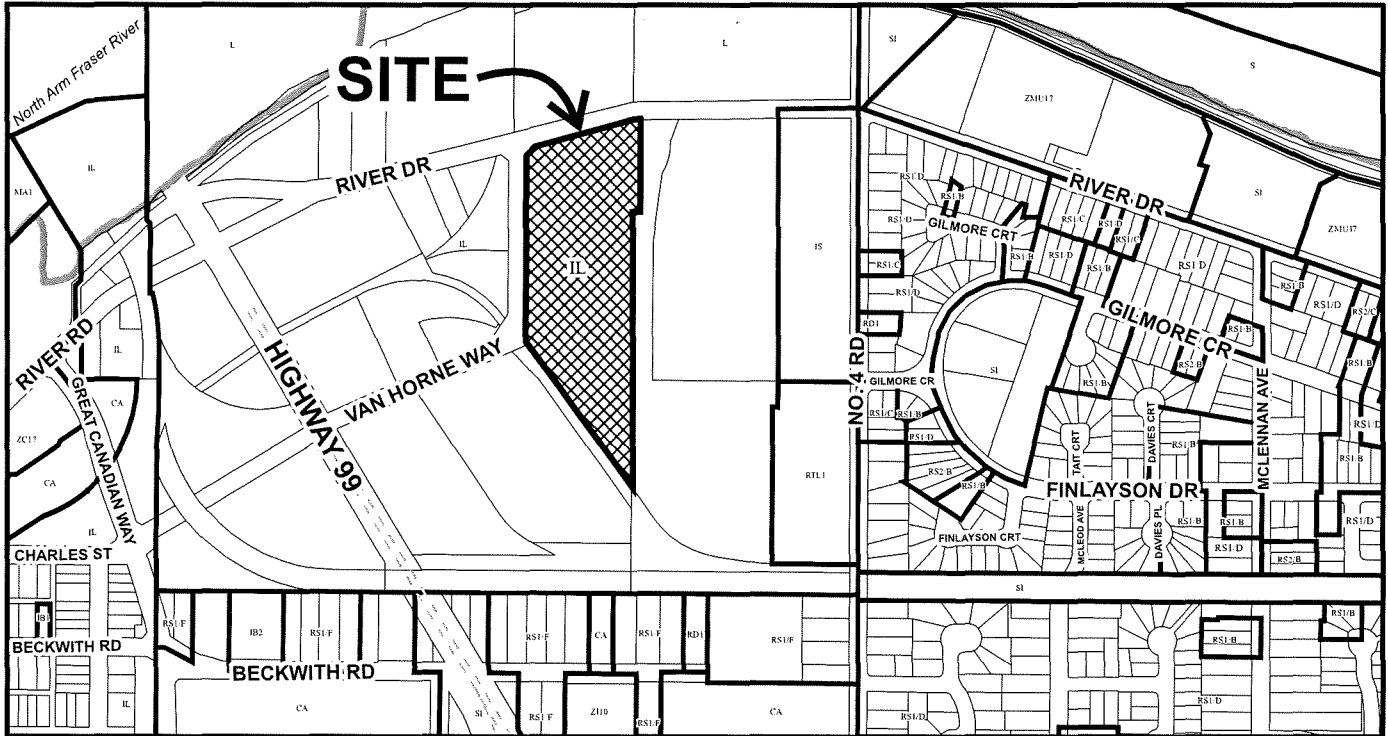
ISSUED BY THE COUNCIL THE

DELIVERED THIS DAY OF , .

MAYOR



City of Richmond



DP 21-943565
SCHEDULE "A"

Original Date: 11/09/21

Revision Date: 04/06/21

Note: Dimensions are in METRES

PROPOSED INDUSTRIAL BUILDINGS FOR:

CEDAR COAST
VAN HORNE

9800 VAN HORNE WAY, RICHMOND, BC

LOT A SEC 22 BLK 5N R6 6W PL LMP1545 LOT A, BLOCK 5N, PLAN LMP1545, SECTION 22, RANGE 6W, NEW WESTMINSTER LAND DISTRICT, EXCEPT PLAN BCP220 14



1 BUILDING A FROM NORTH-WEST CORNER
SCALE: N.T.S.



2 BUILDING B FROM RIVER DRIVE
SCALE: N.T.S.



3 BUILDING A ENTRANCE
SCALE: N.T.S.



4 BUILDING B TYPICAL UNIT ENTRANCE AND LOADING
SCALE: N.T.S.

CONSULTANTS LIST:

ARCHITECT CHIP BARRETT ARCHITECT #40-15055 20 AVE, SURREY BC, V4A 4K9 TEL: 604-536-1212 CONTACT: CHIP BARRETT	DEVELOPER ORION CONSTRUCTION 104 - 3550 191 STREET, SURREY BC, V3Z 0Y6 TEL: 604-362-2994 CONTACT: BRADEN SMITH	CIVIL ENGINEER CENTRAS ENGINEERING LTD. #216-3630 CROYDON DRIVE, SURREY BC V3S 6T3 TEL: 604-702-6921 CONTACT: STEVE O'CONNELL	GEOTECHNICAL ENGINEER GEOPACIFIC CONSULTANTS LTD. 1774 PL 75TH AVENUE VANCOUVER, BC, V6P 6P2 TEL: 604-853-0831 FAX: 604-853-1550 CONTACT: MATT AKENHEAD	LANDSCAPE ARCHITECT KD PLANNING & DESIGN LTD #400-34071 GLADYS AVENUE ABBOTSFORD, BC V2S 2E8 TEL: 604-853-0831 FAX: 604-853-1550 CONTACT: JESSICA THIESSEN	ARBORIST KD PLANNING & DESIGN LTD #400-34071 GLADYS AVENUE ABBOTSFORD, BC V2S 2E8 TEL: 604-853-0831 FAX: 604-853-1550 CONTACT: ALEX GROENEVOLD
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ARCHITECTURAL DRAWING LIST

COVER SHEET	A-0.0
RENDERINGS	A-0.1
CONTEXT PLAN & PHOTOS	A-0.2
STREETSCAPE ELEVATIONS	A-0.3
TOPOGRAPHY PLAN & FIRE RESPONSE PLAN	A-0.4
WASTE MANAGEMENT PLAN & DETAILS	A-0.5
SHADOW STUDY	A-0.6
ACCESSIBILITY & AMENITY AREA PLAN	A-0.7
OVERALL SITE PLAN	A-1.0
ENLARGED SOUTHERN SITE PLAN	A-1.1
ENLARGED NORTHERN SITE PLAN	A-1.2
ENLARGED SITE PLANS & SITE SECTIONS	A-1.3
SITE DETAILS	A-1.4
BUILDING A FLOOR PLANS	A-2.0
BUILDING A TYP. UNIT PLANS	A-2.1
BUILDING A ELEVATIONS	A-4.0
BUILDING B FLOOR PLANS	A-2.0
BUILDING B TYP. OFFICE PLANS	A-2.1
BUILDING B ELEVATIONS	A-4.0
BUILDING B ENLARGED ELEVATIONS	A-4.1



ARCHITECTURE PANEL INC.
ARCHITECTURE, LANDSCAPE ARCHITECTURE, URBAN DESIGN
250 - 1475 FORSTER STREET, WHITE ROCK, BC, V4B 0C4
604 535 1800 | RICH@ARCHITECTUREPANEL.COM

IN ASSOCIATION WITH

D.FORCE DESIGN INC.

2225A ALLIANCE STREET, ABBOTSFORD, B.C., V2S 2J9
TEL: (604) 807-0555, EMAIL: RICH@DFFORCE.COM

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RELEVANT TO THE PROJECT. ANY CHANGES
WITHOUT THE ARCHITECT'S WRITTEN CONSENT SHALL BE
THE CONTRACTOR'S SOLE RESPONSIBILITY. DO NOT
SCALE DRAWINGS OR REDUCE SIZE.

CEDAR COAST

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4	MAR.13.23	UPDATED PER ACP COMMENT
3	DEC.15.22	UPDATED PER CITY COMMENT
2	JUL.10.22	RE-ISSUED FOR DIP
1	OCT.04.21	ISSUED FOR DIP

NO. DATE DESCRIPTION

PROJECT MANAGERS / CONTRACTORS:

ORION
CONSTRUCTION

ORION CONSTRUCTION
104 - 3550 191 STREET,
SURREY BC, V3Z 0Y6
PHONE: (604) 362-2994

PROJECT

CEDAR COAST
VAN HORNE

ADDRESS: 9800 VAN HORNE WAY, RICHMOND, BC

DRAWING

COVER SHEET

SEAL	JOB NO. 2-428	DRAWN VCF
	CHECKED RLO	
	PLOT DATE MAR.13.23	

PROJECT - DRAWING NUMBER
A-0.0

REV.
4



1 NORTHWEST VIEW OF SITE FROM SKYTRAIN
SCALE: N.T.S.



2 BIRD'S EYE VIEW OF SOUTHWEST OF SITE
SCALE: N.T.S.



3 BIRD'S EYE VIEW OF SOUTH OF SITE
SCALE: N.T.S.



4 WEST VIEW OF SITE FROM SKYTRAIN
SCALE: N.T.S.

ARCHITECTURE PANEL INC.
ARCHITECTURE, LANDSCAPE ARCHITECTURE, INTERIOR DESIGN
206-1403 FOSTER STREET, WHITE ROCK, BC V4B 0G4
604 365 3609 | ARCH@ARCHITECTUREPANEL.COM

IN ASSOCIATION WITH

D.FORCE

DESIGN INC.

2625 ALLIANCE STREET, ABOTSFORD, B.C. V2S 3J7
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4	MAR.13.23	UPDATED PER ADP COMMENT
3	DEC.15.22	UPDATED PER CITY COMMENT
2	JUL.18.22	RE-ISSUED FOR DP
1	OCT.04.21	ISSUED FOR DP

NO.	DATE	DESCRIPTION
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PROJECT MANAGERS / CONTRACTORS

ORION CONSTRUCTION
ORION CONSTRUCTION
104-3950 191 STREET,
SURREY BC, V3Z 0Y6
PHONE: (604) 362-2994

PROJECT

CEDAR COAST
VAN HORNE

ADDRESS: 9400 VAN HORNE WAY, RICHMOND, BC

DRAWING

RENDERINGS

SEAL	JOB NO. 21-029	DRAWN VCF
	DESIGNED	
	CHECKED	R.D.
	PLAT DATE	MAR.13.23

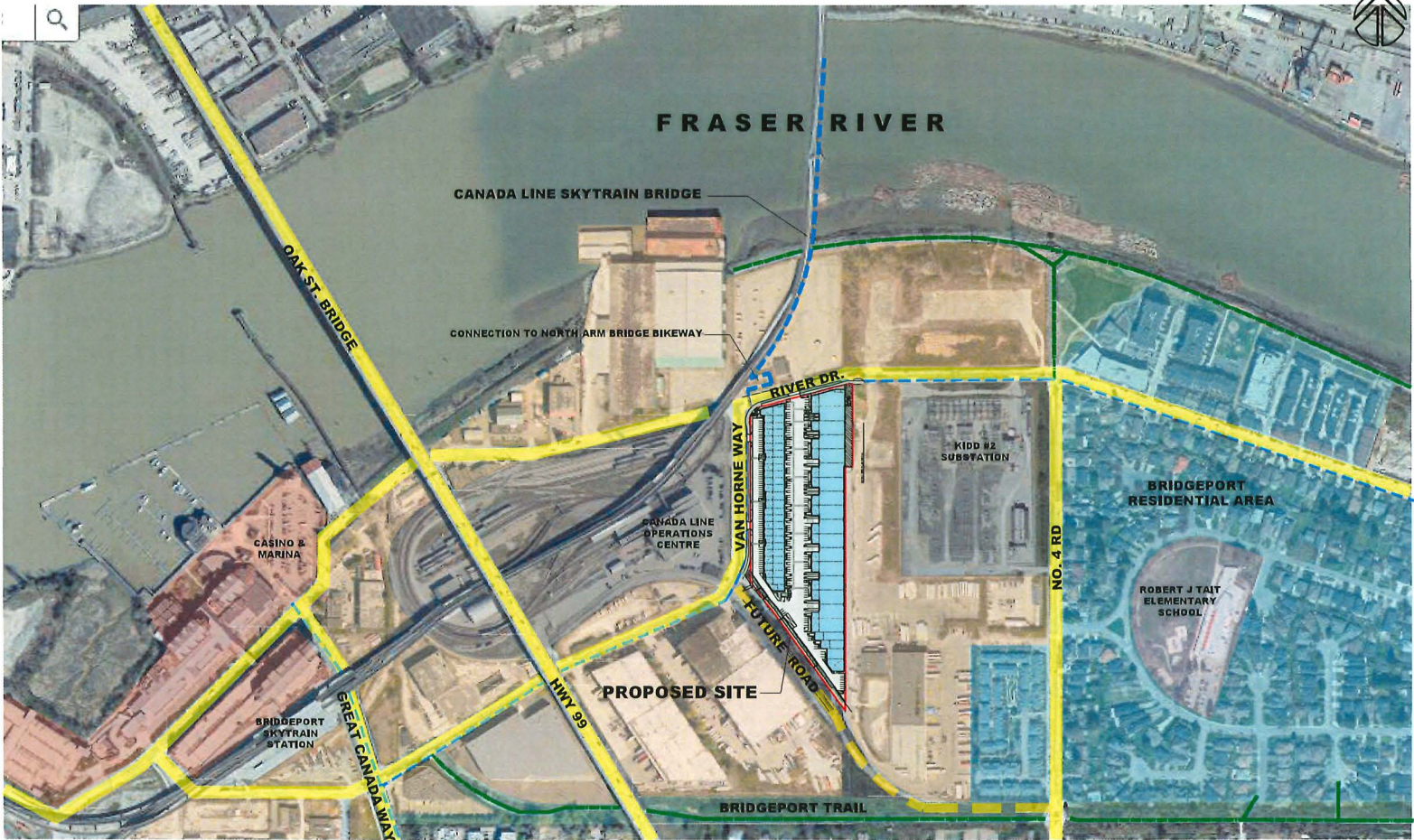
PROJECT - DRAWING NUMBER	REV.
A-0.1	4

CONTEXT PLAN LEGEND

- RESIDENTIAL USE
INDUSTRIAL USE
COMMERCIAL USE
CITY INFRASTRUCTURE
SCHOOL
GREEN SPACE
WALKING TRAIL
BIKING PATH
EXISTING ROAD NETWORK
FUTURE ROAD



2 VIEW OF SITE FROM OAK STREET BRIDGE
SCALE: N.T.S.



1 CONTEXT PLAN
SCALE: N.T.S.



4 NORTH-WEST CORNER OF SITE FROM STREET
SCALE: N.T.S.



3 SOUTH-WEST CORNER OF SITE FROM STREET
SCALE: N.T.S.



6 NORTH-EAST CORNER OF SITE FROM STREET
SCALE: N.T.S.



5 INTERSECTION OF VAN HORNE WAY & RIVER DRIVE
CONNECTION TO NORTH ARM BRIDGE BIKEWAY
SCALE: N.T.S.



ARCHITECTURE PANEL INC.
ARCHITECTURE LANDSCAPE ARCHITECTURE URBAN DESIGN
300-1040 FORT STREET SUITE 1000, VANCOUVER, BC V6C 2E8
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IN ASSOCIATION WITH
D.FORCE DESIGN INC.

2025A ALLIANCE STREET, ABINGFORD, B.C. V2S 2J9
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ORION
CONSTRUCTION
ORION CONSTRUCTION
104 - 3550 191 STREET,
SURREY BC, V3Z 0Y6
PHONE: (604) 362-2994

PROJECT
**CEDAR COAST
VAN HORNE**

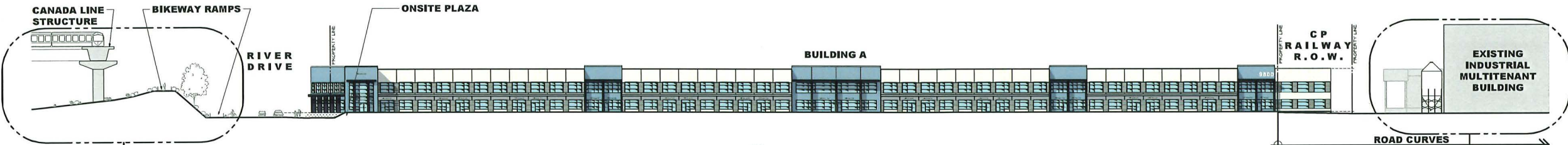
ADDRESS: 8800 VAN HORNE WAY, RICHMOND, BC

DRAWING
**CONTEXT
PLAN & PHOTOS**

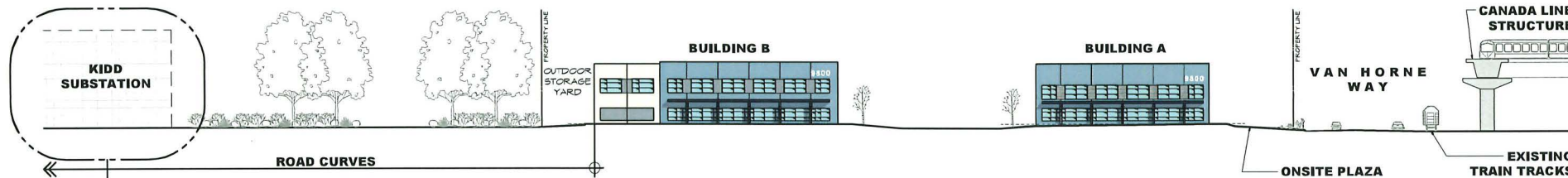
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CHECKED	DESIGNED	
	CHECKED	R.D.
	PLOT DATE	MAR, 13, 23

PROJECT - DRAWING NUMBER
A-0.2

REV.
4

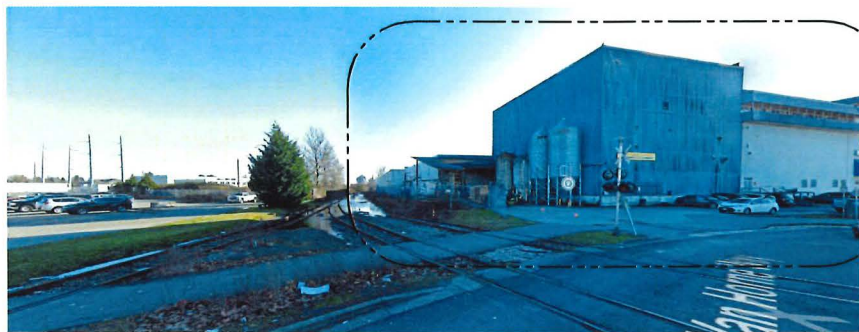


1 STREETScape PARALLEL TO VAN HORNE WAY
A-0.2a SCALE: N.T.S.



2 STREETScape PARALLEL TO RIVER DRIVE
A-0.2a SCALE: N.T.S.

NOTE: ALL OFFSITE STRUCTURES ARE NOTIONAL ONLY. REFER TO PHOTOGRAPHS FOR ADDITIONAL DETAILS



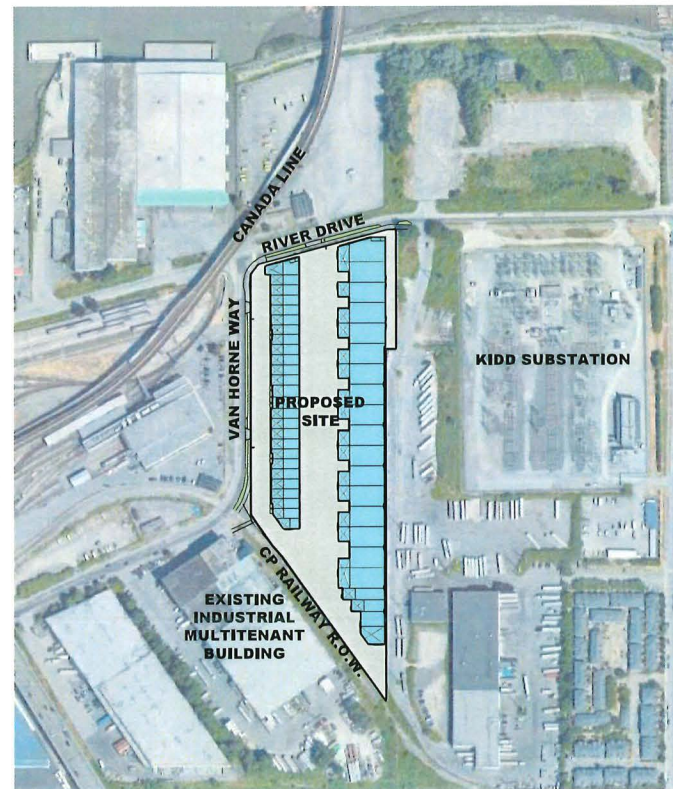
3 VIEW OF NEIGHBOUR TO THE SOUTH
A-0.2a SCALE: N.T.S.



4 VIEW OF NEIGHBOUR TO THE EAST
A-0.2a SCALE: N.T.S.



5 VIEW OF INTERSECTION AT RIVER DR & VAN HORNE WAY
A-0.2a SCALE: N.T.S.



6 CONTEXT PLAN
A-0.2a SCALE: N.T.S.

ARCHITECTURE PANEL INC.
ARCHITECTURE, LANDSCAPE ARCHITECTURE, URBAN DESIGN
205 - 1453 FORSTER STREET, WHITE ROCK, BC, V4B 1C4
TEL: (604) 407-7055 FAX: (604) 407-7056
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NO. DATE DESCRIPTION
PROJECT MANAGERS / CONTRACTORS

ORION CONSTRUCTION
ORION CONSTRUCTION
104 - 3950 191 STREET,
SURREY BC, V4Z 0Y6
PHONE: (604) 362-2994

PROJECT

**CEDAR COAST
VAN HORNE**

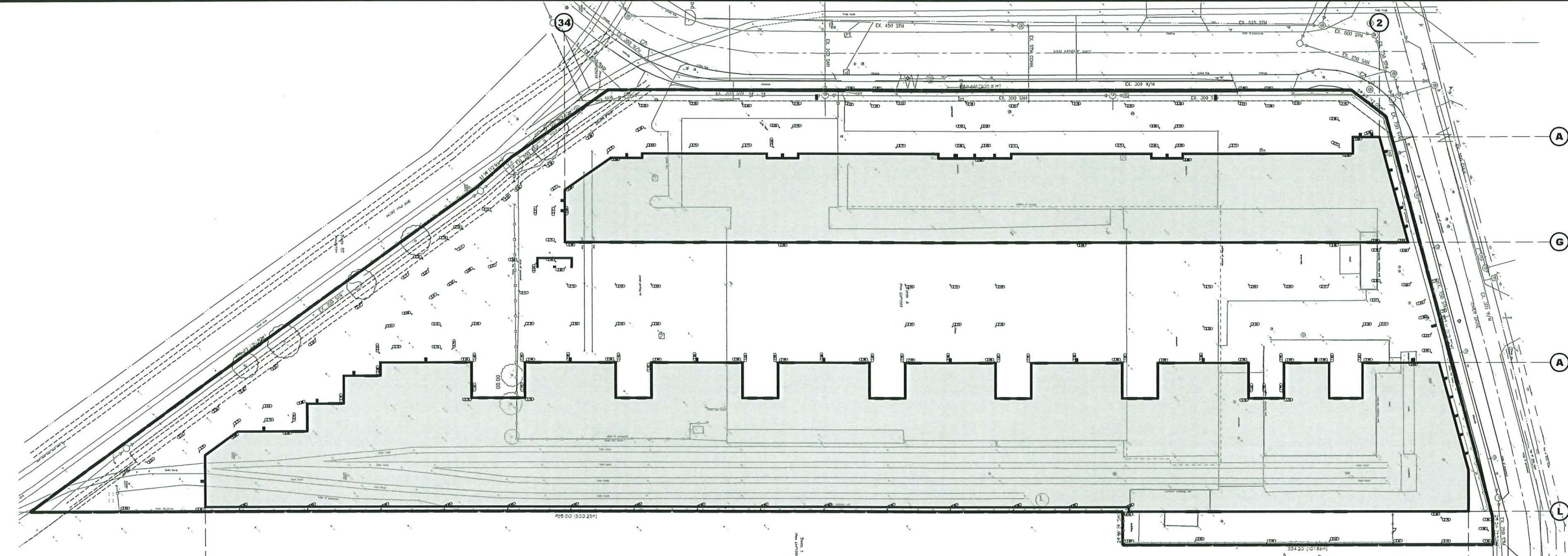
ADDRESS: 9800 VAN HORNE WAY, RICHMOND, BC
DRAWING

**STREETScape
ELEVATIONS**

SCALE	JOB NO. 21-029	DRAWN VCF
	DESIGNED	
	CHECKED	R.D.
	PLOT DATE	MAR.13.23

PROJECT - DRAWING NUMBER
A-0.2a

REV.
2

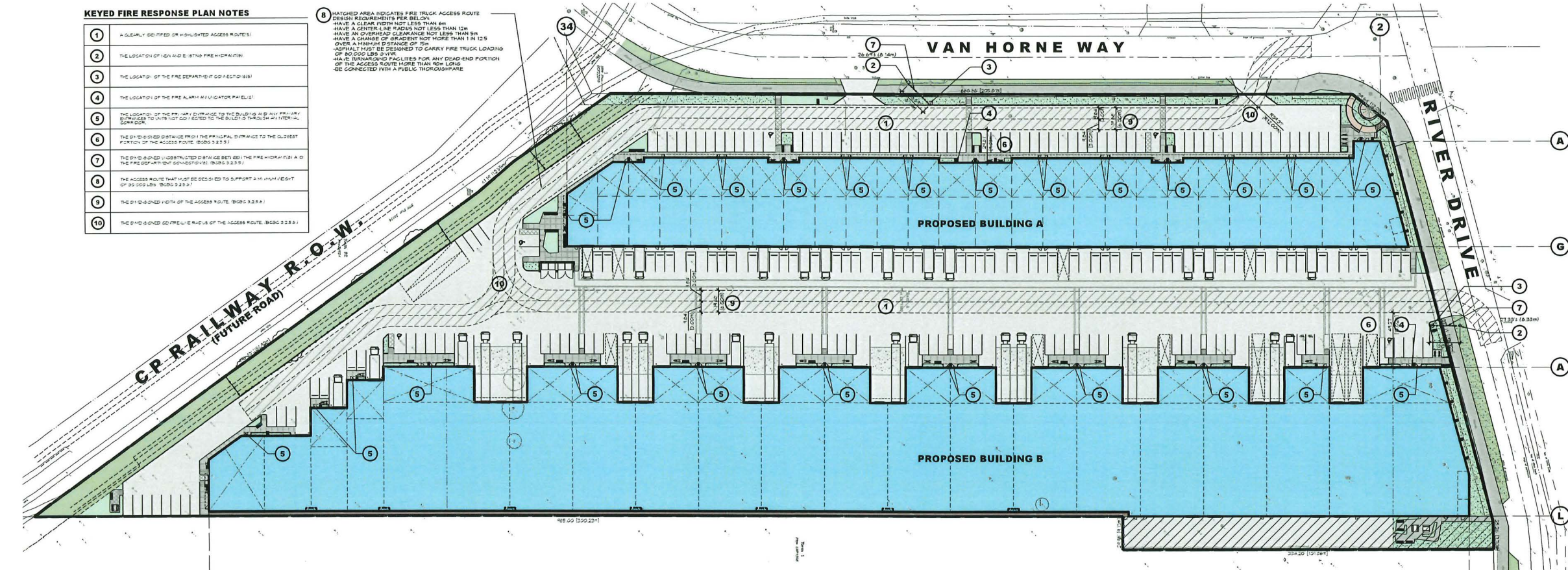


1 TOPOGRAPHY PLAN
SCALE: 1" = 40'-0"

LEGEND
EXISTING GRADE: X 8.53
PROPOSED GRADE: (11.10)
SELECT GRADES SHOWN
REFER TO CIVIL PLANS AND TOPOGRAPHY PLAN FOR GRADES

- KEYED FIRE RESPONSE PLAN NOTES
1. A CLEARLY DEFINED OR HIGHLIGHTED ACCESS ROUTE(S)
 2. THE LOCATION OF THE FIRE DEPARTMENT (S)
 3. THE LOCATION OF THE FIRE DEPARTMENT (S)
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 10. THE LOCATION OF THE FIRE DEPARTMENT (S)

8. HATCHED AREA INDICATES FIRE TRUCK ACCESS ROUTE
DESIGN REQUIREMENTS PER BCDA
HAVE A CLEAR WIDTH NOT LESS THAN 8M
HAVE A GRADE OR RADIUS NOT LESS THAN 15M
HAVE AN OVERHEAD CLEARANCE NOT LESS THAN 5M
HAVE A MAXIMUM DISTANCE OF 30M
ASPHALT MUST BE DESIGNED TO CARRY FIRE TRUCK LOADS
OF 80,000 LBS (36,300 KG)
HAVE TURNING FACILITIES FOR ANY DEAD-END PORTION
OF THE ACCESS ROUTE MORE THAN 40M LONG
BE CONNECTED WITH A PUBLIC THORNSHIRE



2 FIRE RESPONSE PLAN
SCALE: 1" = 40'-0"

NO.	DATE	DESCRIPTION
1	OCT 24/21	ISSUED FOR DP
2	JUN 19/22	NEEDED FOR CP
3	AUG 19/22	FIRE RESPONSE COMMENTS
4	DEC 14/22	UPDATED PER CITY COMMENT
5	MAR 13/23	UPDATED PER ACP COMMENT

PROJECT MANAGERS / CONTRACTORS
ORION CONSTRUCTION
ORION CONSTRUCTION
104-3550 191 STREET,
SURREY BC, V3Z 0Y6
PHONE: (604) 362-2994

PROJECT: CEDAR COAST VAN HORNE

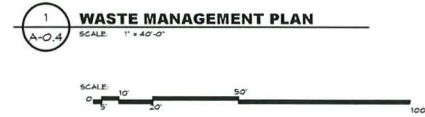
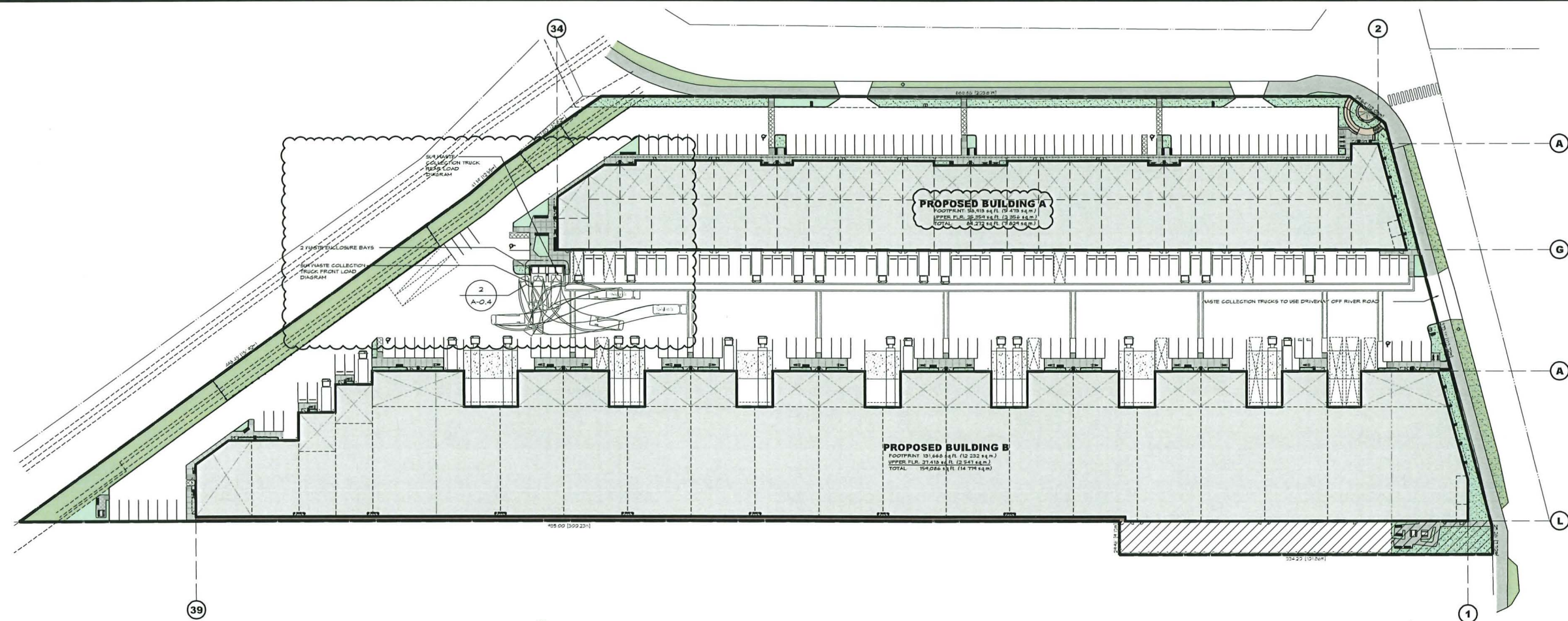
ADDRESS: 3800 VAN HORNE WAY, RICHMOND, BC

DRAWING: TOPOGRAPHY PLAN & FIRE RESPONSE PLAN

SEAL	JOB NO. 21-029	DRAWN OFF/CP
	DESIGNED	
	CHECKED	R.D.
	PLOT DATE	MAR 13/23

PROJECT - DRAWING NUMBER: A-0.3

REV: 5



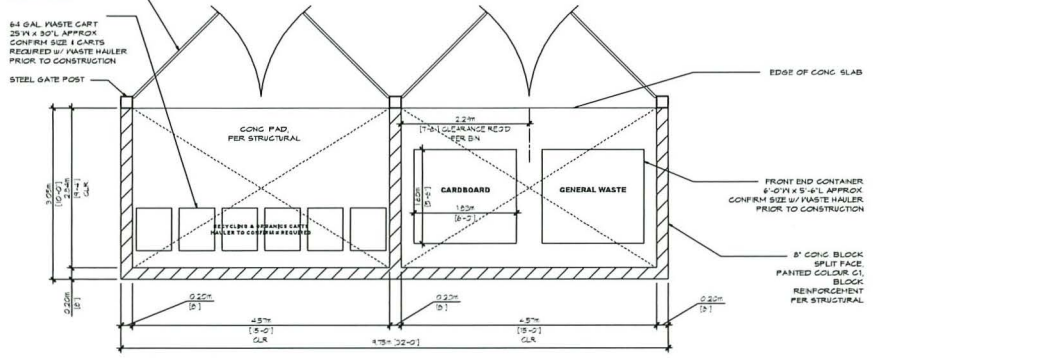
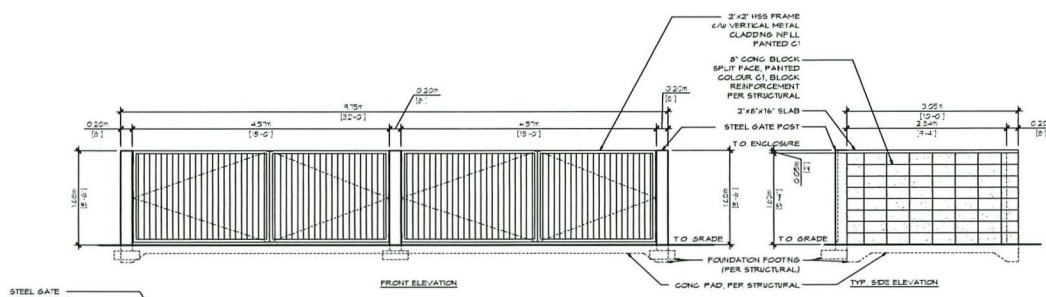
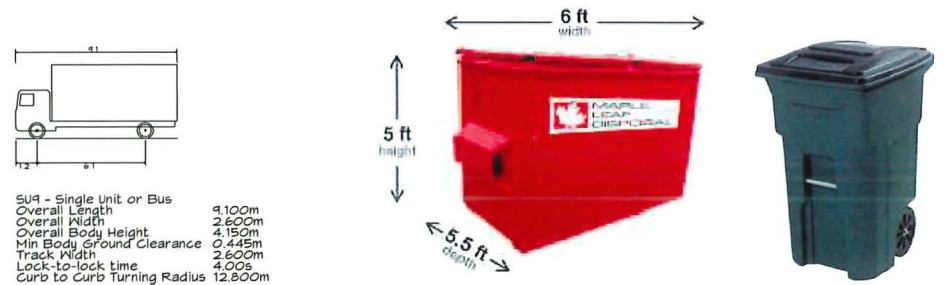
CITY OF RICHMOND RECOMMENDATIONS:
Retail, Light Industrial & Warehouse

Floor Area (sq ft)	Mixed Containers	Refundable Beverage Containers	Mixed Paper (Including newspapers)	Glass	Food Scraps and Yard Trimmings	Cardboard Bin
1 - 200	1	1	1	1	1	1
201 - 500	1	1	2	1	1	1
501 - 600	1	1	3	1	1	1
601 - 700	1	1	3	1	1	1
701 - 1000	1	1	4	1	1	1
1001 - 2000	4	1	9	1	1	1
2001 - 3000	6	1	13	1	1	1
3001 - 4000	7	1	17	1	1	1
4001 - 5000	9	1	21	1	1	1
5001 - 10000	*	*	*	*	*	*

* IF FLOOR AREA IS GREATER THAN 5000 SQ. FT. CITY RECOMMENDS DISCUSSING WITH WASTE HAULER

WASTE COLLECTION CALCULATIONS
BIN RECOMMENDATIONS PROVIDED BY MAPLE LEAF DISPOSAL LTD.
TOTAL WASTE PRODUCED DEPENDANT ON END USERS. THESE ARE ESTIMATES ONLY.

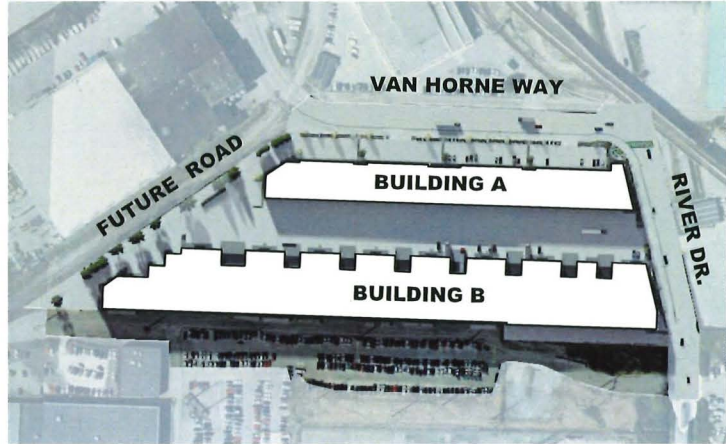
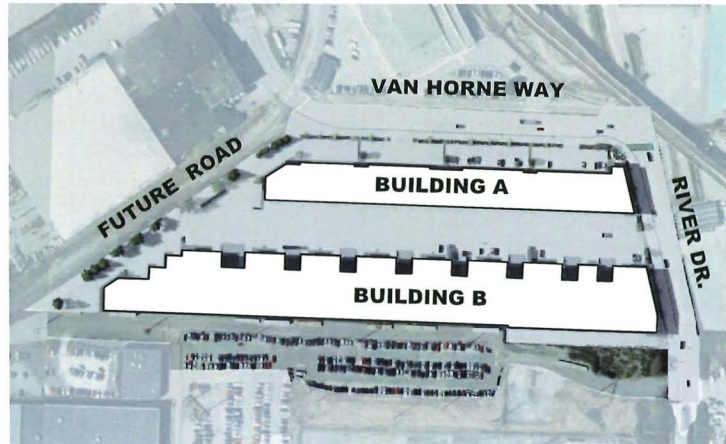
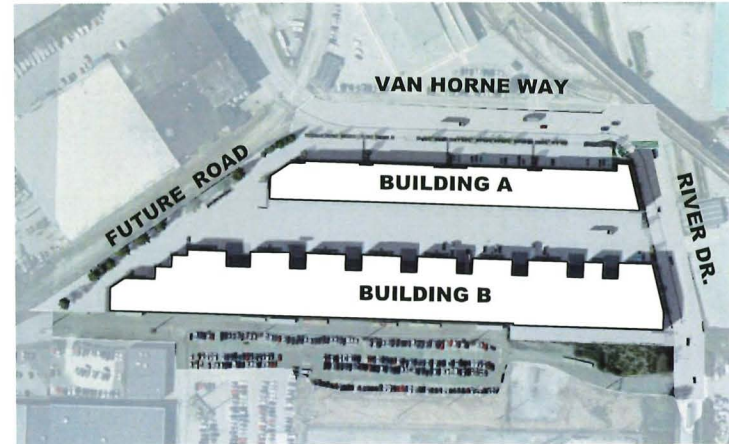
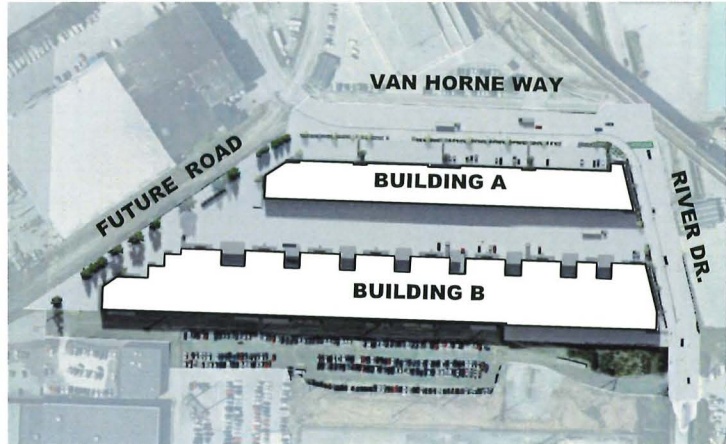
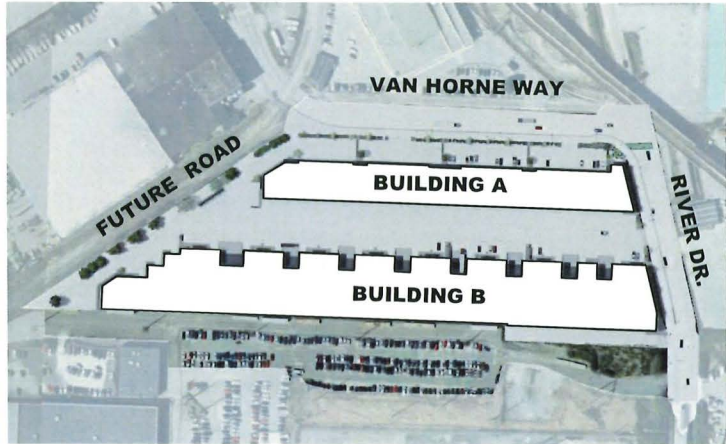
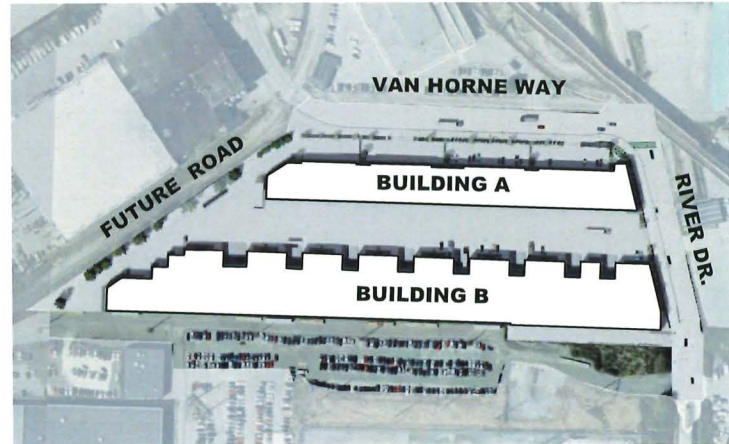
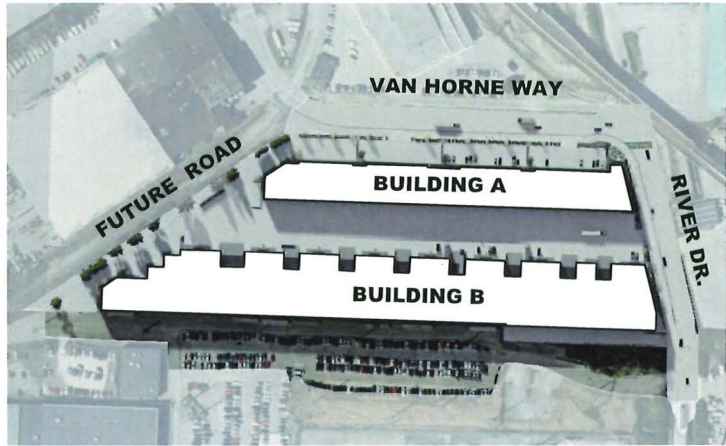
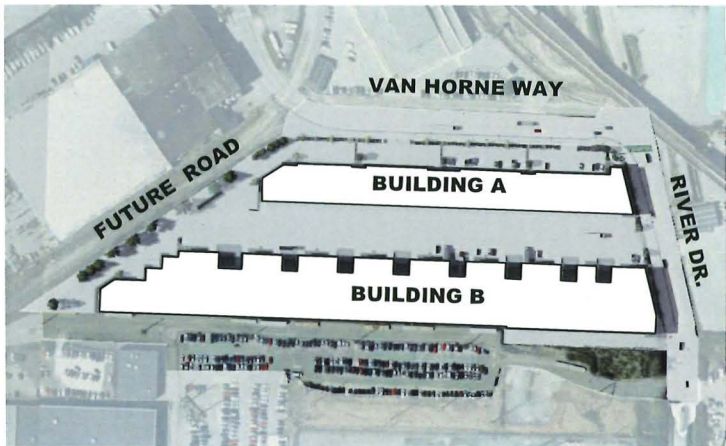
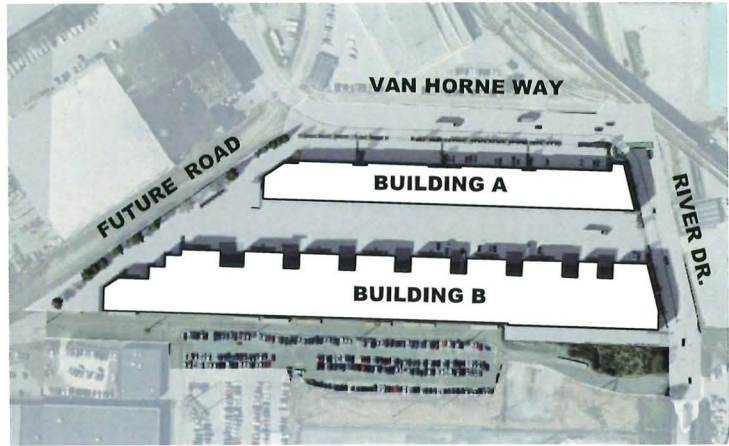
RECOMMENDATIONS FOR 2 INDUSTRIAL BUILDINGS WITH ONCE-A-WEEK PICK-UP CYCLE:
1 X ORGANIC CART (240 LITRES/64 GAL.)
1 X FRONT END CONTAINER FOR GENERAL WASTE (NON-RECYCLABLE)
1 X FRONT END CONTAINER FOR CARDBOARD
CARTS FOR RECYCLING - ** TO BE DETERMINED AT TIME OF CONTRACT



2 TYPICAL WASTE ENCLOSURE DETAIL
SCALE: 1/4" = 1'-0"

DEVELOPER/STRATA COMPANY TO ENSURE CONTRACT WITH LOCAL WASTE HAULER (SUCH AS MAPLE LEAF DISPOSAL LTD.) IN PLACE TO ENSURE REGULAR AND ONGOING WASTE REMOVAL OF THE SITE.

ALL WASTE BINS TO BE PROVIDED BASED ON THE RECOMMENDATIONS OF WASTE HAULER UNDER CONTRACT, AND IN CONFORMANCE WITH CITY OF RICHMOND STANDARDS, BASED ON TENANT REQUIREMENTS.



ARCHITECTURE PANEL INC.
ARCHITECTURE LANDSCAPE ARCHITECTURE URBAN DESIGN
208-1800 KENNEDY STREET, UNIT 100, VANCOUVER, BC V6M 1H2
TEL: (604) 681-7655 FAX: (604) 681-7656 EMAIL: INFO@ARCHITECTUREPANEL.COM

IN ASSOCIATION WITH
D.FORCE DESIGN INC.
2625A ALLIANCE STREET, ABBOTSFORD, B.C. V3B 2J9
TEL: (604) 857-0655 EMAIL: RANDY@DFORCE.COM

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MARCH 21

JUNE 21

SEPTEMBER 21

CEDAR COAST

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NO.	DATE	DESCRIPTION
3	MAR.13.21	UPDATED PER ADP COMMENT
2	DEC.16.21	UPDATED PER CITY COMMENT
1	JUN.10.22	REISSUED FOR DP

PROJECT MANAGERS / CONTRACTORS
ORION CONSTRUCTION
ORION CONSTRUCTION
104-3950 191 STREET,
SURREY BC, V3Z 0Y6
PHONE: (604) 362-2994

CEDAR COAST
VAN HORNE

ADDRESS: 8600 VAN HORNE WAY, RICHMOND, BC

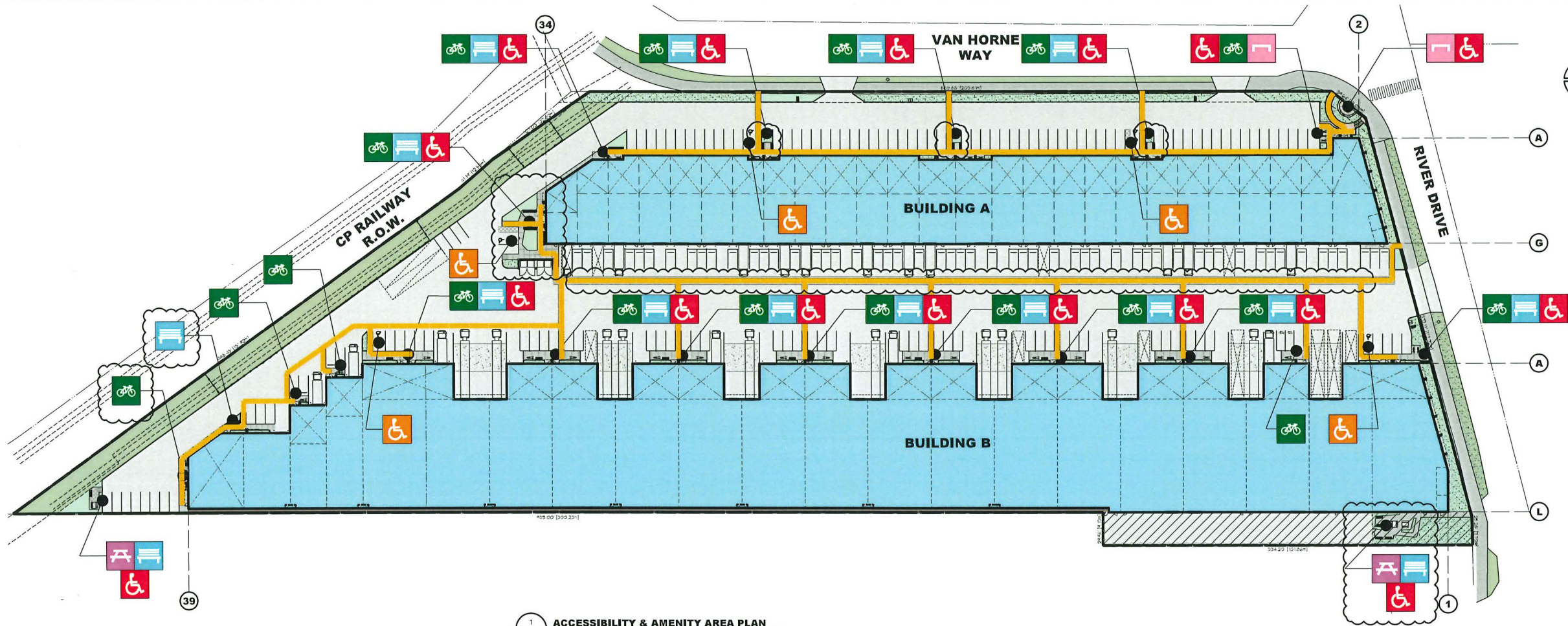
DRAWINGS

SHADOW STUDY

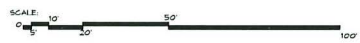
SEAL	JOB NO. 21-429	DRAWN DFVCF
	DESIGNED	
	CHECKED	R.D.
	PLOT DATE	MAR.13.21

PROJECT - DRAWING NUMBER
A-0.5

REV.
3



1 ACCESSIBILITY & AMENITY AREA PLAN
SCALE: 1" = 40'-0"



AMENITY PLANNING DESIGN RATIONAL

KEY DESIGN CONSIDERATIONS:

- DECENTRALIZED
 - ALLOWS FOR ACCESS FROM A VARIETY OF UNITS AT A TIME AND REDUCES WALKING DISTANCE FROM UNITS
- VARYING AMENITY PROVISIONS
 - MEETS THE VARYING DENSITY NEEDS OF THE DIFFERENT BUILDING STYLES BY PROVIDING MORE DENSE AMENITIES AT BUILDING A WHICH WILL HAVE A HIGHER USER RATE THAN BUILDING B
- MULTIPLE STREET CONNECTIONS
 - ACCESS POINTS TO THE SITE HAVE BEEN PROVIDED ALONG BOTH ROADWAYS AND PROVISIONS HAVE BEEN MADE FOR THE FUTURE ROAD TO THE SOUTH TO ALLOW FOR MULTIPLE CONNECTIONS TO THE SITE FOR PEDESTRIANS AND CYCLISTS
- SOUTHERN EXPOSURE
 - EFFORTS HAVE BEEN MADE TO TAKE ADVANTAGE OF THE SOUTHERN EXPOSURE TO SUNLIGHT FOR MANY OF THE AMENITY AREAS

ACCESSIBILITY RATIONAL

FULLY COMPLIANT PER BCBC 2018 SECTION 3.8 & BUILDING ACCESS HANDBOOK

- ALL UNITS ARE ACCESSIBLE
 - ACCESSIBLE MAIN FLOOR (ALL AMENITIES PROVIDED ON MAIN FLOOR) - 3.8.2.1.(F)
 - 50% OF PEDESTRIAN ENTRANCES ARE ACCESSIBLE - 3.8.2.2.1
- ACCESSIBLE PATH OF TRAVEL
 - ACCESSIBLE PATH OF TRAVEL PROVIDED FROM ACCESSIBLE PARKING STALLS TO UNIT ENTRANCES - 3.8.2.5
 - 1500mm WIDE PATH PROVIDED TO ALL UNIT ENTRANCES - 3.8.3.3
- ACCESSIBLE WASHROOM
 - ALL UNITS PROVIDED WITH ONE ACCESSIBLE UNIVERSAL WASHROOM - 3.8.2.8
 - ALL ACCESSIBLE UNIVERSAL WASHROOMS TO CONFORM TO THIS SECTION - 3.8.3.12
- SIGNS & INDICATORS
 - ALL UNITS PROVIDED WITH SIGNAGE FOR ACCESSIBLE WASHROOMS & PARKING STALLS - 3.8.2.10.1
 - ALL STAIRS & RAMPS PROVIDED WITH TACTILE SURFACE INDICATORS - 3.8.2.10.3
- ACCESSIBLE PARKING STALLS
 - ACCESSIBLE STALLS PROVIDE PER THE CITY OF RICHMOND ZONING BYLAW 7.5.11 & 7.5.14

SYMBOL LEGEND

- CLASS 2 EXTERIOR BIKE PARKING
- PICNIC TABLE
- BENCH
- CONCRETE BENCH SEAT
- ACCESSIBLE PARKING STALL
- ACCESSIBLE ACCESS TO AMENITIES
- ACCESSIBLE PATH OF TRAVEL

ARCHITECTURE PANEL INC.
ARCHITECTURE LANDSCAPE ARCHITECTURE URBAN DESIGN
216-1431 EIGHTH STREET, SUITE 100, VANCOUVER, BC V6E 2B3
TEL: (604) 607-5655 EMAIL: INFO@ARCHITECTUREPANEL.COM

IN ASSOCIATION WITH
D.FORCE DESIGN INC.
2625A ALLANCK STREET, ARDSTRONG, B.C. V2B 2J9
TEL: (604) 607-5655 EMAIL: INFO@DFORCE.COM

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CEDAR COAST

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3	MAR.13.21 UPDATED PER ADP COMMENT
2	JAN.20.21 ISSUED FOR ADP MEETING
1	DEC.13.20 UPDATED PER CITY COMMENT
NO.	DATE DESCRIPTION

PROJECT MANAGERS / CONTRACTORS

ORION CONSTRUCTION
ORION CONSTRUCTION
104-3550 191 STREET,
SURREY BC, V3Z 0Y6
PHONE: (604) 362-2994

PROJECT

CEDAR COAST
VAN HORNE

ADDRESS 8805 VAN HORNE WAY, RICHMOND, BC

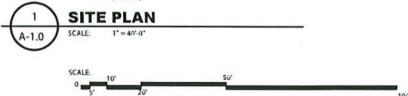
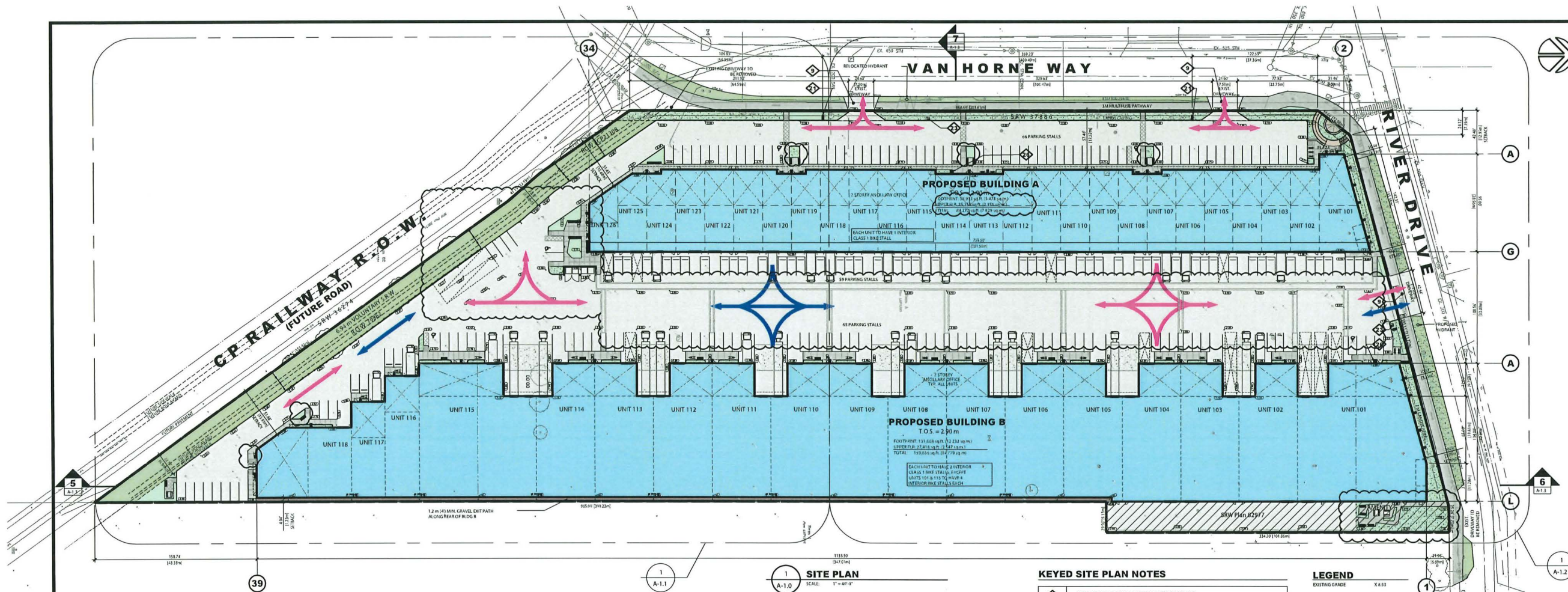
DRAWING

ACCESSIBILITY &
AMENITY AREA PLAN

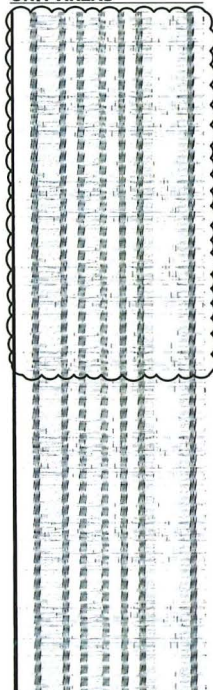
SEAL	JOB NO. 21-019	DRAWN DFF/CF
	DESIGNED	
	CHECKED	R.D.
	PLOT DATE	MAR.13.21

PROJECT - DRAWING NUMBER
A-0.6

REV.
3



UNIT AREAS



OVERALL SITE DATA

CIVIC ADDRESS:	9808 VAN HORNE WAY, RICHMOND, BC
LEGAL DESCRIPTION:	LOT A SEC 22 BUK 5N 6W PL LAMP1555 LOT A, BLOCK 5N, PLAN LAMP1555, SECTION 22, RANGE 6W, NEV WESTERNLAND DISTRICT, L.C. CUP PLAN R220219
EXISTING ZONING:	
GROSS LOT AREA:	36 378.78 m ² (391,588.75 sq. ft. / 8.99 Ac.)
PROPOSED BUILDING AREA (FOOTPRINT):	5 473 m ² (58,913 sq. ft.)
BUILDING A FOOTPRINT:	12 232 m ² (131,668 sq. ft.)
BUILDING B FOOTPRINT:	17 203 m ² (185,547 sq. ft.)
USE COVERAGE, 60% MAX:	190,581 + 52,777 / 391,588.75 sq. ft. = 62%
F.A.R. 1.2 MAX:	

PARKING REQUIRED:
INDUSTRIAL, GENERAL
0.75 SPACES PER 100 SQ. FT. PER 1,435 SQ. FT. OF G.L.F. AREA OF BUILDING
15% REDUCTION IN CITY CENTER PLANNING AREA

Parking Calculations	Building A	Building B	Total
Building Area	58,913	131,668	190,581
Footprint:	58,913	131,668	190,581
Upper floor area:	25,359	27,418	52,777
Total Area	84,272	159,086	243,358
Industrial	33,554	131,668	165,222
Ancillary Office (1st Floor)	25,359	-	25,359
2nd floor Ancillary Offices	25,359	27,418	52,777
2nd floor storage	-	-	-
Parking Stalls Required			
General Industrial - 1 stall per	1,435	23.4	91.7
Ancillary Office - 1 stalls per	1,435	35.3	19.1
Total	90	111	170.0
Total after 15% City Centre reduction	51	95	146.0
Stalls provided	125	65	190

Parking Dimensions	Width (m)	Depth (m)
Regular Stall (90°)	2.65	5.5
Small Car Stall	2.4	5
Accessible Stall	2.5	5.5
Accessible Stall (Van)	3.4	5.5
Accessible Aisle	1.5 min.	
Dead-End Stall (90°)	3.26	5.5
Medium Loading Stall	3	9.1
Large Loading Stall	3.5	19
Class 1 Bike Space	0.6 min.	1.8 min.
Class 2 Bike Space	0.6 min.	1.8 min.
Minimum Drive Aisle*	7.5	
Minimum Sidewalk*	1.5	
Minimum Crosswalk*	1.5	
*May vary, plans take precedent		

SITE DATA - BUILDING A

SETBACKS:	EXISTING	PROPOSED
FRONT (NORTH):	3M (9.84')	3.08 m (10.12')
SIDE (EAST):	0m (0')	SEE BLDG B
SIDE (WEST):	0m (0')	12.25 m (40.18')
REAR (SOUTH):	0m (0')	15.48 m (50.77')
HEIGHT:	16m (52.49')	8.85m (29.04')
ACCESSIBLE STALLS REQUIRED (2:1)		125 X 0.07 = 2.52 STALLS
ACCESSIBLE STALLS PROVIDED:		9 STALLS
Bike Parking Required:		2 VAN ACCESSIBLE - 50% OF REQ'D
CLASS 1: 1 PER 370.37 sq. m. (13,966.63 sq. ft.)		84,272 sq. m. (2,396.63 sq. ft.)
CLASS 2: 1 PER 370.37 sq. m. (13,966.63 sq. ft.)		84,272 sq. m. (2,396.63 sq. ft.)
LOADING SPACES REQUIRED:		
MEDIUM: 1 SPACE PLUS 1 SPACE FOR EACH ADDITIONAL 5,000.0 SQ. M. (1,800.0 SQ. FT.)		3 SPACES REQUIRED
LARGE: 1 SPACE FOR EACH 5,000.0 SQ. M. (1,800.0 SQ. FT.)		3 SPACES PROVIDED

SITE DATA - BUILDING B

SETBACKS:	EXISTING	PROPOSED
FRONT (NORTH):	3M (9.84')	3.08 m (10.09')
SIDE (EAST):	0m (0')	12.25 m (40.18')
SIDE (WEST):	3M (9.84')	SEE BLDG A
REAR (SOUTH):	0m (0')	15.48 m (50.77')
HEIGHT:	16m (52.49')	8.85m (29.04')
SMALL CAR STALLS PROVIDED:		23 STALLS
ACCESSIBLE STALLS REQUIRED (2:1)		65 X 0.07 = 1.3 STALLS
ACCESSIBLE STALLS PROVIDED:		1 VAN ACCESSIBLE - 50% OF REQ'D
Bike Parking Required:		1 VAN ACCESSIBLE - 50% OF REQ'D
CLASS 1: 1 PER 370.37 sq. m. (13,966.63 sq. ft.)		159,086 sq. m. (2,396.63 sq. ft.)
CLASS 2: 1 PER 370.37 sq. m. (13,966.63 sq. ft.)		159,086 sq. m. (2,396.63 sq. ft.)
LOADING SPACES REQUIRED:		
MEDIUM: 1 SPACE PLUS 1 SPACE FOR EACH ADDITIONAL 5,000.0 SQ. M. (1,800.0 SQ. FT.)		4 SPACES REQUIRED
LARGE: 1 SPACE FOR EACH 5,000.0 SQ. M. (1,800.0 SQ. FT.)		4 SPACES PROVIDED

KEYED SITE PLAN NOTES

- INTERNATIONAL SYMBOL OF ACCESS PAINTED ON ASPHALT PER DETAIL 3/A-1.4
- BUILDING MOUNTED H.C. SIGN PER DETAIL 3/A-1.4
- 3'x3' EDEYBACK LETTERING PROVIDE MINIMUM 5'x3' CLEAR AT TOP OF LETDOWN, SEE DETAIL 1/A-1.4
- CONCRETE SIDEWALK 6" - ABOVE ADJACENT ASPHALT LIGHT BROOKLYN FINISH
- 6"x6" EXTENDED CONCRETE CURB TYPICAL AT EDGE OF LANDSCAPING, PER DETAIL 4/A-1.4
- LANDSCAPING PER LANDSCAPE ARCHITECT'S DRAWINGS
- WHEELSTOP PER DETAIL 7/A-1.4
- 4" PAINT STRIP, TYPICAL
- ASPHALT CROSSING TO MUNICIPAL SPES
- 6'x6' 0.14" THICK CONCRETE FELLO STEEL BOLLARD PAINTED "BRIGHT YELLOW" OR EQUIVALENT AT EACH SIDE OF GRADE LEVEL DOOR TYPICAL AT ALL GRADE DOORS
- RETAINING WALL, UNPAINTED 12" x 4" PIPE GUARDRAIL, GUARDRAIL REQUIRED UNTIL THE GRADE DIFFERENCE IS LESS THAN 12" (4' 000mm)
- LINE OF CANOPY ABOVE, SEE PLANS AND DETAILS FOR MORE INFORMATION
- EXTERIOR GARBAGE ENCLOSURE, SEE WASTE MANAGEMENT PLAN AND DETAILS A-0.3
- CONCRETE DOLLY PAD
- CLASS 2 EXTERIOR BICYCLE PARKING (2 SPOTS PER BKE BCKL, PER DETAIL 8/A-1.4
- 6' H FENCE C/W 3' W. MAIN GATE, PROVIDE BLACK VINYL PRIVACY SLATES AROUND OUTDOOR FENCE YARD
- BEACH PER LANDSCAPE DINGS
- ELECTRICAL & MECHANICAL ROOMS / EQUIPMENT
- GAS METER PER MECHANICAL DRAWINGS WITH FENCE AND PROTECTION AS REQUIRED BY BC CODES AND MUNICIPALITY, SEE DETAIL 5/A-1.4
- UNIT SUBSTATION ROOM, SEE ELECTRICAL DRAWINGS
- FREE STANDING SIGNAGE, SEE DETAIL 5/A-1.4
- TYPICAL ACCESSIBLE ENTRANCE
- FIRE DEPARTMENT CONNECTICHL, SEE MECHANICAL DRAWINGS
- TRAVEL DISTANCE HYDRANT TO FDC (147' (45m) MAX CONFIRM QTY 10FT)
- HATCHED AREA INDICATES FIRE TRUCK ACCESS ROUTE DESIGN REQUIREMENT 1 PER BELOW:
 - HAVE A CLEAR WIDTH NOT LESS THAN 6m
 - HAVE A CENTER LINE INDICATOR NOT LESS THAN 12m
 - HAVE AN OVERHEAD CLEARANCE NOT LESS THAN 10m
 - HAVE A CHANGE OF GRADE NOT MORE THAN 1 IN 125
 - OVER A MINIMUM DISTANCE OF 12m
 - ASPHALT MUST BE DESIGNED TO LARRY FIRE TRUCK LOADING OF 80,000 LBS OVER
 - HAVE TURNAROUND FACILITIES FOR ANY DEAD-END PORTION OF THE ACCESS ROUTE MORE THAN 10m LONG
 - BE CONNECTED WITH A PUBLIC THROUGHWAY.
- ULC LISTED EXTERIOR ANTI-VANDALISM PANEL, SEE ELECTRICAL DRAWINGS
- BY CHANGING JUNCTION BOX & ROUGH IN, SEE ELEC DRAWINGS FOR DETAILS
- SQUARE CUT PATTERN SAWCUTS, C/W CONTRASTING COLOUR FINISH, SEE LANDSCAPE DRAWINGS FOR DETAILS

LEGEND

EXISTING GRADE
PROPOSED GRADE
SELECT GRADES SHOWN
REFER TO CIVIL PLANS AND TOPOGRAPHY PLAN FOR
GRADES

ARROW LEGEND

CAR TRAFFIC FLOW

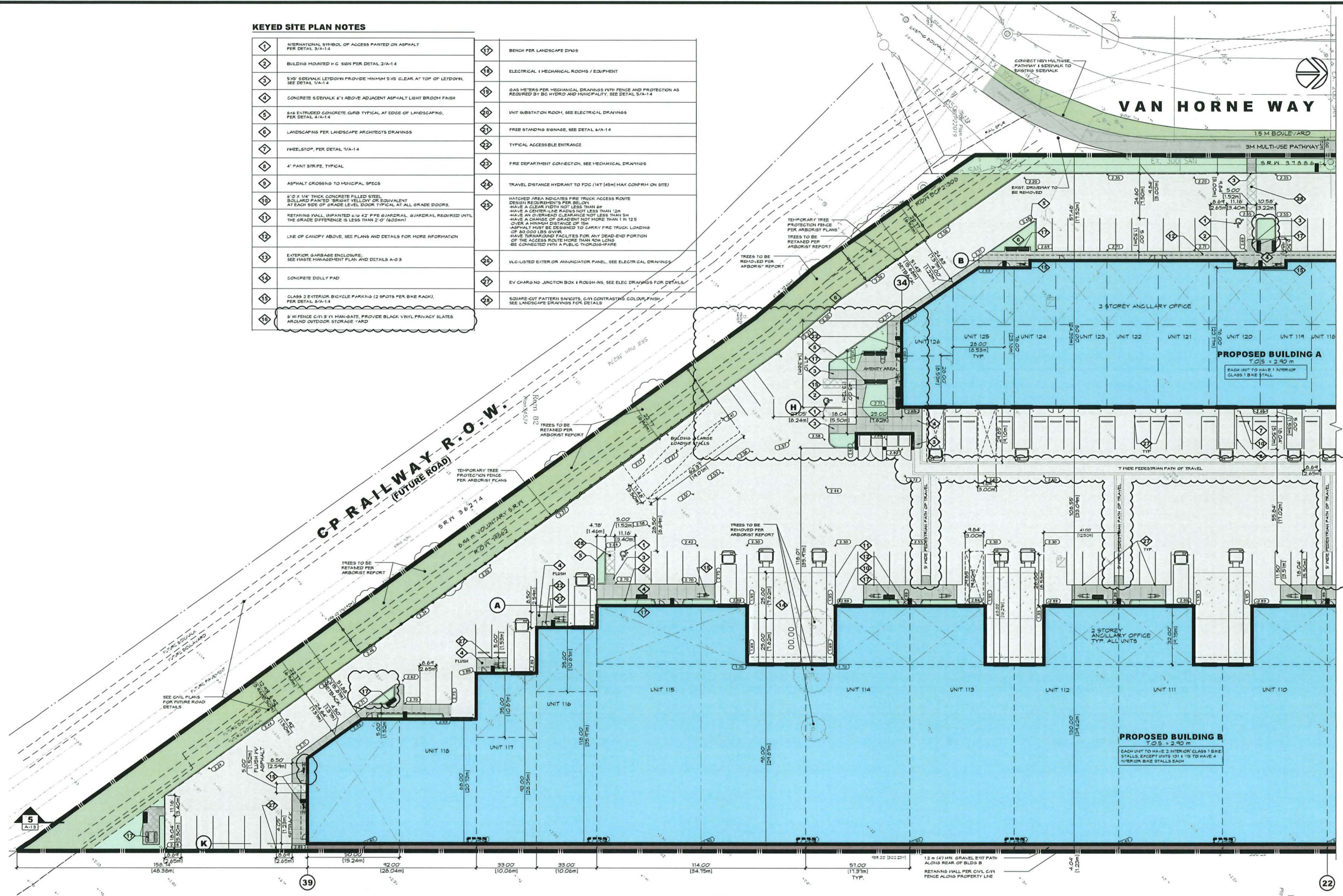
LOADING TRAFFIC FLOW

NO.	DATE	DESCRIPTION
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15	MAR.13.23	UPDATED PER AOP COMMENT
14	MAR.06.23	CONSULTANT USE
13	DEC.15.22	UPDATED PER CITY COMMENTS
12	AUG.10.22	RE-ASSUED FOR CP
11	APR.06.22	CONSULTANT COORDINATION
10	MAY.31.22	CONSULTANT COORDINATION
9	MAY.17.22	CLIENT REVIEW
8	OCT.04.21	ISSUED FOR DP
7	SEP.21.21	CONSULTANT USE
6	AUG.10.21	CONSULTANT USE
5	JUN.2.21	CLIENT REVIEW
4	JULY.28.21	CLIENT REVIEW
3	MAY.7.21	CLIENT REVIEW
2	APR.30.21	CLIENT REVIEW
1	APR.14.21	CLIENT REVIEW

SEAL	JOB NO.	DRAWN
	21-029	DPVCF
DESIGNED		
CHECKED		R.D.
PLOT DATE		MAR.13.23

KEYED SITE PLAN NOTES

1	INTERNATIONAL SYMBOL OF ACCESS PAINTED ON ASPHALT PER DETAIL 5/A-1.4	17	BENCH PER LANDSCAPE PLANS
2	BUILDING MOUNTED H.C. SIGN PER DETAIL 2/A-1.4	18	ELECTRICAL & MECHANICAL ROOMS / EQUIPMENT
3	5'x5' SIDEWALK LETDOWN PROVIDE MINIMUM 5'x5' CLEAR AT TOP OF LETDOWN, SEE DETAIL 1/A-1.4	19	GAS METERS PER MECHANICAL DRAWINGS WITH FENCE AND PROTECTION AS REQUIRED BY BC HYDRO AND MUNICIPALITY, SEE DETAIL 5/A-1.4
4	CONCRETE SIDEWALK 6" ABOVE ADJACENT ASPHALT LIGHT BROOK FINISH	20	UNIT SUBSTATION ROOM, SEE ELECTRICAL DRAWINGS
5	6'x6' EXTRUDED CONCRETE CURB TYPICAL AT EDGE OF LANDSCAPING, PER DETAIL 6/A-1.4	21	FREE STANDING SIGNAGE, SEE DETAIL 6/A-1.4
6	LANDSCAPING PER LANDSCAPE ARCHITECT'S DRAWINGS	22	TYPICAL ACCESSIBLE ENTRANCE
7	WHEELSTOP, PER DETAIL 7/A-1.4	23	FIRE DEPARTMENT CONNECTION, SEE MECHANICAL DRAWINGS
8	4" PAINT STRIPE, TYPICAL	24	TRAVEL DISTANCE HYDRANT TO FDG (147' (45m) MAX CONFORM ON SITE)
9	ASPHALT CROSSING TO MUNICIPAL SPEEDS	25	HATCHED AREA INDICATES FIRE TRUCK ACCESS ROUTE DESIGN REQUIREMENTS PER BELOW: HAVE A CLEAR WIDTH NOT LESS THAN 8' HAVE A CENTER-LINE RADIUS NOT LESS THAN 12M HAVE AN OVERHEAD CLEARANCE NOT LESS THAN 8M HAVE A CHANGE OF GRADE NOT MORE THAN 1 IN 12'S JOINTS A MAXIMUM DISTANCE OF 15' ASPHALT MUST BE DESIGNED TO CARRY FIRE TRUCK LOADS OF 80,000 LBS GVWR THE WHEELSTOP FACILITIES FOR ANY DEAD END PORTION OF THE ACCESS ROUTE MORE THAN 40M LONG BE CONNECTED WITH A PUBLIC THROUGHWAY
10	6" O X 1/4" THICK CONCRETE FILLED STEEL BEULAND PAINTED BRIGHT YELLOW OR EQUIVALENT AT EACH SIDE OF GRADE LEVEL DOOR TYPICAL AT ALL GRADE DOORS	26	VLC-LISTED EXTERIOR ANNUNCIATOR PANEL, SEE ELECTRICAL DRAWINGS
11	RETAINING WALL, UNPAINTED 2'x4" PPE 6" GARDER, GUARDRAIL REQUIRED UNTIL THE GRADE DIFFERENCE IS LESS THAN 2'-0" (600mm)	27	EV CHARGING JUNCTION BOX & ROUGH-INS, SEE ELEC DRAWINGS FOR DETAILS
12	LIVE OF CHANTRY ABOVE, SEE PLANS AND DETAILS FOR MORE INFORMATION	28	SQUARE-CUT PATTERNS SAWCUTS, C/N CONTRASTING COLOR/FINISH, SEE LANDSCAPE DRAWINGS FOR DETAILS
13	EXTERIOR GARBAGE ENCLOSURE, SEE WASTE MANAGEMENT PLAN AND DETAILS A-0.3		
14	CONCRETE DOLLY PAD		
15	GLASS 2'x EXTERIOR BICYCLE PARKING (2 SPOTS PER BKE RACK), PER DETAIL 8/A-1.4		
16	5' HI FENCE C/N 3' HI HAND-GATE, PROVIDE BLACK VINYL PRIVACY SLATES AROUND OUTDOOR STORAGE YARD		



1 ENLARGED SOUTHERN SITE PLAN



Parking Dimensions

Stall Type	Width (m)	Depth (m)
Regular Stall (90°)	2.63	5.3
Small Car Stall	2.4	5
Accessible Stall	2.5	5.3
Accessible Stall (Van)	3.4	5.3
Accessible A's/c	1.5 min.	
Dead-End Stall (90°)	3.26	5.5
Medium Loading Stall	3	9.1
Large Loading Stall	3.5	19
Class 1 Bke Space	0.6 min.	1.8 min.
Class 2 Bke Space	0.6 min.	1.8 min.
Minimum Drive Aisle*	7.5	
Minimum Sidewalk*	1.5	
Minimum Crosswalk*	1.5	

*May vary, please take precedent

LEGEND

EXISTING GRADE	X 353
PROPOSED GRADE	X 11.10

SELECT GRADES SHOWN REFER TO CIVIL PLANS AND TOPOGRAPHY PLAN FOR GRADES

ARCHITECTURE PANEL INC.
ARCHITECTURE LANDSCAPE ARCHITECTURE URBAN DESIGN
205-1893 FOSTER STREET, WHITE ROCK, BC V8B 5G4
TEL: 604-407-0555 EMAIL: INFO@ARCHITECTUREPANEL.COM

IN ASSOCIATION WITH
D.FORCE DESIGN INC.
2225 ALLENBY STREET, ABROTHFORD, B.C. V8B 3J9
TEL: 604-407-0555 EMAIL: INFO@D.FORCEDESIGN.COM

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CEDAR COAST CONSTRUCTION

NO.	DATE	DESCRIPTION
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7	MAR.13.23	UPDATED PER ACP COMMENT
6	FEB.03.24	UPDATED PER CITY COMMENTS
5	DEC.15.22	UPDATED PER CITY COMMENTS
4	JUN.18.22	ISSUED FOR DP
3	MAY.31.22	CONSULTANT COORDINATION
2	MAY.17.22	CLIENT REVIEW
1	OCT.02.21	ISSUED FOR DP

PROJECT MANAGERS / CONTRACTORS
ORION CONSTRUCTION
ORION CONSTRUCTION
104 - 3950 191 STREET,
SURREY BC, V3Z 0Y8
PHONE: (604) 362-2994

CEDAR COAST VAN HORNE

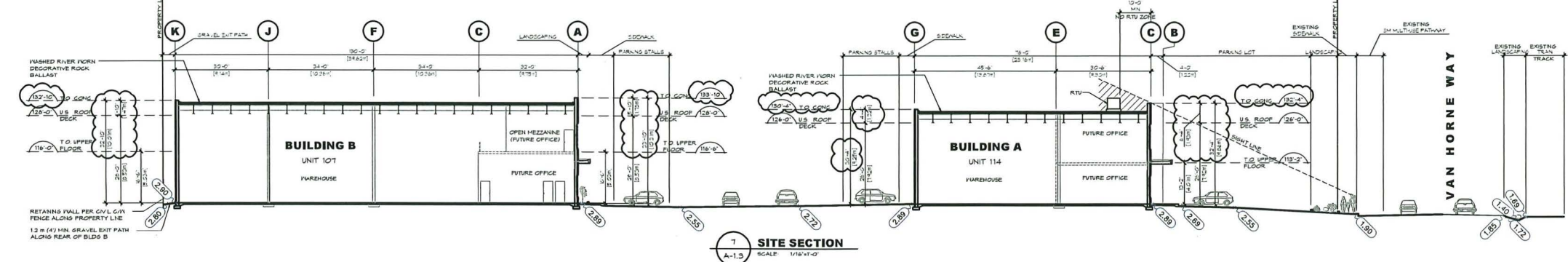
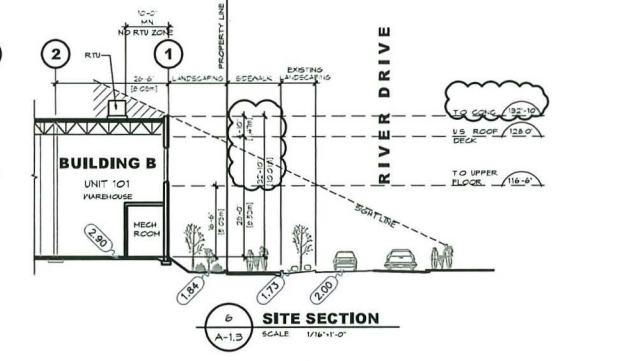
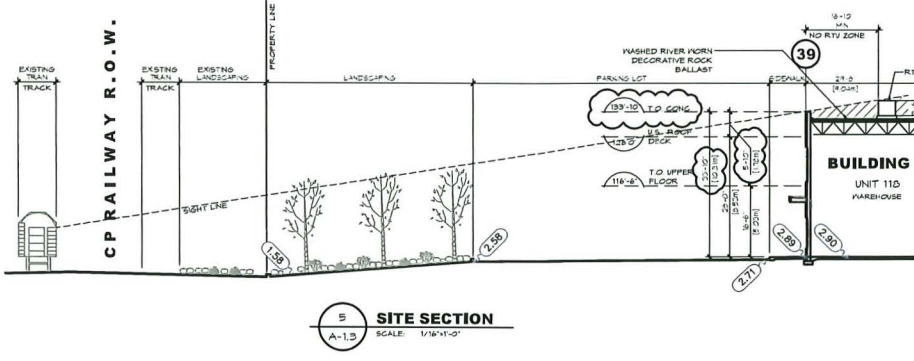
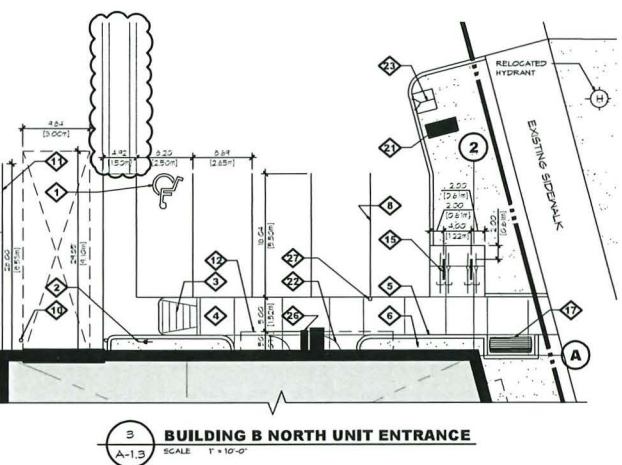
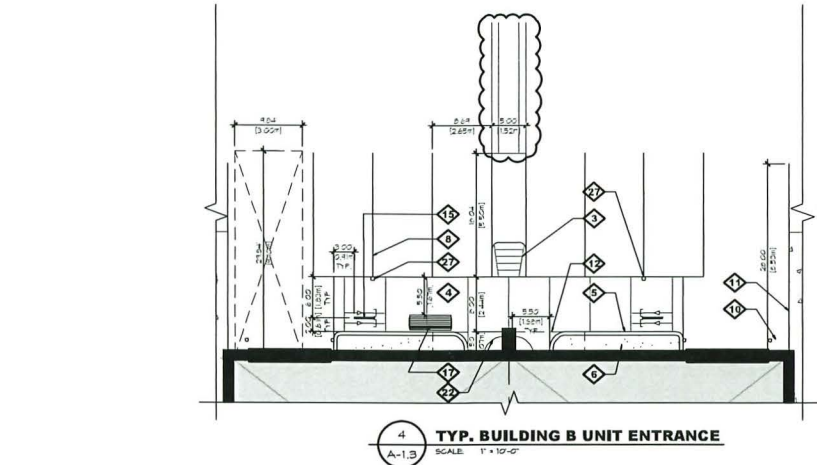
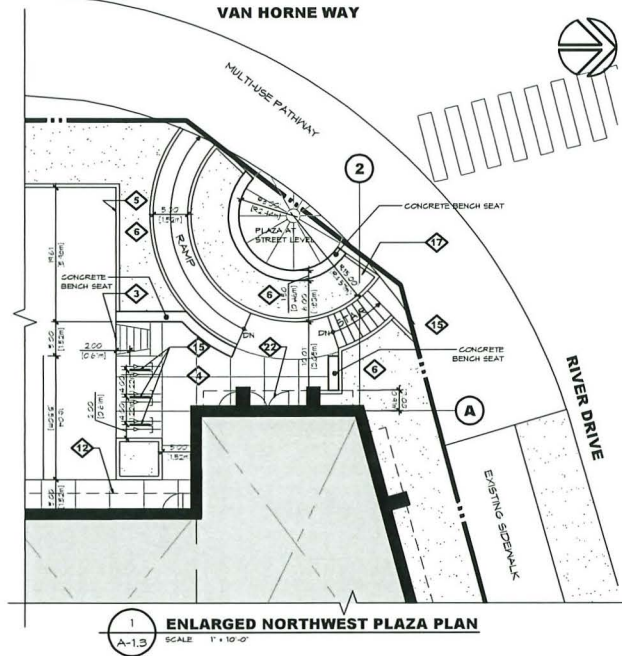
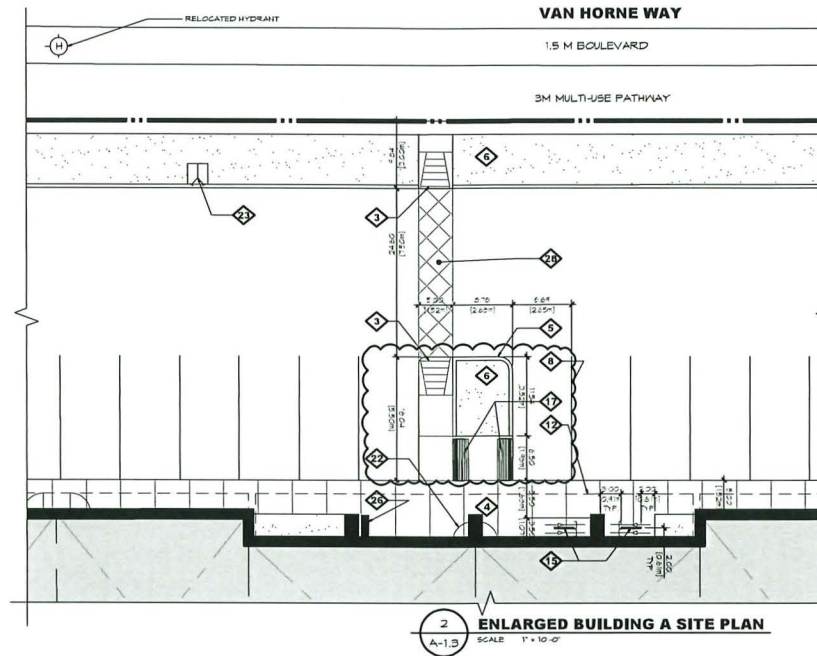
ADDRESS: 9300 VAN HORNE WAY, RICHMOND, BC

DRAWING
ENLARGED SOUTHERN SITE PLAN

SEAL	JOB NO. 21-029	DRAWN DRVCF
	DESIGNED	
	CHECKED RDL	
	FLAT DATE MAR.13.23	
PROJECT - DRAWING NUMBER	REV.	
A-1.1	7	

KEYED SITE PLAN NOTES

1	INTERNATIONAL SYMBOL OF ACCESS PAINTED ON ASPHALT PER DETAIL 5/A-1.4
2	BUILDING MOUNTED H.C. SIGN PER DETAIL 2/A-1.4
3	5'x8' SIDEWALK LETDOWN PROVIDE MINIMUM 5'x5' CLEAR AT TOP OF LETDOWN, SEE DETAIL 1/A-1.1
4	CONCRETE SIDEWALK 6" ABOVE ADJACENT ASPHALT LIGHT BROOM FINISH
5	6"x6" EXTRUDED CONCRETE CURB TYPICAL AT EDGE OF LANDSCAPING, PER DETAIL 4/A-1.4
6	LANDSCAPING PER LANDSCAPE ARCHITECTS DRAWINGS
7	WHEELSTOP, PER DETAIL 1/A-1.4
8	4" PAINT STRIPE, TYPICAL
9	ASPHALT CROSSING TO MUNICIPAL STREETS
10	6"x8" x 1/4" THICK CONCRETE FILLED STEEL BOLLARD PAINTED BRIGHT YELLOW OR EQUIVALENT AT EACH SIDE OF GRADE LEVEL DOOR TYPICAL AT ALL GRADE DOORS.
11	RETAINING WALL, UNPAINTED 2'x4' 42" P.P.E. GUARDRAIL, GUARDRAIL REQUIRED UNTIL THE GRADE DIFFERENCE IS LESS THAN 2'-0" (600mm)
12	LINE OF CANOPY ABOVE, SEE PLANS AND DETAILS FOR MORE INFORMATION
13	EXTERIOR GARBAGE ENCLOSURE, SEE WASTE MANAGEMENT PLAN AND DETAILS A-0.3
14	CONCRETE DOLLY PAD
15	CLASS 2 EXTERIOR BICYCLE PARKING (2 SPOTS PER BIKE RACK), PER DETAIL 5/A-1.4
16	6" HI FENCE 4'x1/2" IN. HAN-GATE, PROVIDE BLACK VINYL PRIVACY SLATES AROUND OUTDOOR STORAGE YARD
17	BENCH PER LANDSCAPE DVGS
18	ELECTRICAL & MECHANICAL ROOMS / EQUIPMENT
19	GAS METERS PER MECHANICAL DRAWINGS WITH FENCE AND PROTECTION AS REQUIRED BY BC HYDRO AND MUNICIPALITY, SEE DETAIL 5/A-1.4
20	UNIT SUBSTATION ROOM, SEE ELECTRICAL DRAWINGS
21	FREE STANDING SIGNAGE, SEE DETAIL 6/A-1.4
22	TYPICAL ACCESSIBLE ENTRANCE
23	FIRE DEPARTMENT CONNECTION, SEE MECHANICAL DRAWINGS
24	TRAVEL DISTANCE HYDRANT TO FDG (147' (45M) MAX CONFRM ON SITE)
25	HATCHED AREA INDICATES FIRE TRUCK ACCESS ROUTE. DESIGN REQUIREMENTS FOR BELONG: - HAVE A CLEAR WIDTH NOT LESS THAN 6'-0" - HAVE A CENTER LINE RADIUS NOT LESS THAN 12M - HAVE AN OVERHEAD CLEARANCE NOT LESS THAN 5M - HAVE A CHANGE OF GRADIENT NOT MORE THAN 1 IN 12.5 OVER A HORIZONTAL DISTANCE OF 10M - ASPHALT MUST BE DESIGNED TO CARRY FIRE TRUCK LOADINGS OF 80,000 LBS GROSS - HAVE TURNAROUND FACILITIES FOR ANY DEAD-END PORTION OF THE ACCESS ROUTE MORE THAN 10M LONG - BE CONNECTED WITH A PUBLIC THOROUGHFARE
26	ULC-LISTED EXTERIOR ANNUNCIATOR PANEL, SEE ELECTRICAL DRAWINGS
27	EV CHARGING ANCHOR BOX 1 ROWS/H-N, SEE ELEC DRAWINGS FOR DETAILS
28	SQUARE-GUT PATTERN SAVICUTS, GUT CONTRASTING COLOUR FINISH, SEE LANDSCAPE DRAWINGS FOR DETAILS



ARCHITECTURE PANEL INC.
ARCHITECTURE, LANDSCAPE ARCHITECTURE, URBAN DESIGN
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IN ASSOCIATION WITH
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2025 - 1885 FOSTER STREET, ANIMAPOLIS, B.C., V2S 2J9
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SCALE: DRAWING 5: 1/16\"/>

CEDAR COAST

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7	MAR.13.23	UPDATED PER ACP COMMENT
6	DEC.18.22	UPDATED PER CITY COMMENTS
5	AUG.19.22	FIRE RESPONSE COMMENTS
4	JUN.19.22	RECEIVED FOR CP
3	MAY.31.22	CONSULTANT COORDINATION
2	MAY.17.22	CLIENT REVIEW
1	OCT.24.21	ISSUED FOR CP
NO.	DATE	DESCRIPTION
PROJECT MANAGERS / CONTRACTORS		

ORION
CONSTRUCTION

ORION CONSTRUCTION
104 - 3950 191 STREET,
SURREY BC, V3Z 0Y6
PHONE: (604) 362-2994

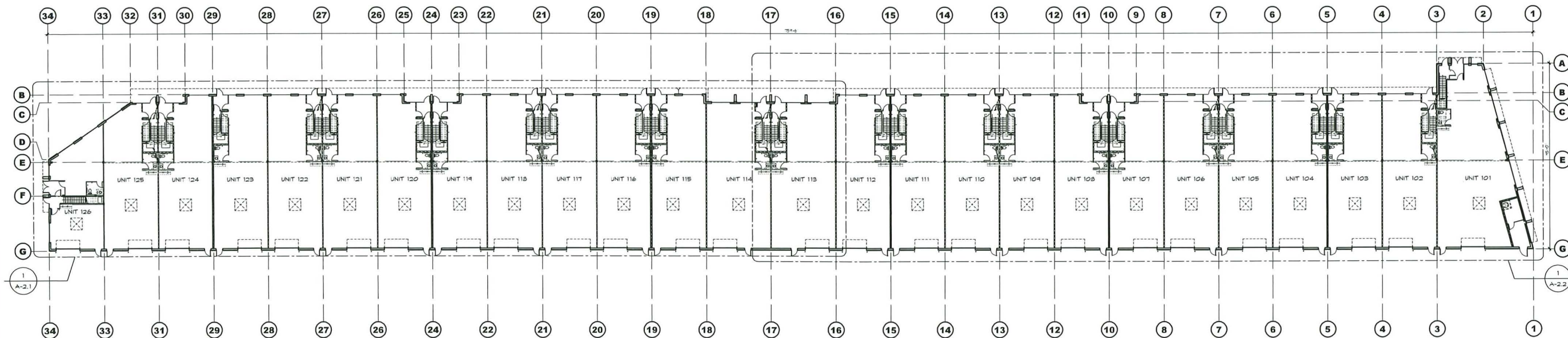
PROJECT
**CEDAR COAST
VAN HORNE**

ADDRESS 3800 VAN HORNE WAY, RICHMOND, BC

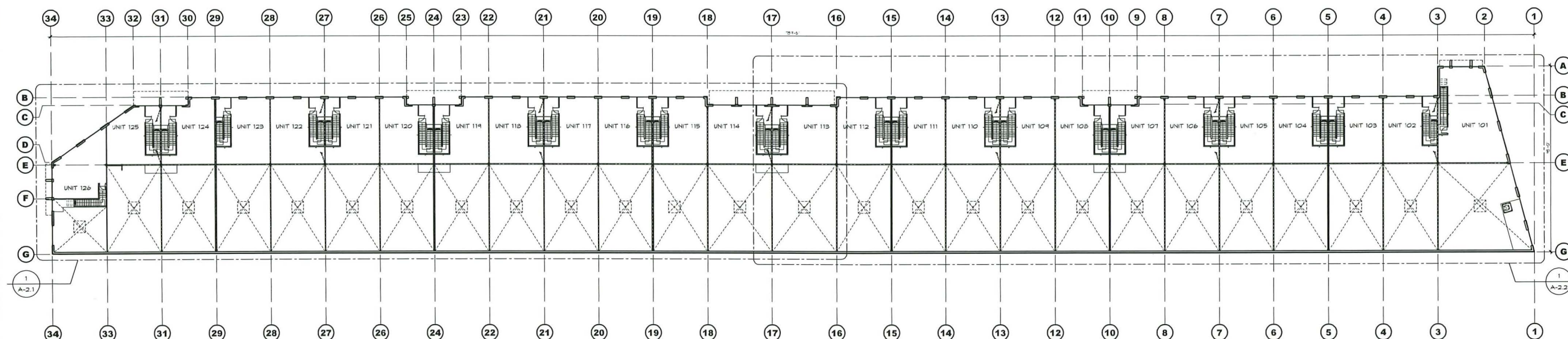
DRAWING
**ENLARGED SITE PLANS
& SITE SECTIONS**

SEAL	JOB NO. 31429	DRAWN DVP/CP
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	CHECKED	R.D.
	PLAT DATE	MAR.13.23
PROJECT - DRAWING NUMBER		REV.

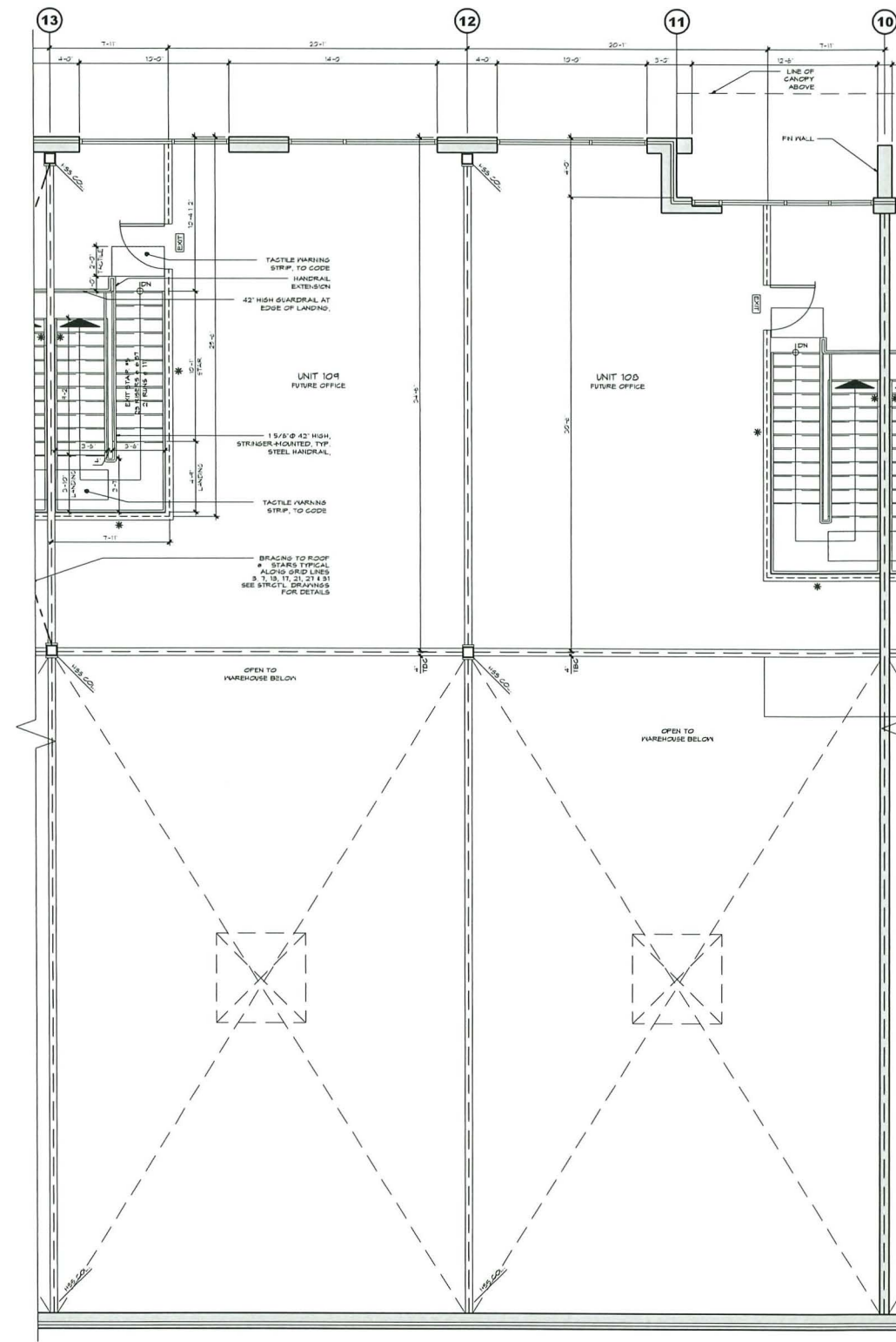
A-1.3 **7**



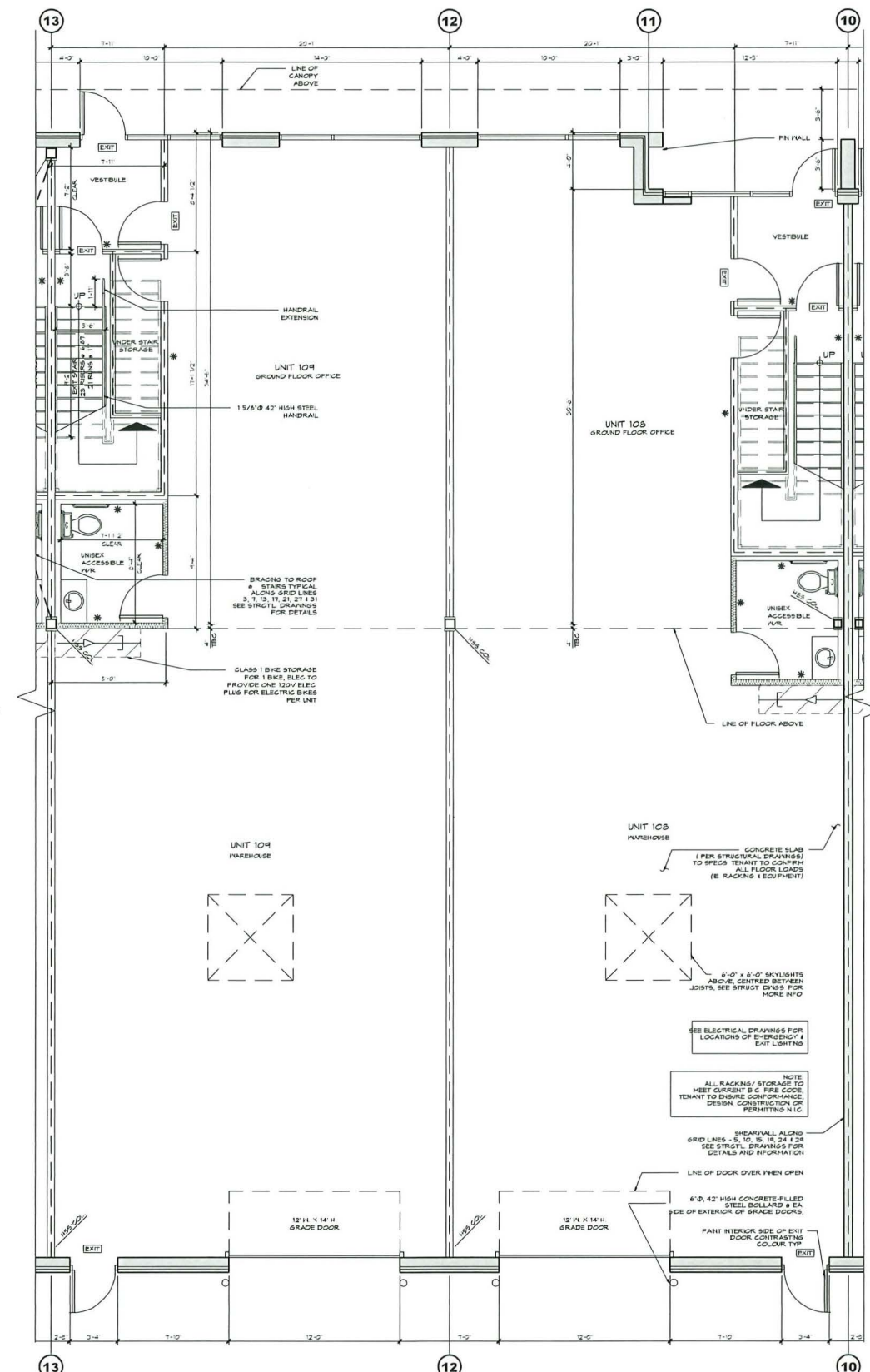
1
OVERALL
GROUND FLOOR PLAN
SCALE 1"=30'-0"



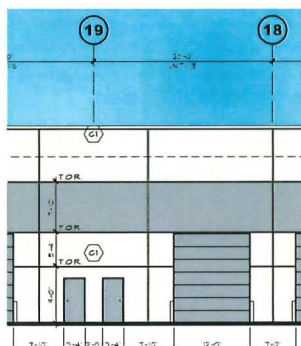
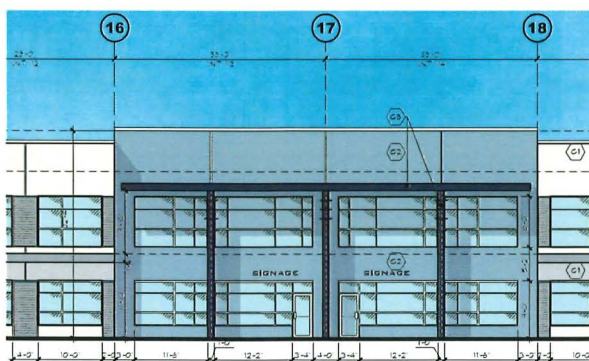
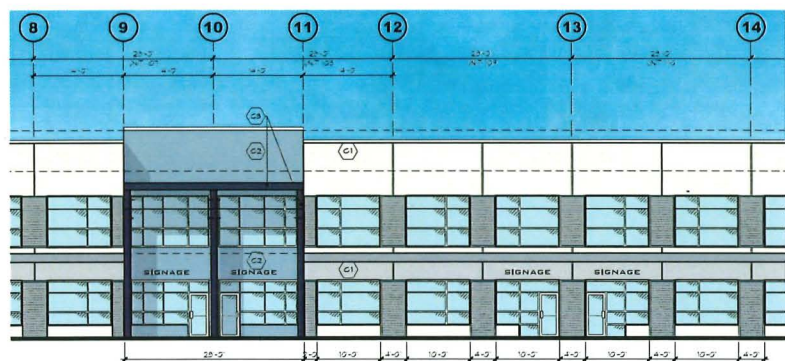
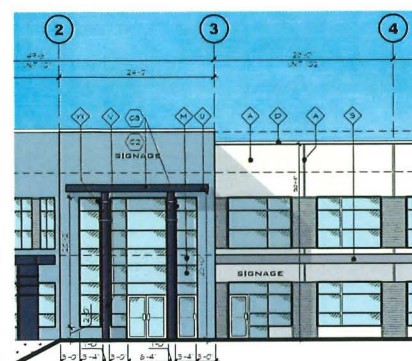
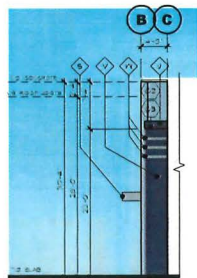
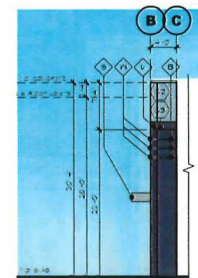
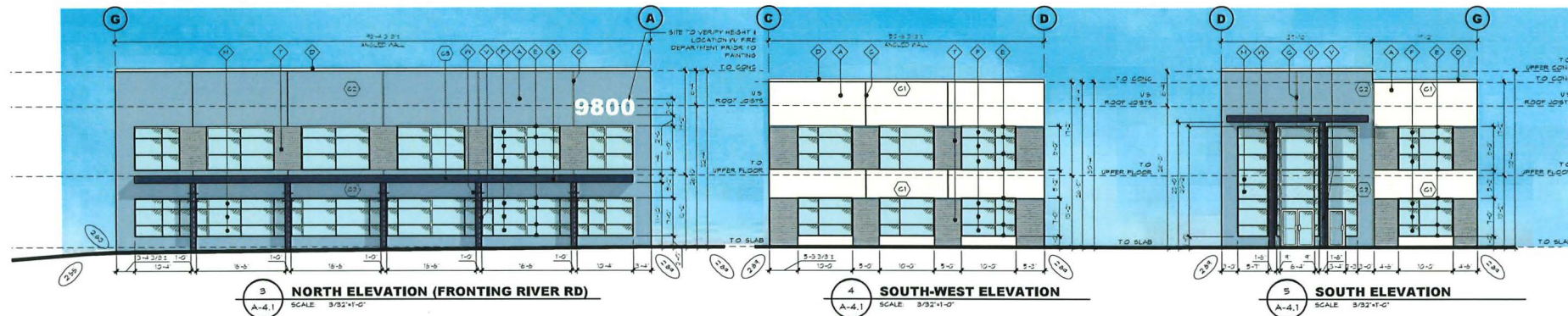
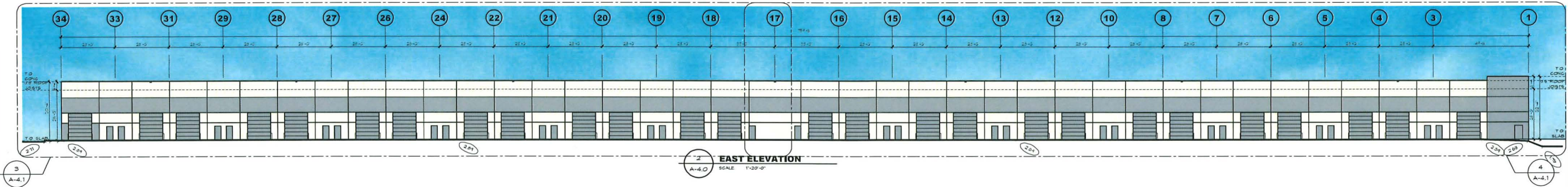
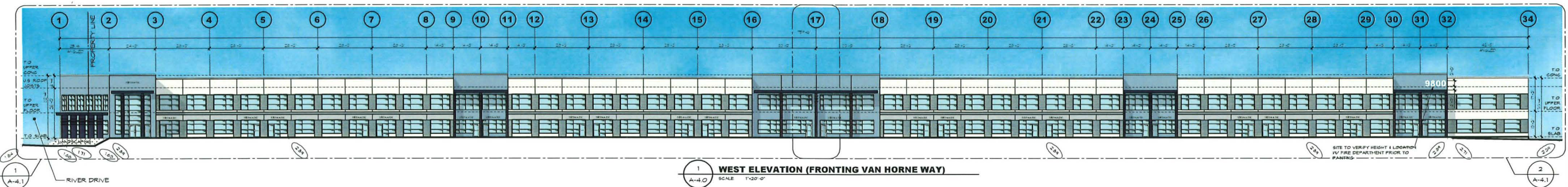
2
OVERALL
SECOND FLOOR PLAN
SCALE 1"=30'-0"



2 ENLARGED UPPER FLOOR PLAN
SCALE: 1/4"=1'-0"



1 ENLARGED GROUND FLOOR PLAN
SCALE: 1/4"=1'-0"



LEGEND:

PROPOSED GRADE

MATERIAL LEGEND

- CONCRETE SANDWICH TILT-UP WALL PANEL, TYP - PAINTED
- REVEAL IN CONCRETE - PAINTED
- PANEL JOINT
- PRE-FINISHED METAL GAP FLASHING
- STOREFRONT FRAMES - CLEAR ANODIZED ALUMINUM
- STOREFRONT GLASS - CLEAR
- STEEL MAIN DOORS - PAINTED
- STEEL SECTIONAL OVERHEAD DOORS - PAINTED
- STEEL GUARDRAILS - PAINTED
- CONCRETE RETAINING WALLS - NATURAL FINISH UNPAINTED TYP.
- LIGHT FIXTURE - SEE ELECTRICAL DWGS
- SPANDREL GLAZING (OBSCURE TO MATCH VISION GLASS)
- SCUPPER
- METAL CLAD CANOPY
- STEEL BOLLARD - PAINTED
- CONCRETE CURB UNDER, PAINTED
- STEEL CANOPY, PAINTED
- HORIZONTAL METAL CLADDING
- ENTRANCE CANOPY
- FIN WALL
- ANODIZED ALUMINUM FRAME ACCENT

NOTE:

NOT ALL MATERIALS ARE APPLICABLE

SPANDREL GLAZING

PROJECT COLOURS

ALL COLOURS SHERWIN WILLIAMS

MAIN FIELD COLOUR 1

FIELD ACCENT COLOUR 1

FIELD ACCENT COLOUR 2

HIGH REFLECTIVE WHITE (SW 7757)

ALUMINUM (SW 6241)

ANCHORS AFRICA (SW 9176)

POINTER GOAT BLACK VELVET

CLEAR ANODIZED ALUMINUM

TYPICAL GLAZING

SPANDREL

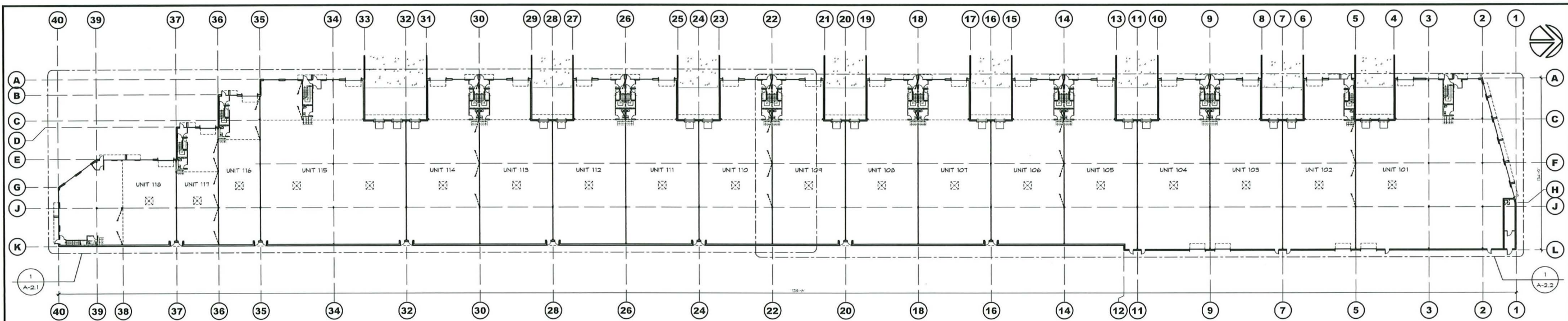
TYPICAL HORIZONTAL CLADDING

TYPICAL METAL GAP FLASHING

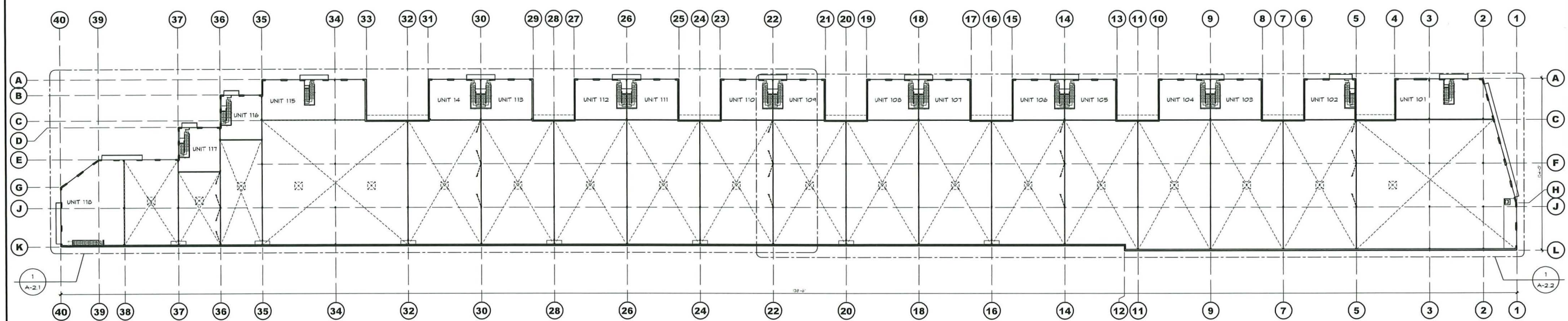
BLACK-GRAY

SALVADORA FINISH

WESTFORTH METALS RESIST GRAY



1 OVERALL GROUND FLOOR PLAN
SCALE: 1/8"=1'-0"



2 OVERALL MEZZANINE PLAN
SCALE: 1/8"=1'-0"

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IN ASSOCIATION WITH
D.FORCE DESIGN INC.
2625A ALLIANCE STREET, ABBOTSFORD, B.C. V2S 3J9
TEL: (604) 607-5655 EMAIL: DARCY@DFORCE.CA

ARCHITECTURE PANEL INC.
ARCHITECTURE, LANDSCAPE ARCHITECTURE, URBAN DESIGN
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ORION CONSTRUCTION
UNIT 105 19923 80A AVE
LANGLEY, BC V2Y 0E2
PHONE: (604) 362-2994

CEDAR COAST
CEDAR COAST
UNIT 3300 - 1021 West Hastings St.
VANCOUVER, BC V6E 0C3

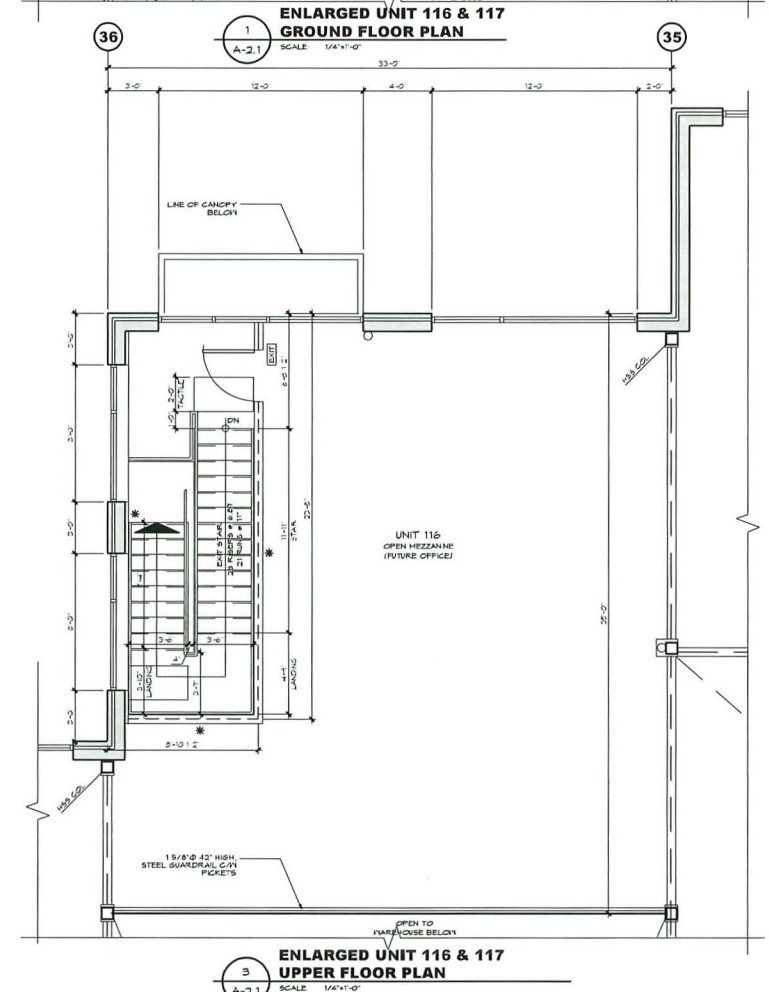
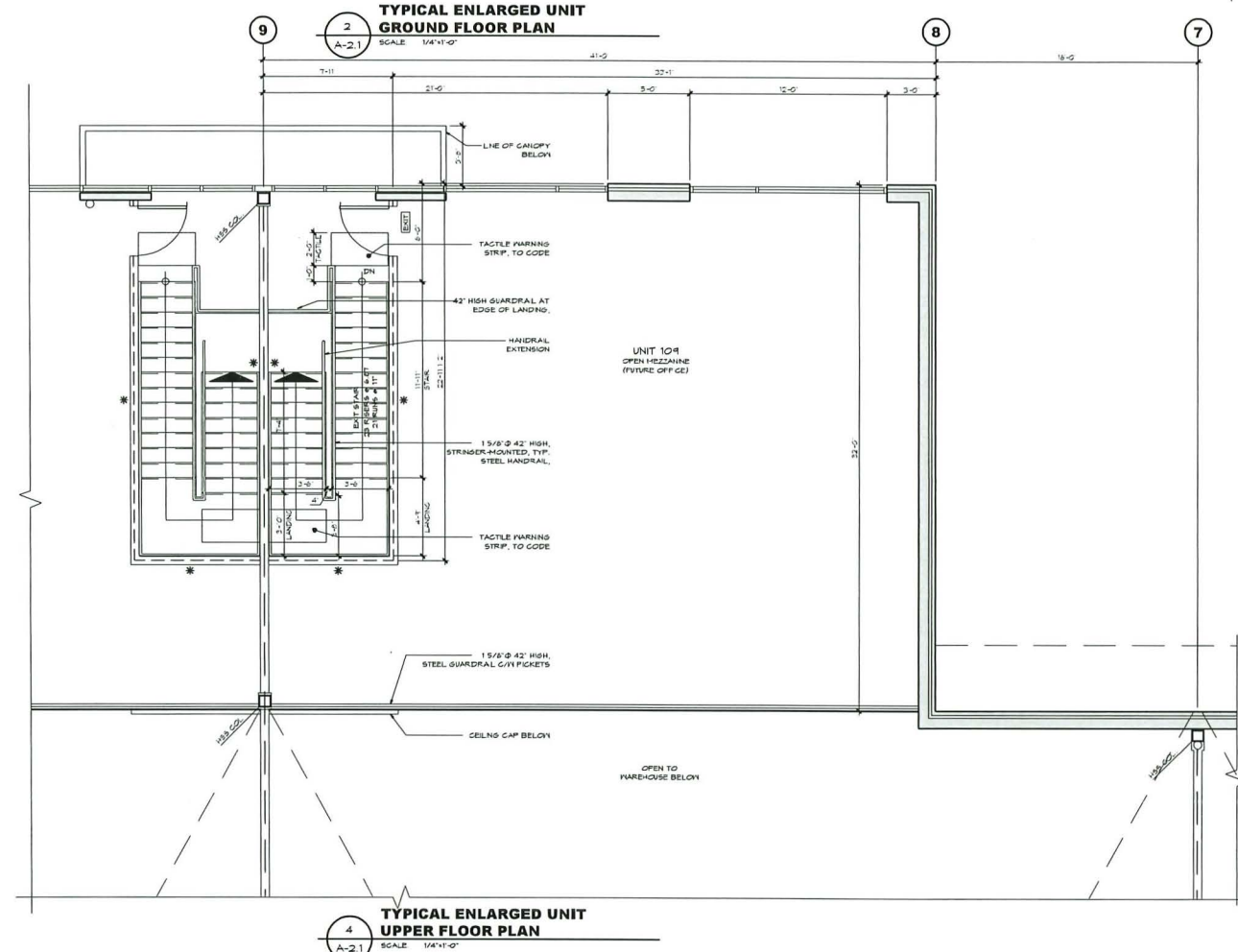
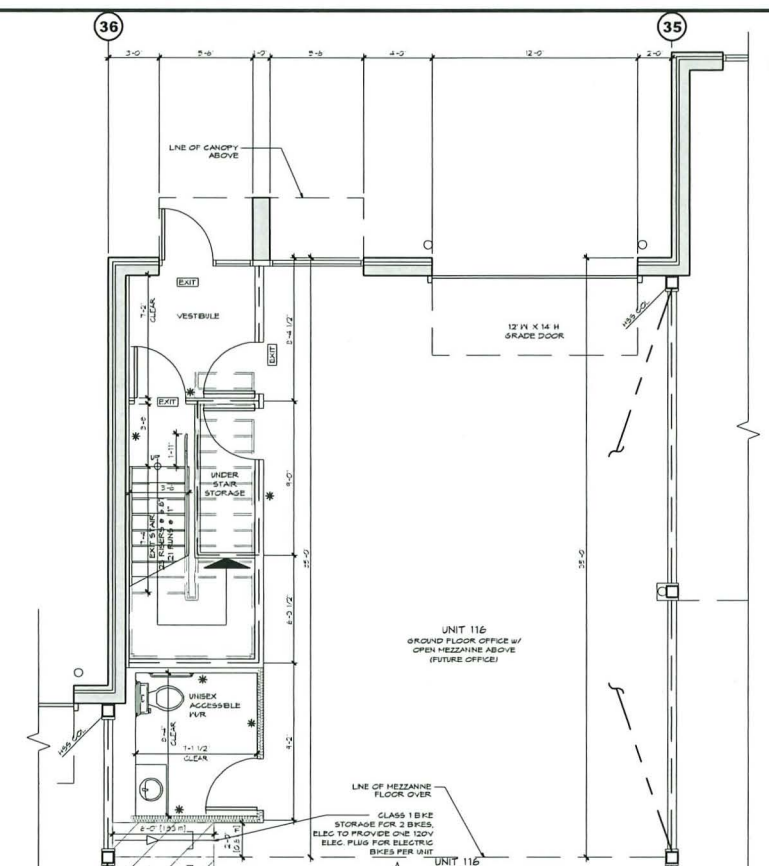
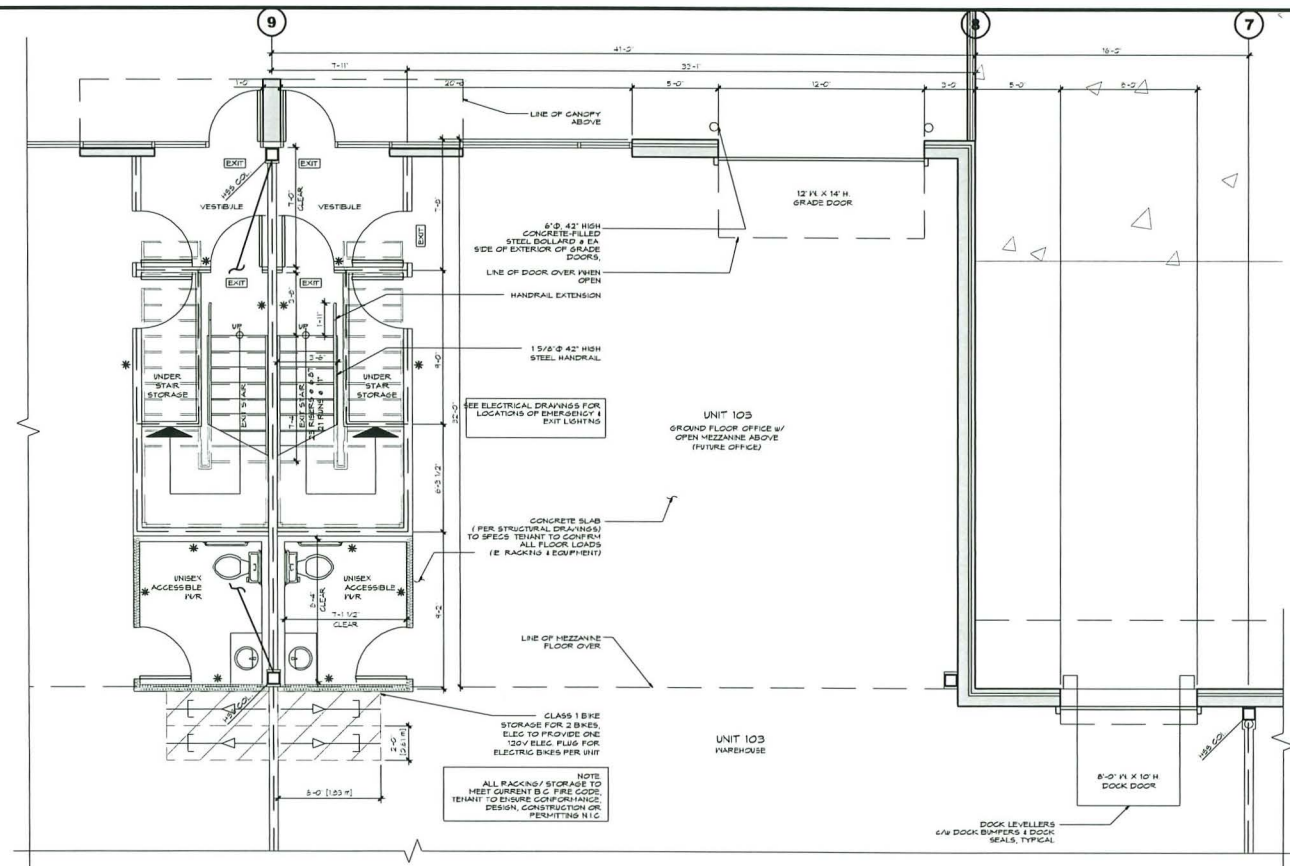
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2	OCT 04, 21	ISSUED FOR OP
3	JAN 10, 22	REISSUED FOR OP
4	DEC 16, 22	UPDATED PER CITY COMMENT
5	MAR 09, 23	CONSULTANT USE
6	MAR 13, 23	UPDATED PER ADP COMMENT
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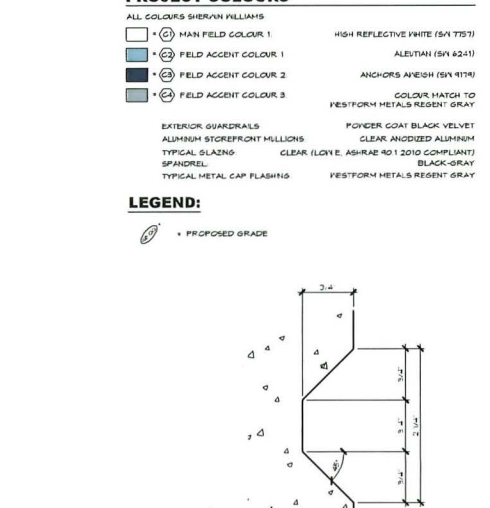
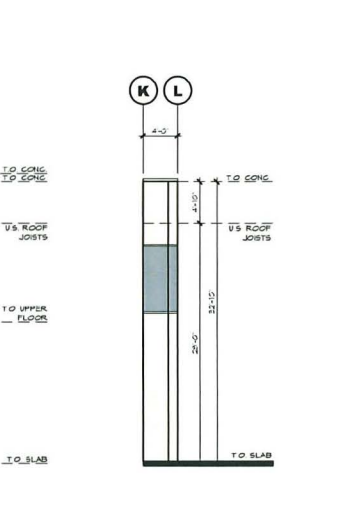
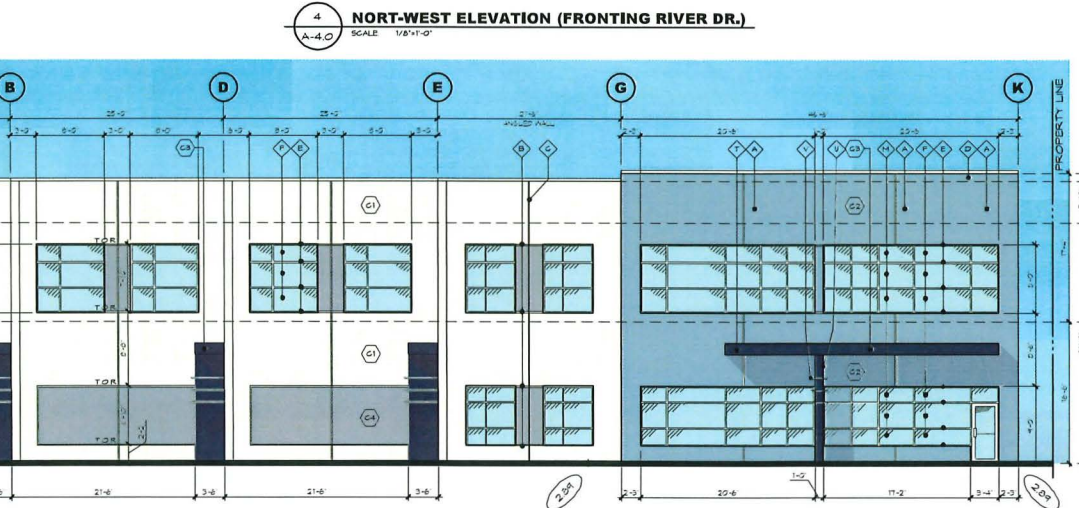
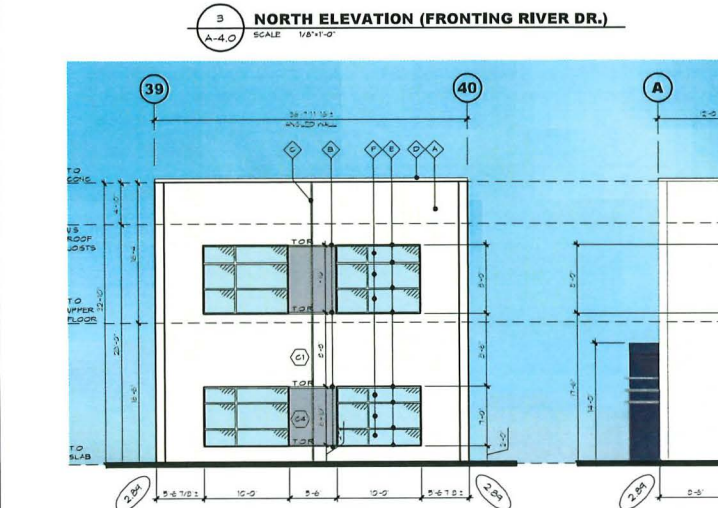
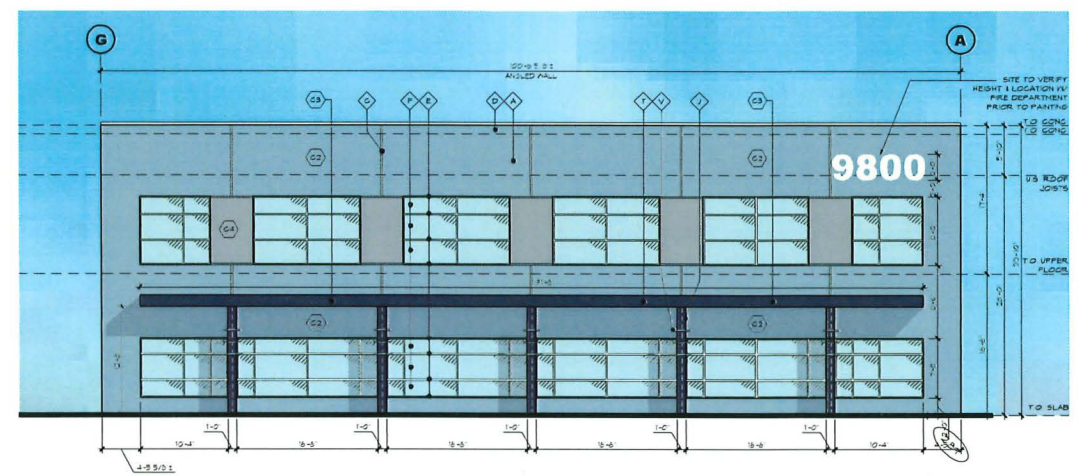
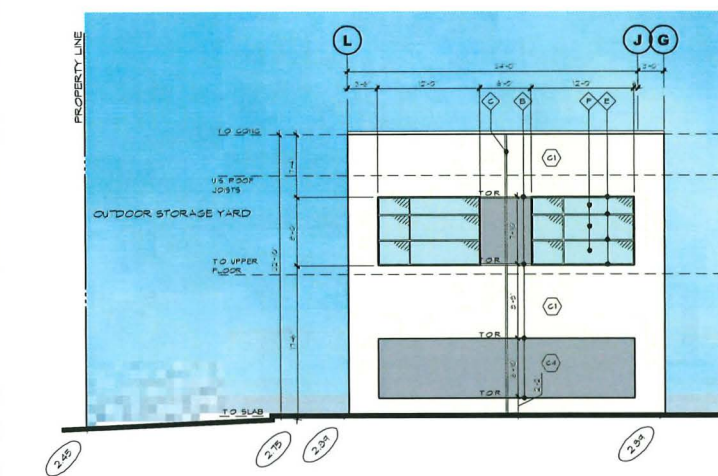
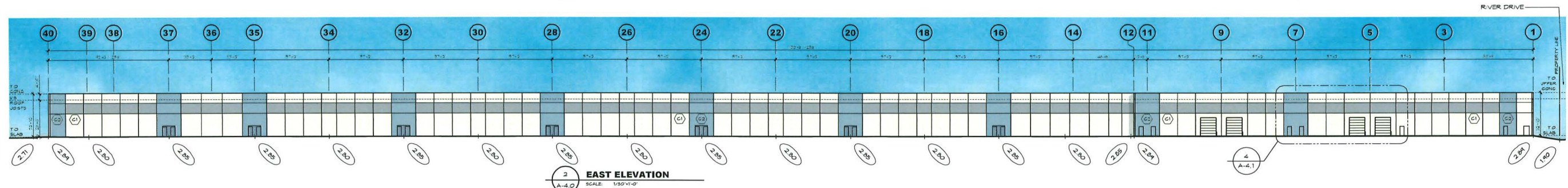
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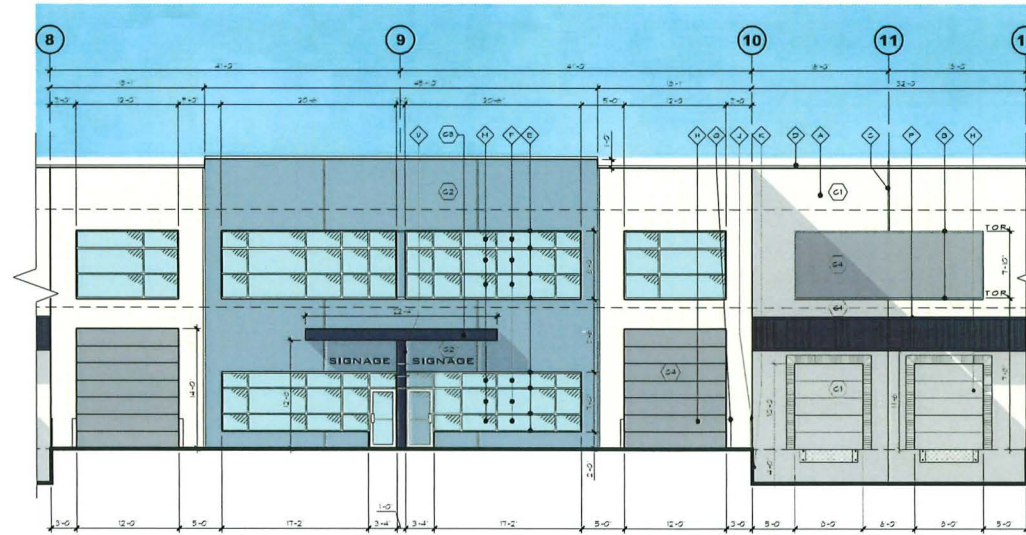
PROJECT: PROPOSED BUILDING FOR
CEDAR COAST VAN HORNE
ADDRESS: 9802 VAN HORNE WAY, RICHMOND, BC
DRAWING: **BUILDING B FLOOR PLANS** REV: 6

DRAWN: [] CHECKED: []
JOB NO.: 31409
DATE PLOTTED: MAR 09, 23
DRAWING NUMBER: **A-2.0**

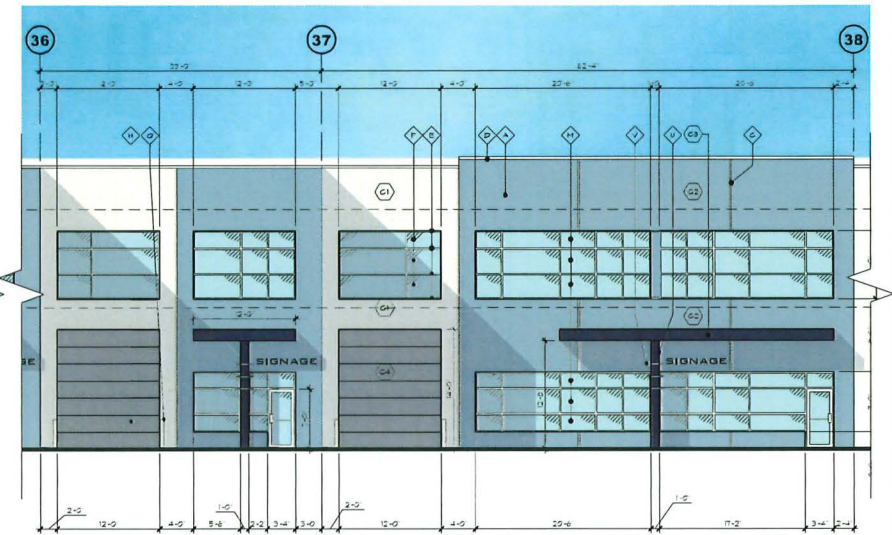




- MATERIAL LEGEND**
- CONCRETE SAATCHI TILT-UP WALL PANEL TYP. - PAINTED
 - REVEAL IN CONCRETE - PAINTED
 - PRE-FINISHED METAL CAP FLASHING
 - STOREFRONT FRAMES - CLEAR ANODIZED ALUMINUM
 - STOREFRONT GLASS - CLEAR
 - STEEL HANDDOORS - PAINTED
 - STEEL SECTIONAL OVERHEAD DOORS - PAINTED
 - STEEL GUARDRAILS - PAINTED
 - CONCRETE RETAINING WALLS - NATURAL FINISH UNPAINTED TYP.
 - LIGHT FIXTURE - SEE ELECTRICAL DWS'S
 - SPANDREL GLAZING (OBSOLETE TO MATCH VISION GLASS)
 - SCUPPER
 - METAL CLAD CANOPY
 - STEEL BOLLARD - PAINTED
 - CONCRETE CURB UNDER, PAINTED
 - STEEL CANOPY, PAINTED
 - ENTRANCE CANOPY
 - FIN WALL
 - ANODIZED ALUMINUM FRAME ACCENT
- NOTE:**
- NOT ALL MATERIALS ARE APPLICABLE
- SPANDREL GLAZING
- PROJECT COLOURS**
- ALL COLOURS SHERWIN WILLIAMS
- MAN FIELD COLOUR 1: HIGH REFLECTIVE WHITE (SW 7751)
 - FELD ACCENT COLOUR 1: ALEUTIAN (SW 6241)
 - FELD ACCENT COLOUR 2: ANCHORS AWEIGH (SW 4174)
 - FELD ACCENT COLOUR 3: COLOUR MATCH TO VESTFORM METALS REGENT GRAY
- EXTERIOR GUARDRAILS: POWDER COAT BLACK VELVET
ALUMINUM STOREFRONT MULLIONS: CLEAR ANODIZED ALUMINUM
TYPICAL GLAZING: CLEAR (LOW E, ASHRAE 401 2010 COMPLIANT)
SPANDREL: BLACK-GRAY
TYPICAL METAL CAP FLASHING: VESTFORM METALS REGENT GRAY
- LEGEND:**
- PROPOSED GRADE



1 ENLARGED WEST ELEVATION
SCALE: 1/8"=1'-0"



2 ENLARGED WEST ELEVATION
SCALE: 1/8"=1'-0"

MATERIAL LEGEND

- CONCRETE SANDWICH TILT-UP WALL PANEL, TYP. - PAINTED
- REVEAL IN CONCRETE - PAINTED
- PANEL JOINT
- PRE-FINISHED METAL CAP FLASHING
- STOREFRONT FRAMES - CLEAR ANODIZED ALUMINUM
- STOREFRONT GLASS - CLEAR
- STEEL HANDDOORS - PAINTED
- STEEL SECTIONAL OVERHEAD DOORS - PAINTED
- STEEL GUARDRAILS - PAINTED
- CONCRETE RETAINING WALLS - NATURAL FINISH UNPAINTED TYP.
- LIGHT FIXTURE - SEE ELECTRICAL DWG'S
- SPANDREL GLAZING (OBSOLETE TO MATCH VISION GLASS)
- SCUPPER
- METAL GLAD CANOPY
- STEEL BOLLARD - PAINTED
- CONCRETE CURB UNDER, PAINTED
- STEEL CANOPY, PAINTED
- ENTRANCE CANOPY
- FIN WALL
- ANODIZED ALUMINUM FRAME ACCENT

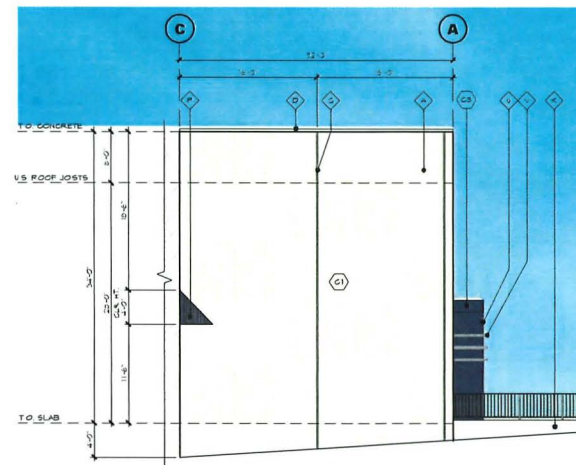
NOTE:
- NOT ALL MATERIALS ARE APPLICABLE
- SPANDREL GLAZING

PROJECT COLOURS

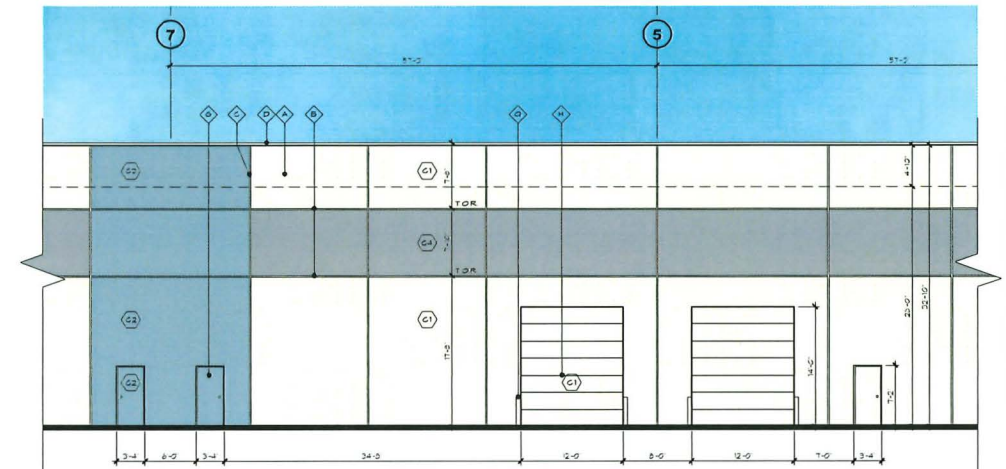
- ALL COLOURS SHERWIN WILLIAMS:
- MAN FIELD COLOUR 1: HIGH REFLECTIVE WHITE (SW 7757)
 - FIELD ACCENT COLOUR 1: ALUMINUM (SW 6241)
 - FIELD ACCENT COLOUR 2: ANCHORS AWEASH (SW 4119)
 - FIELD ACCENT COLOUR 3: COLOUR MATCH TO VESTFORM 1 METALS RESIDENT GRAY
- EXTERIOR GUARDRAILS: POWDER COAT BLACK VELVET
ALUMINUM STOREFRONT MILLWORK: CLEAR ANODIZED ALUMINUM
TYPICAL GLAZING: CLEAR (LOW E, ASHRAE 90.1 2010 COMPLIANT)
SPANDREL: BLACK-GRAY
TYPICAL METAL CAP FLASHING: VESTFORM METALS RESIDENT GRAY

LEGEND:

- PROPOSED GRADE



3 TYPICAL ELEVATION
@ GRID LINES 4, 7, 12, 16, 20, 24, 28, 32
@ GRID LINES (OPP) 3, 5, 9, 14, 18, 22, 26, 30
SCALE: 1/8"=1'-0"



4 ENLARGED EAST ELEVATION
SCALE: 1/8"=1'-0"



To: Development Permit Panel

Date: April 20, 2023

From: Wayne Craig
Director, Development

File: DP 22-019430

Re: Application by Talvinder Jagde for a Development Permit at
10151 Ainsworth Crescent

Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of a coach house at 10151 Ainsworth Crescent on a site zoned "Single Detached with Granny Flat or Coach House Edgemere (REI)";
2. Vary the provisions of Richmond Zoning Bylaw 8500 to:
 - a) increase the maximum setback that a coach house is permitted to be located from the south property line from 2.0 m to 5.95 m; and,
 - b) decrease the minimum setback that a coach house is permitted to be located from the north property line from 2.0 m to 0.90 m.

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

WC:le
Att. 5

Staff Report

Origin

Talvinder Jagde, authorized agent for the property owners (Jim Kirk, Prabherjot Saini, and Robyn Kirk), has applied to the City of Richmond for permission to develop a 58.3 m² (627.5 ft²) coach house at 10151 Ainsworth Crescent on a site zoned "Single Detached with Granny Flat or Coach House – Edgemere (RE1)". A copy of a location map is attached (Attachment 1). The site currently contains one single detached house, which is proposed to be demolished (Attachment 2).

Development Information

Please refer to the attached Development Application Data Sheet (Attachment 3) for a comparison of the proposed development data with the relevant Bylaw requirements.

Background

Development surrounding the subject site is as follows:

- To the north: A single detached house on a lot zoned "Single Detached with Granny Flat or Coach House - Edgemere (RE1)".
- To the south: A single detached house on a lot zoned "Single Detached with Granny Flat or Coach House - Edgemere (RE1)".
- To the east: Across Ainsworth Crescent, a single detached house on a lot zoned "Single Detached with Granny Flat or Coach House - Edgemere (RE1)".
- To the west: Across the rear lane, a single detached house on a lot zoned "Single Detached with Granny Flat or Coach House - Edgemere (RE1)".

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the design guidelines for coach houses in the Edgemere neighbourhood contained in the City's Official Community Plan (OCP), and complies with the "Single Detached with Granny Flat or Coach House Edgemere (RE1)" zone except the below noted variances.

Zoning Compliance/Variations

The applicant has requested to vary the provisions of Richmond Zoning Bylaw 8500 to:

1. Increase the maximum setback that a coach house is permitted to be located from the south property line from 2.0 m to 5.95 m.
2. Decrease the minimum setback that a coach house is permitted to be located from the north property line from 2.0 m to 0.90 m.

The applicant has requested the above variances in order to locate the coach house safely outside of the tree protection zone of a significant tree (Tree ID# os3 - Douglas Fir, DBH 110 cm) located on the neighbouring property to the south (see Tree Retention and Replacement Plan, Attachment 4). In order to ensure that the entirety of the proposed coach house and garage are located outside of the Tree Protection Zone, while also maintaining consistency with Coach House design guidelines, the applicant proposes to shift the coach house and garage to the north side of the property.

Staff supports the proposed variances as they provide for the retention of a significant tree (a 15 m tall Douglas fir with a diameter of 110 cm) which is in good condition. The City Arborist has reviewed the submitted Arborist Report and supports the efforts taken to shift the proposed coach house and garage as far to the north as possible, such that the development is located entirely outside of the Tree Protection Zone.

The proposed variances do not interfere with the overall design of the coach house which is generally consistent with the Development Permit guidelines. The applicant has also provided a shadow analysis (Attachment 5) that demonstrate that the variances to the setback requirements in the zone will not result in undue shadowing of the adjacent property to the north.

Analysis

Conditions of Adjacency

- The proposed coach house design relates to the proposed single detached housing form, character and scale of the surrounding neighbourhood.
- The proposed location of the coach house, which is set back between 1.5 m and 3.0 m from the rear lane, provides an adequate buffer to the adjacent lot to the west.
- The majority of the floor space in the coach house building is proposed on the ground floor (60 per cent, i.e., entry, powder room, living, kitchen/dining), and the portion of the floor space located in the upper half-storey of the coach house is located in the middle of the overall building.
- There are no windows proposed on the north or south side elevations to address concerns of overlook into the neighbouring properties. There are windows proposed on the west and east elevations of the coach house to provide passive surveillance of the lane and maximize light penetration.

Urban Design and Site Planning

- Consistent with the OCP guidelines for coach houses in the Edgemere neighbourhood, the proposed primary pedestrian entry to the coach house is from the rear lane, and secondary pedestrian access to the coach house is proposed via a pathway from Ainsworth Crescent along the south side of the property.
- The west elevation of the coach house that faces the lane has been designed as the primary facade, with a main window off the living area at grade, wood posts with stone bases on either side of the covered front porch, as well as exterior wall and landscape lighting to enhance visibility and appearance of the lane as a public space.

- Consistent with zoning, private outdoor space for the exclusive benefit of the coach house is proposed in the form of a screened and landscaped yard off the south side of the coach house. Access to the private outdoor space is from the front door of the coach house.
- A single shared garbage and recycling enclosure is proposed for the site for use by the residents of the property. The enclosure, which is adequately sized to contain the required number of containers for the single detached house and coach house, is set back 1.5 m from the rear property line and is screened by wood fencing, gates, and a variety of soft landscaping.
- The proposed site plan provides on-site parking in compliance with the Zoning Bylaw, including: two parking spaces for the principal dwelling in the garage off the lane and one unenclosed and permeable parking space for the coach house with access from the lane.
- Prior to development permit issuance, the applicant shall provide a letter of undertaking or contract with a certified arborist for the supervision of all works to be completed within the Tree Protection zone of trees #os3 and os4, including landscaping and footing preparation and installation.

Architectural Form and Character

- The proposed exterior building materials and colours of the coach house are consistent with the building styles in the neighbourhood, and include horizontal white Hardie-plank siding with black trim and grey stone accents.
- The primary facade of the coach house facing the lane is proposed to be visually broken into smaller components through the inclusion of a covered front porch, and an upper covered deck.

Landscape Design and Open Space Design

- Tree retention and removal was assessed as part of this application. One significant 110 cm Douglas fir tree (Tree ID # os3) and a 23 cm magnolia tree (Tree ID# os4) which are in proximity to the proposed coach house and located on the neighbouring property to the south are required to be retained and protected. Tree protection fencing must be installed and inspected prior to issuance of a Demolition Permit for the existing single detached house or the Building Permit for the coach house. The proposed Tree Retention and Removal Plan is included in Attachment 4.
- There are no on-site trees in the area of the proposed coach house and garage. Future assessment of on-site tree retention and removal associated with any new single-family dwelling to be constructed on the property will be assessed and reviewed at the time of the building permit application for the single-family dwelling.
- The applicant proposes to plant three new trees on-site adjacent to the proposed coach house and garage.
- The area surrounding the coach house main entrance, adjacent to the rear lane, is proposed to be treated with a combination of shrubs and flowering plants to enhance the appearance of the lane.
- The private open space for the coach house is proposed at grade, in the rear yard to the south of the coach house, and is defined through the planting of shrubs.

The proposed open space is adequately sized and shaped to comply with the "Single Detached with Granny Flat or Coach House Edgemere (RE1)" zone.

- Prior to DP issuance, the applicant is required to submit a Landscaping Security for the proposed works, based on 100 per cent of the cost estimate provided by the Landscape Architect (including a 10 per cent contingency, soft and hard landscaping, fencing and installation).

Crime Prevention Through Environmental Design

- Consistent with the design guidelines for coach houses in the OCP, the proposed coach house design enables natural surveillance by locating windows and living areas overlooking the lane.
- Similarly, the applicant proposes exterior lighting on the eaves facing the lane, as well as porch lighting at the coach house's main entry to maintain visibility and safety. The lighting will be designed to limit spillover onto adjacent lots.

Energy Efficiency

- The applicant has indicated that they intend to achieve Step 3 of the BC Energy Step Code, and will provide a Low Carbon Energy System, consistent with the City's requirements.

Conclusions

The applicant is seeking permission to build a coach house in the rear yard of the subject property at 10151 Ainsworth Crescent in the Edgemere neighbourhood.

The proposal aims to respect the existing character of the immediate surrounding neighbourhood which consists of single detached housing, by conforming to the design guidelines for coach houses in the OCP. The proposed construction of the coach house complies with the requirements of the "Single Detached with Granny Flat or Coach House - Edgemere (RE1)" zone, with the exception of the two variances requested to allow for the retention of a significant tree.

On this basis, staff recommends support for this Development Permit application.



Laurel Eyton
Planning Technician
(604-276-4262)

LE:js

- Att. 1: Location Map
 2: Survey Plan
 3: Development Application Data Sheet
 4: Tree Retention and Replacement Plan
 5: Shadow Study

The following are to be met prior to forwarding this application to Council for approval:

- Registration of a flood indemnity covenant on Title.
- Receipt of a Letter-of-Credit for landscaping in the amount of 100 per cent of the costs of soft and hard landscaping, installation, and a 10 per cent contingency.
- Receipt of a Letter of Undertaking from Arborist indicating that they will be on site to supervise all works within the Tree Protection Zone, and within 1.0 m of the Tree Protection Zone. The contract/letter of undertaking must include the scope of work to be supervised, any protection measures required to ensure tree protection, as well as a provision for the Arborist to submit a post-construction impact assessment report to the City for review.

Prior to future Building Permit issuance, the developer is required to complete the following:

- Demonstrate compliance with the Development Permit plans.
- Demonstrate compliance with the applicable level of the BC Energy Step Code.
- Install tree protection fencing to City standard around the driplines of any protected trees in accordance with the City's Tree Protection Information Bulletin (TREE-03), which must remain in place until construction and landscaping is completed.
- The applicant is required to obtain a Building Permit for any construction hoarding associated with the proposed development. If construction hoarding is required to temporarily occupy a street, or any part thereof, or occupy the air space above a street or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. *For further information on the Building Permit, please contact Building Approvals Department at 604-276-4285.*
- Submission of a construction traffic and parking management plan to the satisfaction of the City's Transportation Department (<http://www.richmond.ca/services/ttp/special.htm>).



City of Richmond

Development Permit

No. DP 22-019430

To the Holder: Talvinder Jagde
Property Address: 10151 Ainsworth Crescent
Address: 6391 No. 5 Road, Richmond BC

1. This Development 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 Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. The "Richmond Zoning Bylaw 8500" is hereby varied to:
 - a) increase the maximum setback that a coach house is permitted to be located from the south property line from 2.0 m to 5.95 m; and,
 - b) decrease the minimum setback that a coach house is permitted to be located from the north property line from 2.0 m to 0.90 m.
4. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #8 attached hereto.
5. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
6. As a condition of the issuance of this Permit, the City is holding the security based on 100% of the cost estimate for the proposed works around the coach house (including 10% contingency, soft and hard landscaping, fencing and installation) 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. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
7. 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.

Development Permit
No. DP 22-019430

To the Holder: Talvinder Jagde
Property Address: 10151 Ainsworth Crescent
Address: 6391 No. 5 Road, Richmond BC

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.

This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO.
DAY OF , .

ISSUED BY THE COUNCIL THE

DELIVERED THIS DAY OF , .

MAYOR



DP 22-019430

Attachment 3

Address: 10151 Ainsworth Crescent

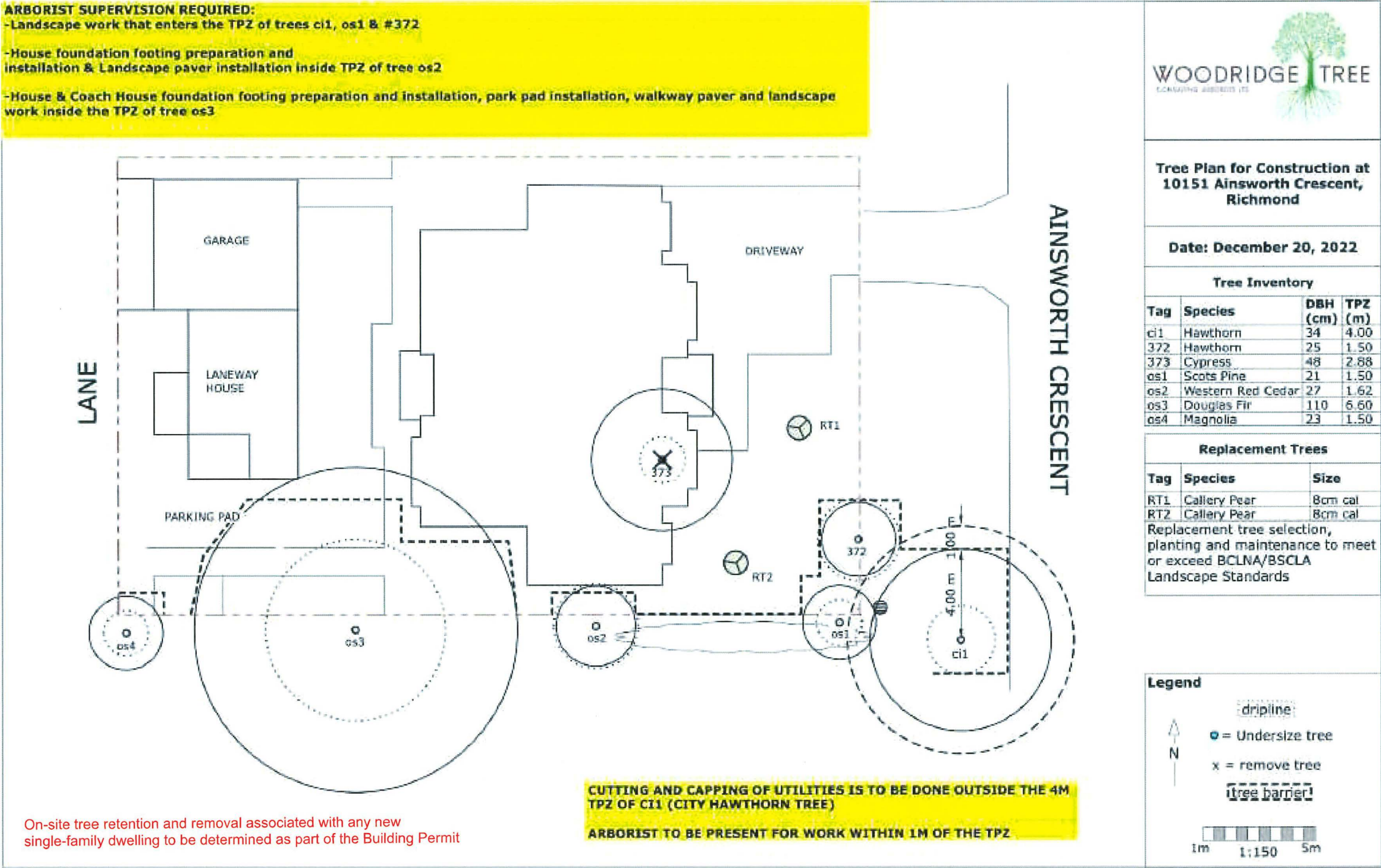
Applicant: Talvinder Jagde

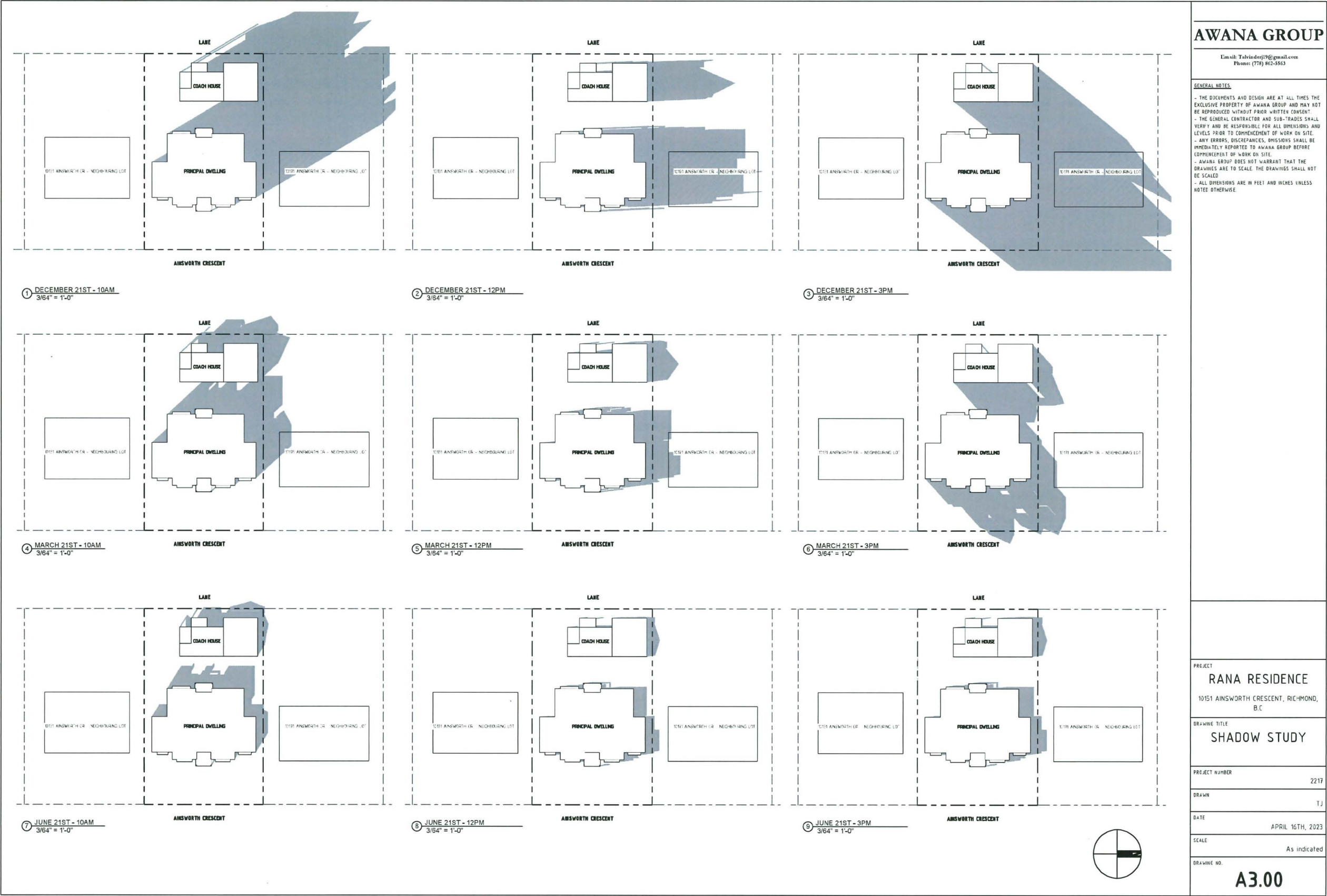
Owners: Jim Kirk, Prabherjot Saini, and Robyn Kirk

Planning Area(s): Shellmont

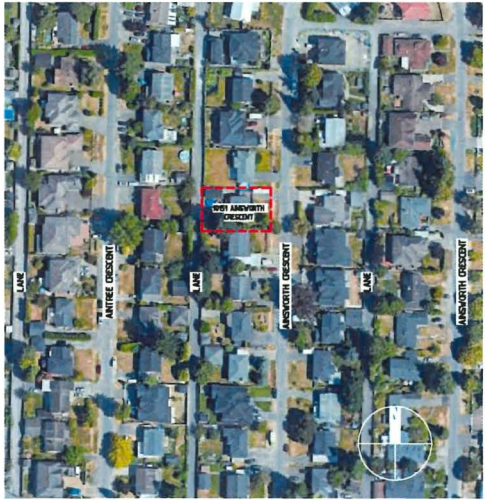
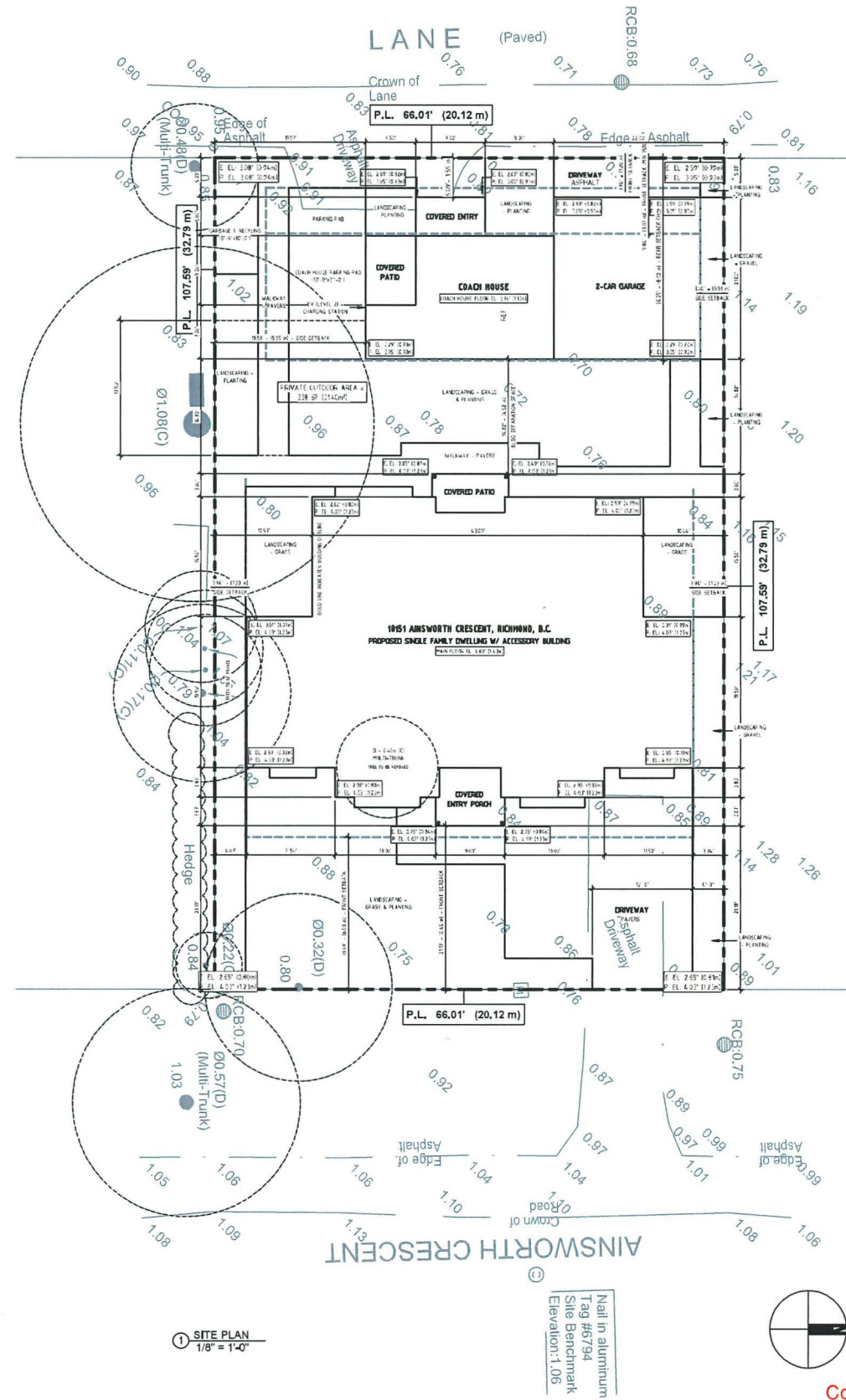
	Existing	Proposed
Site Area:	659 m ²	659 m ²
Land Uses:	Single detached residential	Single detached residential with detached coach house
OCP Designation:	NRES	NRES
Zoning:	RE1	RE1
Number of Units:	1	1 Single Detached House 1 Coach House

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. $0.6 \times 464.5 \text{ m}^2 + 0.3 \times \text{remainder} = 337 \text{ m}^2 (3,627 \text{ ft}^2)$	$0.6 \times 464.5 \text{ m}^2 + 0.3 \times \text{remainder} = 337 \text{ m}^2 (3,267 \text{ ft}^2)$	none permitted
Coach House Size	Min. 33 m ² and Max. 60 m ²	58.3 m ² (627.5 ft ²)	no
Lot Coverage:	Building: Max. 45% Non-porous surfaces: Max. 70% Live Landscaping: Min. 20%	Building: Max. 45% Non-porous surfaces: Max. 70% Live Landscaping: Min. 20%	no
Setback – Side Yard, north (coach house):	Min. 2.0 m	0.9 m	Variance Requested
Setback – Side Yard, south (coach house):	Max. 2.0 m	5.95 m	Variance Requested
Setback – Rear Yard (coach house):	Min. 1.2 m for max. 65% of rear façade; 3.0 m for min. 35% of rear façade; min. 1.5 m to entry	Min. 1.2 m for max. 65% of rear façade; 3.0 m for min. 35% of rear façade; min. 1.5 m to entry	no
Separation between single detached house and coach house:	Min. 4.5 m	5.4 m	no
Height (m) (coach house):	Max 1 ½ storeys or 6.0 m	Max 1 ½ storeys or 6.0 m	no
Lot Size:	Min. 550 m ²	660 m ²	none permitted
Off-street Parking Spaces – (coach house):	Min. 1	1	no
Amenity Space – Outdoor (coach house):	Min. 30 m ²	31.4 m ²	no





PROJECT	RANA RESIDENCE
	10151 AINSWORTH CRESCENT, RICHMOND, B.C.
DRAWING TITLE	SHADOW STUDY
PROJECT NUMBER	2217
DRAWN	TJ
DATE	APRIL 16TH, 2023
SCALE	As indicated
DRAWING NO.	A3.00



CONTEXT PLAN
N.T.S.

PROJECT SUMMARY

PROPERTY DESCRIPTION	10151 AINSWORTH CRESCENT, RICHMOND, B.C.
OWN: ADDRESS	LOT 31, SECTION 25, BLOCK 4, R.G. PLAN N472511, P.O. 500-448-300
LEGAL DESCRIPTION	SINGLE DETACHED WITH COACH HOUSE - (EDGEWELL 3465)
ZONING	PROPOSED SINGLE FAMILY DWELLING W/ DETACHED COACH HOUSE GROUP C
PROPOSAL	
LOT DIMENSIONS	
LOT WIDTH	66.31'
LOT DEPTH	127.12'
LOT AREA	8437.57 SF

ZONING ANALYSIS

HEIGHT CALCULATION (RESIDENTIAL BUILDING)	
ALLOWABLE MAX BLDG HEIGHT	3 1/2 STOREYS BUT SHALL NOT EXCEED RESIDENTIAL VERTICAL LOT DEPTH & WIDTH ENVELOPE

PROPOSED BUILDING HEIGHT	28.54'
HEIGHT CALCULATION (ACCESSORY BUILDING)	
ALLOWABLE MAX BLDG HEIGHT	10.00'

PROPOSED BUILDING HEIGHT	9.64'
HEIGHT CALCULATION (ACCESSORY BUILDING)	
ALLOWABLE MAX BLDG HEIGHT	10.00'

BUILDING SETBACKS (RESIDENTIAL BUILDING)	REQUIRED	PROPOSED
FRONT LOT LINE SETBACK	10' (P. 60.04)	21' (P. 64.64)
INTERIOR LOT LINE SETBACK	10' (P. 60.04)	10' (P. 60.04)
REAR LOT LINE SETBACK	10' (P. 60.04)	42' (P. 102.44)
BUILDING SETBACKS (ACCESSORY BUILDING)	REQUIRED	PROPOSED
FRONT LOT LINE SETBACK	10' (P. 60.04)	10' (P. 60.04)
INTERIOR LOT LINE SETBACK	10' (P. 60.04)	10' (P. 60.04)
REAR LOT LINE SETBACK	10' (P. 60.04)	10' (P. 60.04)

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE STANDARDS OF BRITISH COLUMBIA BUILDING CODE (BCBC) AND IN CASE OF A DISCREPANCY BETWEEN SPECIFICATIONS OF THESE DRAWINGS AND BCBC, THE MORE STRINGENT SHALL APPLY.
2. ALL EXTERIOR AND OVERALL DIMENSIONS ARE TO THE OUTSIDE FACE OF THE SHEATHING.
3. ALL DIMENSIONS TO BE SHOWN TO 2 DECIMAL PLACES EXCEPT AS NOTED OTHERWISE.
4. JOISTS TO BE STRAINED FROM TWISTING AT END SUPPORTS AND AT INTERVALS OF MAXIMUM 7'-0" (GROSS MEASUREMENT, CONTINUOUS STRAPPING, ETC.).
5. ALL WOOD MEMBERS IN CONTACT WITH CONCRETE TO BE PROTECTED WITH A USA APPROVED PRESERVATIVE.
6. ALL LUMBER, FLOOR BOARDS AND RAILINGS OF EXTERIOR BALCONIES, SUNDRIES AND PATIOS TO BE TREATED WITH A USA APPROVED WOOD PRESERVATIVE.
7. ALL GLAZING WITHIN 10' OF FLOOR TO BE SAFETY GLASS.
8. ALL GLAZED SHOWER OR BATHTUB ENCLOSURES, GLAZED DOORS AND SIDEWALLS AND WINDOW WITHIN 5'-0" OF DOCKINGS TO BE OF SAFETY GLASS.
9. ALL WERED DOORS SHALL CONFORM TO B.C.B.C. 9.12.02.
10. ALL EXTERIOR WINDOWS AND GLAZED DOORS TO BE DOUBLE GLAZED IN ALUMINUM VINYL FRAME, EXCEPT AS NOTED OTHERWISE.
11. ALL GLASS IN NON-FACTORY-BUILT SKYLIGHTS SHALL BE LAMINATED, TEMPERED OR WERED GLASS.
12. ALL WINDOWS, DOORS & SKYLIGHTS SHALL CONFORM TO B.C.B.C. 9.12.02.
13. ALL ENTRY DOORS SHALL CONFORM TO B.C.B.C. 9.12.02.
14. ALL WINDOWS LOCATED WITHIN 2 METERS OF ADJACENT'S GROUND LEVEL SHALL CONFORM TO B.C.B.C. 9.12.02.
15. ALL INTERIOR WINDOWS SHALL CONFORM TO B.C.B.C. REQUIREMENTS. EACH BEDROOM SHALL HAVE AT LEAST ONE OUTSIDE WINDOW GRABABLE FROM INSIDE WITH THE USE OF TOOLS OR SPECIAL KNOWLEDGE OR UNSTRUCTURED OPENING W/ AREA NOT LESS THAN 0.35 sq. m. AND NO DIMENSION LESS THAN 300 mm.
16. ALL HANDRAILS TO BE 2" MINIMUM AND 7'-0" MAXIMUM ABOVE STAIR NOSING.
17. ALL EXTERIOR HANDRAILS TO BE 2'-0" MINIMUM.
18. ALL RAILING GUARDS SHALL BE DESIGNED TO PREVENT THE PENETRATION OF A SPHERICAL OBJECT OF MAXIMUM 1".
19. INSTALLED SMOKE ALARMS SHALL CONFORM TO B.C.B.C. 9.12.02.
20. ALL FACTORY-BUILT PREFABRICATED AND THEIR INSTALLATION SHALL CONFORM TO B.C.B.C. 9.12.02.
21. PROVIDE VENT OF ATT. AREA IN UNSTRUCTURED AREA FOR VENTILATION.
22. FLOOR FINISHES IN BATHROOMS TO BE IMPERMEABLE.
23. GYPSUM WALLBOARD AROUND TUBS AND SHOWERS TO BE OF WATER RESISTANCE TYPE.
24. ALL INTERIOR FINISHES AS PER OWNER'S SPECIFICATIONS.

DRAWING LIST		
No.	SHEET NAME	
A0.00	COVER SHEET	
A1.00	FOUNDATION	
A1.01	AREA PLANS	
A2.00	ELEVATIONS & SECTIONS	
A3.00	SHADOW STUDY	

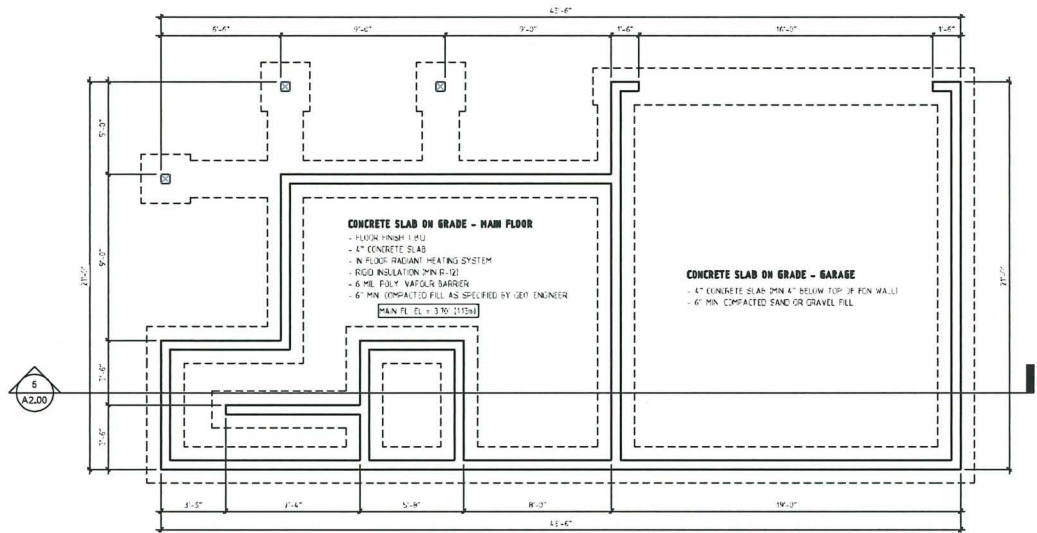
AWANA GROUP

Email: Talvinderj0@gmail.com
Phone: (778) 462-5563

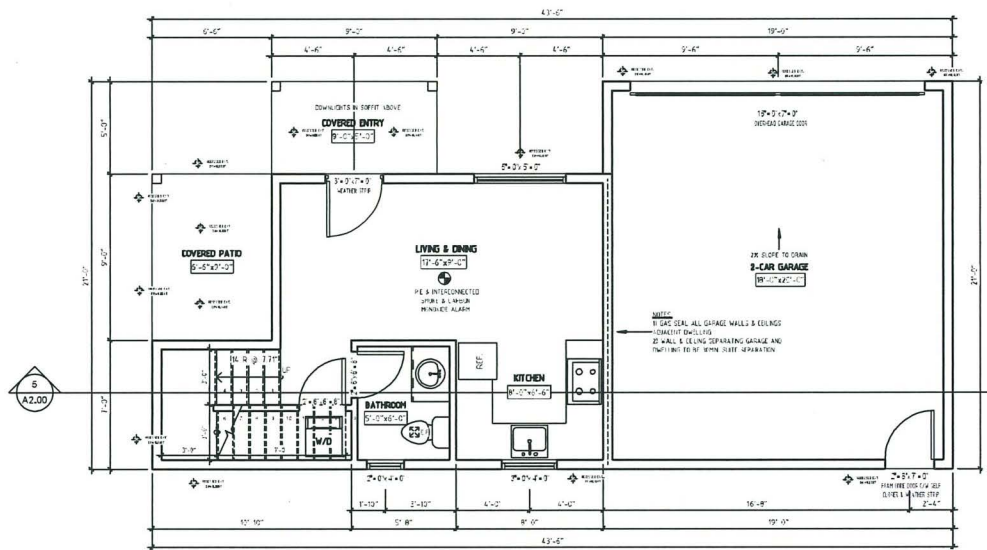
GENERAL NOTES:

- THE DOCUMENTS AND DESIGN ARE AT ALL TIMES THE EXCLUSIVE PROPERTY OF AWANA GROUP AND MAY NOT BE REPRODUCED WITHOUT PRIOR WRITTEN CONSENT.
- THE GENERAL CONTRACTOR AND SUB-TRADES SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND LEVELS PRIOR TO COMMENCEMENT OF WORK ON SITE.
- ANY ERRORS, DISCREPANCIES, OMISSIONS SHALL BE IMMEDIATELY REPORTED TO AWANA GROUP BEFORE COMMENCEMENT OF WORK ON SITE.
- AWANA GROUP DOES NOT WARRANT THAT THE DRAWINGS ARE TO SCALE. THE DRAWINGS SHALL NOT BE SCALED.
- ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS NOTED OTHERWISE.

PROJECT	RANA RESIDENCE	PROJECT NUMBER	2217
	10151 AINSWORTH CRESCENT, RICHMOND, B.C.	DRAWN	T.J.
		DATE	APRIL 16TH, 2023
DRAWING TITLE	COVER SHEET	SCALE	As indicated
		DRAWING NO.	A0.00

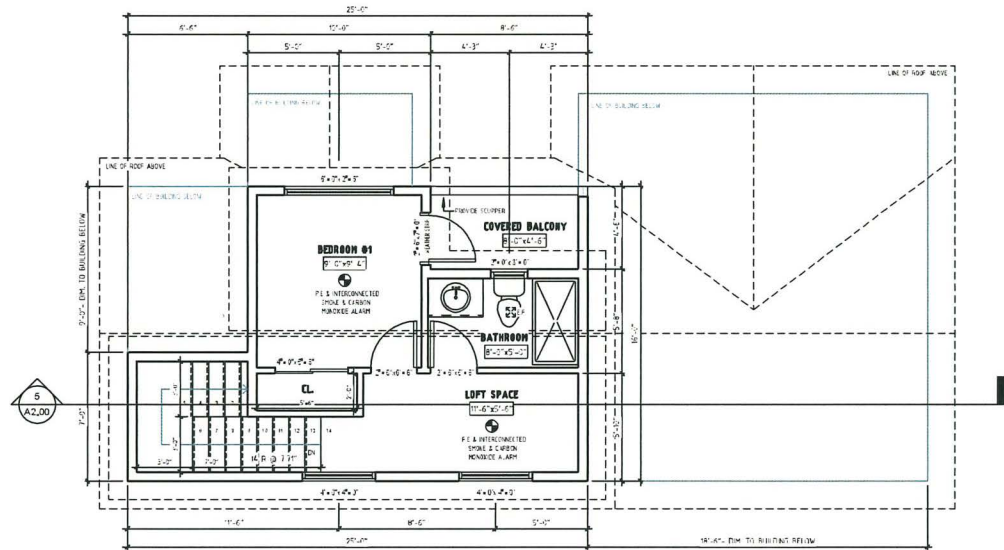


1 FOUNDATION PLAN - COACH HOUSE
1/4" = 1'-0"



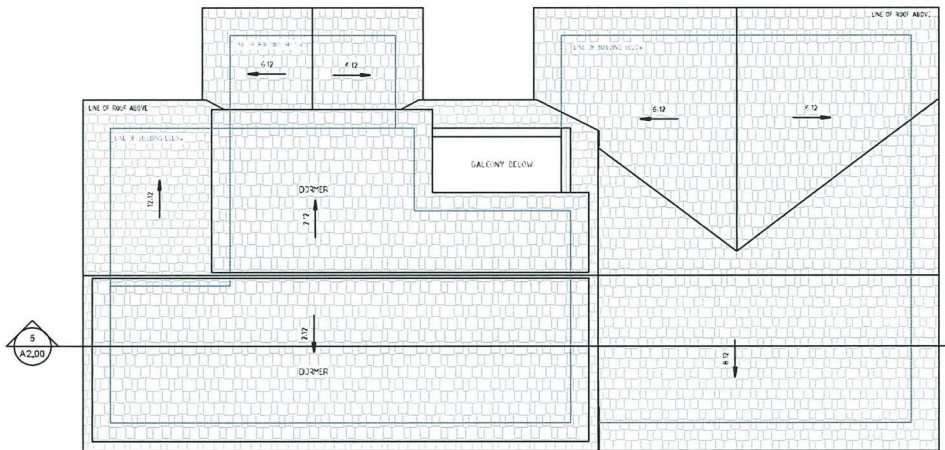
2 MAIN FLOOR - COACH HOUSE
1/4" = 1'-0"

CEILING HEIGHT = 8'-0"
MAIN FLOOR AREA = 341.83 SF (31.76m²)
GARAGE AREA = 430.50 SF (39.99m²)
COVERED ENTRY AREA = 47.50 SF (4.41m²)
CARPORT AREA = 79.50 SF (7.39m²)



3 UPPER FLOOR - COACH HOUSE
1/4" = 1'-0"

CEILING HEIGHT = 8'-0"
UPPER FLOOR AREA = 285.67 SF (26.54m²)
BALCONY AREA = 39.67 SF (3.69m²)

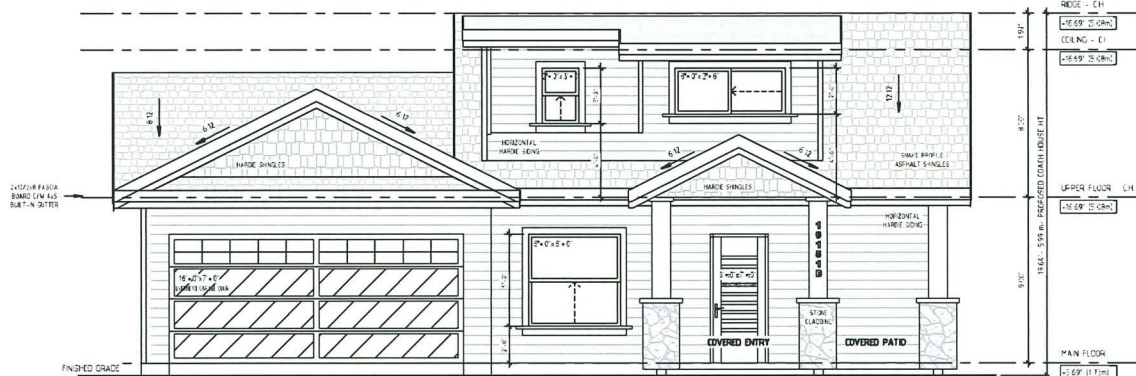


4 ROOF PLAN - COACH HOUSE
1/4" = 1'-0"

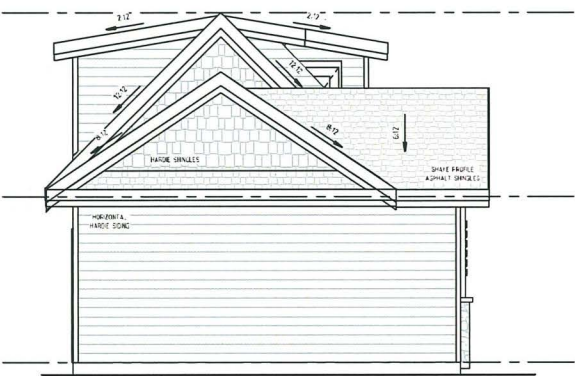
NOTES:
1) VENT AND DRAIN LOCATIONS TO BE COORDINATED ON SITE BY CONTRACTOR
2) VENTILATION AT 1/300 OF INSULATED AREA
3) OVERHANG TO BE 1'-6" UNLESS NOTED OTHERWISE

Coach House to comply with BC Building Code

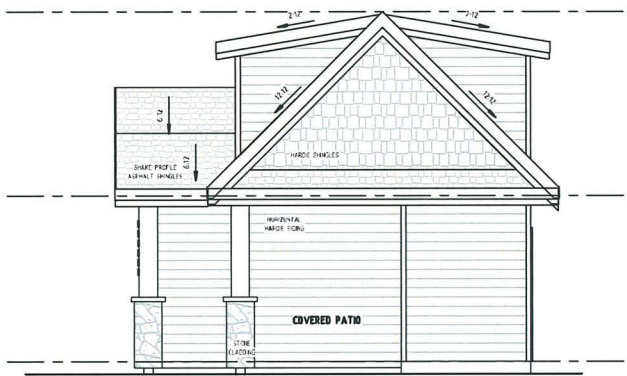
<div>AWANA GROUP</div> <div>Email: Tatvinderj19@gmail.com Phone: (778) 862-5563</div> <div>GENERAL NOTES: - THE DOCUMENTS AND DESIGN ARE AT ALL TIMES THE EXCLUSIVE PROPERTY OF AWANA GROUP AND MAY NOT BE REPRODUCED WITHOUT PRIOR WRITTEN CONSENT. - THE GENERAL CONTRACTOR AND SUB-TRADES SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND LEVELS PRIOR TO COMMENCEMENT OF WORK ON SITE. - ANY ERRORS, DISCREPANCIES, OMISSIONS SHALL BE IMMEDIATELY REPORTED TO AWANA GROUP BEFORE COMMENCEMENT OF WORK ON SITE. - AWANA GROUP DOES NOT WARRANT THAT THE DRAWINGS ARE TO SCALE. THE DRAWINGS SHALL NOT BE SCALED. - ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS NOTED OTHERWISE.</div>	PROJECT RANA RESIDENCE 10151 AINSWORTH CRESCENT, RICHMOND, B.C.	PROJECT NUMBER 2217
	DRAWING TITLE FLOOR PLANS	DRAWN TJ
		DATE APRIL 16TH, 2023
		SCALE As indicated
		DRAWING NO. A1.00



1 FRONT (WEST) ELEVATION - COACH HOUSE
1/4" = 1'-0"



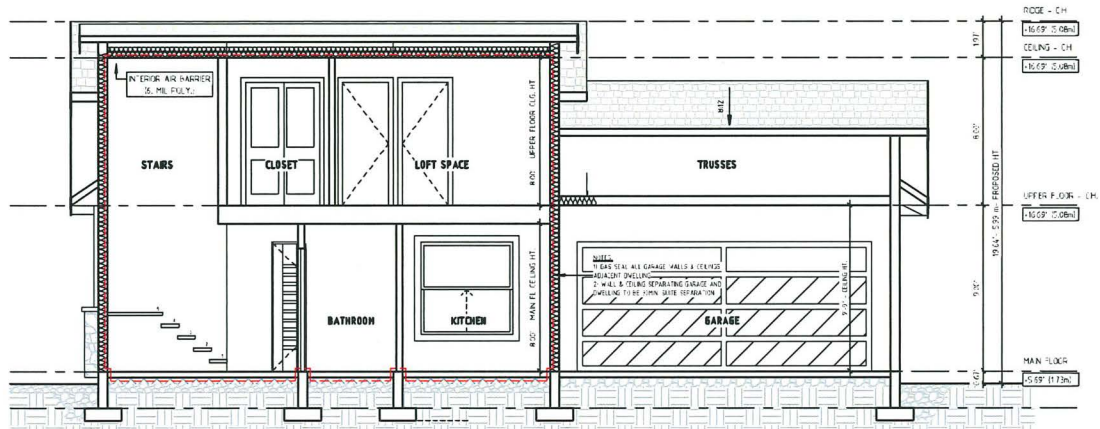
2 LEFT (NORTH) ELEVATION - COACH HOUSE
1/4" = 1'-0"



3 RIGHT (SOUTH) ELEVATION - COACH HOUSE
1/4" = 1'-0"



4 REAR (EAST) ELEVATION - COACH HOUSE
1/4" = 1'-0"



5 SECTION 1
1/4" = 1'-0"

WALL ASSEMBLIES

DESCRIPTION
EXTERIOR WOOD STUD WALL (2x4) - STUCCO OR STONE TILE OR SIDING <ul style="list-style-type: none">1/2" ALUMINUM STUCCO OR EXPANDED METAL LATH OR STONE TILE OR MURKIN LATH OR HARDIE PLANK OR VINYL SIDING3/8" x 2" PLY VERTICAL FLYWOOD STRAPPING @ 12" O.C. (NOT REQUIRED FOR VINYL SIDING)1/2" FLYWOOD SHEATHING2x4 #2 SPF WOOD STUDS @ 16" O.C.BATT INSULATION IN CAVITY (MIN. R-13)6 MIL POLY VAPOR BARRIER1/2" GYPSUM WALLBOARD
INTERIOR WOOD STUD WALL (2x4) OR (2x6) <ul style="list-style-type: none">1/2" GYPSUM WALLBOARD2x4 OR 2x6 #2 SPF WOOD STUDS @ 16" O.C.1/2" GYPSUM WALLBOARD
NOTES: <ul style="list-style-type: none">1. USE 2x4 FOR PUMPING WALLS AND AS NOTED ON STRUCTURAL.2. GAS SEAL GARAGE WALLS ADJACENT TO DWELLING W/ 6 MIL POLY VAPOR BARRIER.3. USE 1 LAYER OF 5/8" TYPE X GYPSUM BOARD FOR JOINT SILENCE SEPARATION.
EXTERIOR FOUNDATION WALL <ul style="list-style-type: none">2' CONCRETE FOUNDATION WALL 1' SIDE UP TO GRADE4" THICK REINFORCED CONCRETE FOUNDATION WALL EXCEPT AS NOTED OTHERWISECONTINUOUS REINFORCED CONCRETE FOOTING AS PER STRUCTURAL DRAWINGS
INTERIOR FOUNDATION WALL <ul style="list-style-type: none">2x4 #2 SPF WOOD STUDS @ 16" O.C.6" CONCRETE CURBCONTINUOUS REINFORCED CONCRETE FOOTING AS PER STRUCTURAL DRAWINGS
BOTTOM PLATE ON CONCRETE <ul style="list-style-type: none">2x4 OR 2x6 #2 SPF PT WOOD STUDS (AS REQUIRED) SILL PLATE6 MIL POLY VAPOR BARRIER OR CLOSE CELL PLATE GASKET BETWEEN CONCRETE AND SILL PLATE5/8" DIAMETER ANCHOR BOLTS @ 4'-0" O.C. MAX.

INTERIOR WALL DETAIL

WHERE WALLS & STAYS ARE INSTALLED TO THE EXTERIOR WALL FACE THE EFFECTIVE THERMAL INSULATION AND AIR TIGHTNESS MUST BE MAINTAINED BY THE EXTERIOR WALL. STRUCTURAL MEMBERS OF THE EXTERIOR STAYS AND TO BE INSTALLED ON AND INTERIOR LIGED SYSTEM.

INTERIOR THERMAL EFFECT
THE THERMAL INSULATION EFFECT OF CLOSELY PLACED STRUCTURAL MEMBERS (EX. STAYS, WALLS, PARTITION WALLS) IS TO BE MAINTAINED BY THE EXTERIOR WALL. THE INSULATION EFFECT OF THE EXTERIOR WALL IS TO BE MAINTAINED BY THE EXTERIOR WALL.

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FLOOR ASSEMBLIES

DESCRIPTION
CONCRETE SLAB ON GRADE - GARAGE <ul style="list-style-type: none">1" CONCRETE SLAB MIN. 1" BELOW TOP OF FORM WALLS6" MIN. COMPACTED SAND OR GRAVEL FILL
CONCRETE SLAB ON GRADE - MAIN FLOOR <ul style="list-style-type: none">FLOOR FINISH 1.501" CONCRETE SLABIN FLOOR RADIANT HEATING SYSTEMRIGID INSULATION (MIN. R-10)6 MIL POLY VAPOR BARRIER1" MIN. COMPACTED FILL AS SPECIFIED BY GEOTECHNICAL ENGINEER
FRAMED FLOOR - SECOND FLOOR <ul style="list-style-type: none">FLOOR FINISH 1.501 1/2" LIFT-TIGHT CONCRETE TOPPING W/ IN FLOOR RADIANT HEATING SYSTEM5/8" T&G FLYWOOD (SUB-FLOORING, GLEED & NAILED)FLOOR JOISTS AS PER STRUCTURAL DRAWINGS (W/ CROSS BRACING/LOCKING AS REQUIRED @ 16" O.C. MAX.)1/2" GYPSUM WALLBOARD
NOTES: <ul style="list-style-type: none">1. GAS SEAL FLOOR OVER GARAGE W/ 6 MIL POLY VAPOR BARRIER2. INSULATE FLOOR OVER EXTERIOR W/ BATT INSULATION (MIN. R-10)3. USE 1 LAYER OF 5/8" TYPE X GYPSUM BOARD FOR JOINT SILENCE SEPARATION
FRAMED FLOOR - DECK OVER EXT. <ul style="list-style-type: none">DECKING VINYL FINISH5/8" T&G FLYWOOD (SUB-FLOORING, GLEED & NAILED)FLOOR JOISTS AS PER STRUCTURAL DRAWINGS (W/ CROSS BRACING/LOCKING AS REQUIRED @ 16" O.C. MAX.)VENTED ALUMINUM OR VINYL SCOFFIT
NOTES: <ul style="list-style-type: none">1. IF JOISTS ARE CANTILEVERED FROM THE INTERIOR, FLOOR JOISTS TO BE TAFFERED AT EXT. WALL TO PREVENT WATER INFILTRATION

ROOF ASSEMBLY

DESCRIPTION
ROOF
SHAKE PROFILE ASPHALT SHINGLES
FELT UNDERLAY
1/2" FLYWOOD SHEATHING
PREFABRICATED DECK TRUSSES AS PER STRUCTURAL

FLAT ROOF (OVER EXT.)

- 2 LAYERS OF 100# EDMAN MEMBRANE
- 5/8" PLYWOOD SHEATHING
- ROOF JOISTS AS PER STRUCTURAL DRAWINGS (W/ CROSS BRACING/LOCKING AS REQUIRED @ 16" O.C. MAX.)
- VENTED ALUMINUM OR VINYL SCOFFIT

NOTES:

- 1. PROVIDE CANT STRIP ALONG CURB WALL
- 2. PROVIDE FLASHING WITH EXP. EDGE & END DAMPS

CEILING ASSEMBLY
DESCRIPTION
SECOND FLOOR CEILING
RIGID INSULATION (MIN. R-10)
6 MIL POLY VAPOR BARRIER
5/8" GYPSUM WALL BOARD

NOTES:

- 1. GAS SEAL FLOOR OVER GARAGE W/ 6 MIL POLY VAPOR BARRIER
- 2. INSULATE FLOOR OVER EXTERIOR W/ BATT INSULATION (MIN. R-10)
- 3. USE 1 LAYER OF 5/8" TYPE X GYPSUM BOARD FOR JOINT SILENCE SEPARATION

FRAMED FLOOR - DECK OVER EXT.

- DECKING VINYL FINISH
- 5/8" T&G FLYWOOD (SUB-FLOORING, GLEED & NAILED)
- FLOOR JOISTS AS PER STRUCTURAL DRAWINGS (W/ CROSS BRACING/LOCKING AS REQUIRED @ 16" O.C. MAX.)
- VENTED ALUMINUM OR VINYL SCOFFIT

NOTES:

- 1. IF JOISTS ARE CANTILEVERED FROM THE INTERIOR, FLOOR JOISTS TO BE TAFFERED AT EXT. WALL TO PREVENT WATER INFILTRATION

INTERIOR WALL DETAIL

WHERE WALLS & STAYS ARE INSTALLED TO THE EXTERIOR WALL FACE THE EFFECTIVE THERMAL INSULATION AND AIR TIGHTNESS MUST BE MAINTAINED BY THE EXTERIOR WALL. STRUCTURAL MEMBERS OF THE EXTERIOR STAYS AND TO BE INSTALLED ON AND INTERIOR LIGED SYSTEM.

INTERIOR THERMAL EFFECT
THE THERMAL INSULATION EFFECT OF CLOSELY PLACED STRUCTURAL MEMBERS (EX. STAYS, WALLS, PARTITION WALLS) IS TO BE MAINTAINED BY THE EXTERIOR WALL. THE INSULATION EFFECT OF THE EXTERIOR WALL IS TO BE MAINTAINED BY THE EXTERIOR WALL.

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ROOF ASSEMBLY

DESCRIPTION
ROOF <ul style="list-style-type: none">SHAKE PROFILE ASPHALT SHINGLESFELT UNDERLAY1/2" FLYWOOD SHEATHINGPREFABRICATED DECK TRUSSES AS PER STRUCTURAL
FLAT ROOF (OVER EXT.) <ul style="list-style-type: none">2 LAYERS OF 100# EDMAN MEMBRANE5/8" PLYWOOD SHEATHINGROOF JOISTS AS PER STRUCTURAL DRAWINGS (W/ CROSS BRACING/LOCKING AS REQUIRED @ 16" O.C. MAX.)VENTED ALUMINUM OR VINYL SCOFFIT
NOTES: <ul style="list-style-type: none">1. PROVIDE CANT STRIP ALONG CURB WALL2. PROVIDE FLASHING WITH EXP. EDGE & END DAMPS
CEILING ASSEMBLY DESCRIPTION SECOND FLOOR CEILING RIGID INSULATION (MIN. R-10) 6 MIL POLY VAPOR BARRIER 5/8" GYPSUM WALL BOARD
NOTES: <ul style="list-style-type: none">1. GAS SEAL FLOOR OVER GARAGE W/ 6 MIL POLY VAPOR BARRIER2. INSULATE FLOOR OVER EXTERIOR W/ BATT INSULATION (MIN. R-10)3. USE 1 LAYER OF 5/8" TYPE X GYPSUM BOARD FOR JOINT SILENCE SEPARATION
FRAMED FLOOR - DECK OVER EXT. <ul style="list-style-type: none">DECKING VINYL FINISH5/8" T&G FLYWOOD (SUB-FLOORING, GLEED & NAILED)FLOOR JOISTS AS PER STRUCTURAL DRAWINGS (W/ CROSS BRACING/LOCKING AS REQUIRED @ 16" O.C. MAX.)VENTED ALUMINUM OR VINYL SCOFFIT
NOTES: <ul style="list-style-type: none">1. IF JOISTS ARE CANTILEVERED FROM THE INTERIOR, FLOOR JOISTS TO BE TAFFERED AT EXT. WALL TO PREVENT WATER INFILTRATION

ROOF ASSEMBLY

DESCRIPTION
ROOF
SHAKE PROFILE ASPHALT SHINGLES
FELT UNDERLAY
1/2" FLYWOOD SHEATHING
PREFABRICATED DECK TRUSSES AS PER STRUCTURAL

FLAT ROOF (OVER EXT.)

- 2 LAYERS OF 100# EDMAN MEMBRANE
- 5/8" PLYWOOD SHEATHING
- ROOF JOISTS AS PER STRUCTURAL DRAWINGS (W/ CROSS BRACING/LOCKING AS REQUIRED @ 16" O.C. MAX.)
- VENTED ALUMINUM OR VINYL SCOFFIT

NOTES:

- 1. PROVIDE CANT STRIP ALONG CURB WALL
- 2. PROVIDE FLASHING WITH EXP. EDGE & END DAMPS

CEILING ASSEMBLY
DESCRIPTION
SECOND FLOOR CEILING
RIGID INSULATION (MIN. R-10)
6 MIL POLY VAPOR BARRIER
5/8" GYPSUM WALL BOARD

NOTES:

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- 2. INSULATE FLOOR OVER EXTERIOR W/ BATT INSULATION (MIN. R-10)
- 3. USE 1 LAYER OF 5/8" TYPE X GYPSUM BOARD FOR JOINT SILENCE SEPARATION

FRAMED FLOOR - DECK OVER EXT.

- DECKING VINYL FINISH
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- FLOOR JOISTS AS PER STRUCTURAL DRAWINGS (W/ CROSS BRACING/LOCKING AS REQUIRED @ 16" O.C. MAX.)
- VENTED ALUMINUM OR VINYL SCOFFIT

NOTES:

- 1. IF JOISTS ARE CANTILEVERED FROM THE INTERIOR, FLOOR JOISTS TO BE TAFFERED AT EXT. WALL TO PREVENT WATER INFILTRATION

INTERIOR WALL DETAIL

WHERE WALLS & STAYS ARE INSTALLED TO THE EXTERIOR WALL FACE THE EFFECTIVE THERMAL INSULATION AND AIR TIGHTNESS MUST BE MAINTAINED BY THE EXTERIOR WALL. STRUCTURAL MEMBERS OF THE EXTERIOR STAYS AND TO BE INSTALLED ON AND INTERIOR LIGED SYSTEM.

INTERIOR THERMAL EFFECT
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ROOFING: SHAKE PROFILE ASPHALT SHINGLES - BLACK

FASCIA: 2x10/2x8 FASCIA BOARD - BLACK

WALLS: HORIZONTAL HARDIE SIDING - WHITE

WALLS: HORIZONTAL HARDIE SHINGLES - WHITE

BUILT-UP POSTS: BOARD & BATTEN - WHITE

BUILT-UP COLUMN BASE: STONE CLADDING - GREY

WINDOWS: MULLIONS & SASH - BLACK

MATERIAL BOARD
1/4" = 1'-0"

AWANA GROUP

Email: Talvinderj@icloud.com
Phone: (778) 862-5563

GENERAL NOTES:

- THE DOCUMENTS AND DESIGN ARE AT ALL TIMES THE EXCLUSIVE PROPERTY OF AWANA GROUP AND MAY NOT BE REPRODUCED WITHOUT PRIOR WRITTEN CONSENT.
- THE GENERAL CONTRACTOR AND SUB-TRADES SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND LEVELS PRIOR TO COMMENCEMENT OF WORK ON SITE.
- ANY ERRORS, DISCREPANCIES, OMISSIONS SHALL BE IMMEDIATELY REPORTED TO AWANA GROUP BEFORE COMMENCEMENT OF WORK ON SITE.
- AWANA GROUP DOES NOT WARRANT THAT THE DRAWINGS ARE TO SCALE. THE DRAWINGS SHALL NOT BE SCALED.
- ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS NOTED OTHERWISE.

PROJECT	PROJECT NUMBER
RANA RESIDENCE	2217
10151 AINSWORTH CRESCENT, RICHMOND, B.C.	TJ
DRAWING TITLE	DATE
ELEVATIONS & SECTIONS	APRIL 16TH, 2023
	SCALE
	As indicated
	DRAWING NO.
	A2.00

Coach House to comply with BC Building Code

LANDSCAPE CONTRACT DOCUMENTS

PROJECT: LANDSCAPE FOR COACH HOUSE

LOCATION: 10151 AINSWORHT CRESCENT, RICHMOND
CLIENT: HARK RANA
BUILDING DESIGNER: TALVINDER JAGDE
LANDSCAPE ARCHITECT CONSULTANT: SW LANDSCAPE ARCHITECT
ATTN: STEVE WONG 778 834-8959 stevewong234@gmail.com
www.swlandscapearchitect.com

SUMMARY OF LANDSCAPE SCOPE OF WORK

SUMMARY: THE LANDSCAPE PORTION OF THE PROJECT INCLUDES ALL LANDSCAPE WORKS ASSOCIATED WITH THE CONSTRUCTION OF A NEW COACH HOUSE DEVELOPMENT. THIS INCLUDES BUT NOT LIMITED TO, REMOVAL AND DISPOSAL OF EXISTING MATERIAL, SITE PREPARATION, GRADING AND DRAINAGE, THE SUPPLY AND INSTALLATION OF GROWING MEDIUM, LANDSCAPE PLANTS, MULCH, IRRIGATION SYSTEM, CIP CONCRETE WALK/WALLS/STAIRS, ASPHALT, FENCING, GATES, TIMBER CURB, ONE YEAR WARRANTY AND ONE YEAR LANDSCAPE MAINTENANCE. CONTRACTOR IS RESPONSIBLE FOR PROVIDING WATER FEED IN ORDER TO ALLOW FOR THE INSTALLATION OF A COMPLETE, FUNCTIONING LANDSCAPE IRRIGATION SYSTEM. LANDSCAPE DESIGN/WORKS IS TO BE COORDINATED WITH ALL OTHER WORK ON THIS SITE.

LANDSCAPE LIST OF DRAWINGS

- L0 COVER SHEET
- L1 LAYOUT
- L2 PLANTING PLAN
- L3 TREE MANAGEMENT PLAN
- L4 DETAILS

GENERAL CONDITIONS OF THE CONTRACT

-REFER TO GENERAL CONDITIONS OF CONTRACT, BY PRIME CONSULTANT
-REFER TO, AND COORDINATE THESE CONTRACT DOCUMENTS WITH THE CONTRACT DOCUMENTS OF THE OTHER CONSULTANTS AND THE MAIN CONTRACT

LANDSCAPE SPECIFICATIONS

- 1. CANADIAN LANDSCAPE STANDARD (CLS), SECOND EDITION
COPYRIGHT: 2020, ISBN: 978-0-9950714-1-4
-PUBLISHED JOINTLY BY:
CANADIAN SOCIETY OF LANDSCAPE ARCHITECTS
12 FORILLON CRESCENT, OTTAWA ON K2M 2W5
1-613-668-4775 csle-aspc.ca
CANADIAN NURSERY LANDSCAPE ASSOCIATION
7856 FIFTH LINE SOUTH MILTON ON L9T 2X8
1-888-446-3499 cnla-acpp.ca

SUPPLEMENTARY SPECIFICATIONS- PROJECT SPECIFIC:

- 9. LANDSCAPE MAINTENANCE: ADD: PER SECTION 9.1.5, ESTABLISHMENT AND WARRANTY MAINTENANCE. THE MAINTENANCE PERIOD WILL BE FOR 1 CALENDAR YEAR FROM DATE OF ACCEPTANCE. PER SECTION 9.1.7, MAINTENANCE LEVEL FOR THIS PROJECT WILL BE AT LEVEL 3 "MODERATE"

CLS SPECIFICATIONS

- 1. SCOPE OF THE STANDARD
- 2. CONTRACT ADMINISTRATION
- 3. SITE PREPARATION AND PROTECTION
- 4. GRADING AND DRAINAGE
- 5. GROWING MEDIUM
- 6. PLANTS AND PLANTING
- 7. MULCHING
- 8. SEEDING AND SODDING
- 9. LANDSCAPE MAINTENANCE
- 10. IRRIGATION SYSTEMS
- 11. INTEGRATED PEST AND VEGETATION MANAGEMENT
- 12. HARDSCAPE
- 13. LANDSCAPE OVER STRUCTURES
- 14. INTERIOR PLANTScape N/A

- APPENDIX A: LIST OF TABLES AND FIGURES
- APPENDIX B: BASIC CONTENTS OF A LANDSCAPE COMMISSIONING PLAN
- APPENDIX C: CANADIAN NURSERY STOCK STANDARD, NINTH EDITION
- APPENDIX D: NATIONAL VOLUNTARY CODE OF CONDUCT FOR THE ORNAMENTAL HORTICULTURE INDUSTRY
- GLOSSARY OF TERMS AND DEFINITIONS

- 2. MMCD (LATEST EDITION) SPECIFICATIONS AND DRAWINGS, WITH MUNICIPAL SUPPLEMENTARY SPECIFICATIONS AND ALL APPLICABLE MUNICIPAL BY-LAWS.

- 3. CAN/CSA-Z614-14 CHIDREN'S PLAY SPACES AND EQUIPMENT AND IPEMA (INTERNATIONAL PLAY EQUIPMENT MANUFACTURERS ASSOCIATION) STANDARD, SPECIFICATIONS FOR PLAY SURFACES TO INCLUDE ASTM F292/1951/2075/2223/355

NOTES:

- 1. IN CASE OF CONFLICTING SPECIFICATIONS THE MOST STRINGENT SPECIFICATION PREVAILS
- 2. CONTRACTOR TO PROVIDE DIGITAL PHOTOS TO THE LANDSCAPE ARCHITECT FOR ALL WORK THAT WILL BE BURIED OR CONCEALED IN ORDER TO CONFIRM THAT THE WORK MEETS SPECIFICATIONS AND APPLICABLE STANDARDS
- 3. CONTRACTOR TO PROVIDE DIGITAL PHOTOS OF ALL PLANT MATERIAL AT THE NURSERY FOR LANDSCAPE ARCHITECT APPROVAL PRIOR TO SHIPPING. PHOTOS ARE TO BE REPRESENTATIVE OF THE PLANTS TO BE SHIPPED AND CLEARLY SHOW THE QUALITY AND SIZE OF THE PLANTS. A MEASURING STICK SHOULD BE USED WHERE NECESSARY TO SHOW THE HEIGHT OF A PLANT.

GENERAL PROJECT AND CONTRACTOR NOTES

- 1. Contractor shall review these plans thoroughly, make a detailed site visit, and shall immediately bring any inconsistency, site layout problem, or any other request for clarification to the Landscape Architect for resolution prior to the delivery of any bid. Failure to do so shall cause the Contractor to be ineligible for extras relating to such matters.
- 2. Contractor shall submit reproducible shop drawings to Landscape Architect for Owner's approval.
- 3. Contractor shall co-ordinate with all trades to provide complete working systems.
- 4. Drawings of existing facilities are, in general, diagrammatic. Exact locations shall be determined by the Contractor from field measurements taken by Contractor's personnel. Actual arrangement of the work shall follow locations shown on the drawings within the constraints of existing equipment and construction. Dimensions shall govern these drawings and they are not to be scaled. Any scales on drawings are only for the Contractor's convenience. Drawing and notes to drawings are correlative and have equal authority and priority. Should there be discrepancies in themselves or between them, Contractor shall base bid pricing on the most expensive combination of quality and/or quantity of the work indicated. In the event of discrepancies, the appropriate method of performing the work and/or items to be incorporated into the scope of the work shall be determined by the appropriate design professional (eg Landscape Architect, Architect, Engineer)
- 5. Contractor is responsible for the safety, actions and conduct of his employees and his subcontractors' employees while in the project area, adjacent areas and in the building and its vicinity.
- 6. All work described by these documents shall be performed in full accordance with all applicable codes and standards.
- 7. All materials, finishes, manufactured items, and equipment shall be installed in full accordance with the supplier's or manufacturer's written recommendations or these documents, whichever is more stringent.
- 8. Requests to substitute any product, technique, or material shall be submitted in writing to Landscape Architect for approval. Samples, product information, and drawings shall be required prior to substitution approval. Proposed substitution shall be of equal quality and performance specification to that originally specified.
- 9. All workmanship, material, and equipment shall be guaranteed for one year from date of Owner acceptance. Any failure or deterioration within this period shall be corrected by the contractor at the contractor's expense.
- 10. Coordinate landscape drawings with architect/engineer and all other consultant drawings.

GENERAL LANDSCAPE NOTES

- 1. All landscape works are to meet the specifications and standards of the latest edition of the CANADIAN LANDSCAPE STANDARD, published by the Canadian Society of Landscape Architects and the Canadian Nursery Landscape Association.
- 2. All landscape works to be carried out by a contractor with minimum 5 years' experience doing work similar in scope and size, and on at least 3 comparable projects. The contractor needs to be a member in good standing with the appropriate trade organization: eg, B.C. Landscape and Nursery Association (BCLNA), Irrigation industry Association of B.C. (IIABC). Execution of work to be under the direct supervision of qualified industry certified technicians.
- 3. All grades to meet adjacent grades at property line. All stormwater is to be contained on site and away from adjacent properties. All hard surfaces to be sloped a minimum of 1.5%, and all lawn areas to be sloped a minimum of 2% to avoid standing water. Contractor is ultimately responsible for ensuring there is no standing water on site over an extended period.
- 4. No slopes to be steeper than 2.5 horizontal: 1 vertical.
- 5. All plant material and growing medium to meet Canadian Landscape Standard #1 specifications. Plant search area is to be any plant nursery within the Lower Mainland. Plant substitutions are only allowed if approved by Landscape Architect. Suggested plant substitutions shall be of similar species and of at least equal size to those originally specified.
- 6. All shrub beds to contain minimum 18" (450) mm depth of approved growing medium over scarified subgrade. All lawn areas to contain minimum 6" (150) mm of approved growing medium over scarified subgrade.
- 7. All guardrails are required wherever the fall height is over 2 ft. Guardrails to be a minimum 42" high from any climbable surface surface. Maximum openings between pickets to be under 4".
- 8. Stairs to have consistent rise/run for risers and treads. Stair treads to slope 2% to front edge of tread for drainage and constructed with materials or finishes to prevent slip falls. All stairs over 2 risers to have handrails between 32" to 38" high from the front of stair treads, and to extend 12" past the end of top/bottom treads.
- 9. Exterior ramps to adhere to BC Building code if greater than 5% slope. Ramps to be maximum of 8.3% and minimum 5' width. Handrails required on both sides. Construction to adhere to BC Building code.
- 10. All retaining walls and structures over 4 ft. in height or if there are issues with soil stability require signoff from the appropriate engineer (eg structural, geotechnical). Contractor to provide engineer stamped shop drawings for Landscape Architect.
- 11. Landscape installation to be reviewed by registered Landscape Architect.
- 1. ASPHALT: 3" of compacted hot mix asphalt applied in 2 lifts over 4" of well compacted ¾" minus base course per municipal and MMCD specifications.
- 2. FENCE- POST SADDLE BRACKET: By Simpson Strong-Tie, WUB44RHDG for full dimension 4" post, galvanized with 15M rebar.
- 3. FENCE-WOOD: Full dimension #2 and better cedar boards, finished with 2 coats of Sikkens semi-transparent cedar stain. Posts and kick board to be full dimension wood, incised and rated for ground contact approved per CCA/MCA PT.
- 4. GATE HARDWARE: Hardware should be in black finish by Onward Hardware with 3 heavy duty 8" strap hinges (923 FBR), adjustable-tension gale spring (304 FBR), gate latch (301 FBR) gale pull (478 FBR0) and a rubber gate stopper (480 BPYR0) or pre-approved equivalent. If lockable latch is required: Lockable latch by National Hardware, V6203, N346-202 for keyed access from both sides and with polymer and stainless steel construction.
- 5. GRAVEL EDGE: Gravel edge around the building to be ¾" clean drain rock, minimum 4" depth.
- 6. GROWING MEDIUM: In accordance with CLS standards, latest edition. For Turf Areas: Level 1H (High Traffic Lawn Areas), containing by weight: 70-90% sand, maximum 25% fines (max 20% clay), 3-5% organic matter, with pH between 6-7; For Planting Areas: Level 1P (Planting Areas), containing by weight: 50-70% sand, maximum 25% fines (max 20% clay), 10-20% organic matter, with pH between 4.5-6.5. Supplied by Veratec Engineered Products (www.veratecgroup.com), DENBOW (www.denbow.com), SUMAS GRO MEDIA (www.sumasgromedia.com) or equivalent: 6" min for lawn areas on grade, 18" min for planted areas on grade, over scarified base, or as otherwise specified. A current representative soil analysis is to be done by Pacific Soil Analysis, Richmond to confirm soil sample meets specifications prior to shipping. If after shipping the quality of the soil is in question, further sampling and testing by Pacific Soil Analysis will be required at contractor's expense. If it is determined that the soil does not meet CLS Specifications, the soil is to be removed at contractor's expense. Contact information for Pacific Soil Analysis is: #5-11720 Voyageur Way, Richmond, BC V6X 3G9: Phone (604) 273-8226. For growing medim on roof, see section under Green Roof.
- 7. IRRIGATION: Supply and installation required for a complete automatic, inground irrigation system to provide supplemental water efficiently and uniformly. All components to be new, and includes all pipes, sleeves, valves, in-ground irrigation boxes, sprinkler heads, solenoid wires, controller and rain sensor. Hose bibs and quick couplers to be on their separate zone. Controller to have 2 extra zones for future expansion and if installed outside, to have controller and wiring secured in a lockable, weatherproof metal box. Irrigation components to be Rainbird, Toro or Hunter. Irrigation design and installation per Canadian Landscape Standards, latest edition. Design to be completed by a qualified designer/contractor with IIABC. Shop drawings for the irrigation design are to be provided by contractor and to be approved by the landscape architect prior to installation. Contractor is responsible for providing a water service line and connecting irrigation system to water service line complete with backflow preventor, pressure reducing valve and isolation valves. Contractor to adjust irrigation controller, sprinkler heads and commission system in addition to providing as-built drawings and a one year warranty.
- 8. LANDSCAPE EDGING: HDPE edging by Precision Edging (PE 20C) 7/16" by 4", screwed to plastic spikes (1.25" by 12") every 2' OC.
- 9. MULCH: To be composted fir bark, having dark brown, fine texture and ½" minus, applied evenly at a 2" depth over plant beds. Available from Augustine Soil and Mulch (604 465-5193) or equivalent.
- 10. PAVERS-PERMEABLE: AQUAPAVE by Abbotsford Concrete Products, Standard Series, 4 5/16" by 8 3/4" by 3 1/8" inches, Natural colour, running bond with soldier course in Charcoal colour, installed per manufacturer's instructions.
- 11. PLANT MATERIAL: All plant material are to meet current Canadian Landscape Standard (CLS) #1 and installed according to current CLS standards by qualified contractor. Plant search is generally throughout the Lower Mainland except as indicated otherwise. Any plant substitutions must be approved by Landscape Architect.
- 12. RETAINING WALL-CONCRETE: Per applicable industry standards. Concrete to be reinforced with rebar as shown on drawings. Drawings are to be confirmed with structural engineer. For retaining walls over 4' high, or where there may be issues with global stability, stamped engineered drawings are required. Provide shop drawings for consultant review prior to placing showing expansion and control joints.
- 13. SOD: All sod to be sand based sod (Perennial ryegrass/Kentucky bluegrass) with no netting. Supplied by Bos Sod Farms or equivalent. No clay or silt soil to be allowed.
- 14. WOOD: Per industry standards. All exterior wood to be rot resistant, either western red cedar, yellow cedar, robinia, ipe or pressure treated (PT). Minimum standard to be #2 and better. Wood to be finished with minimum 2 coats of an approved exterior grade finish. All wood in contact with ground to be incised, ground contact approved per CCA/MCA PT. All cuts to be sealed prior to installation.

NOTE: ALL MATERIALS SHOWN ON DRAWINGS ARE NOT NECECARILY INCLUDED IN THIS MATERIALS LIST. CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALL MATERIALS REQUIRED TO COMPLETE LANDSCAPE WORKS PER CONTRACT DOCUMENTS.



AERIAL VIEW OF PROJECT SITE -> NORTH

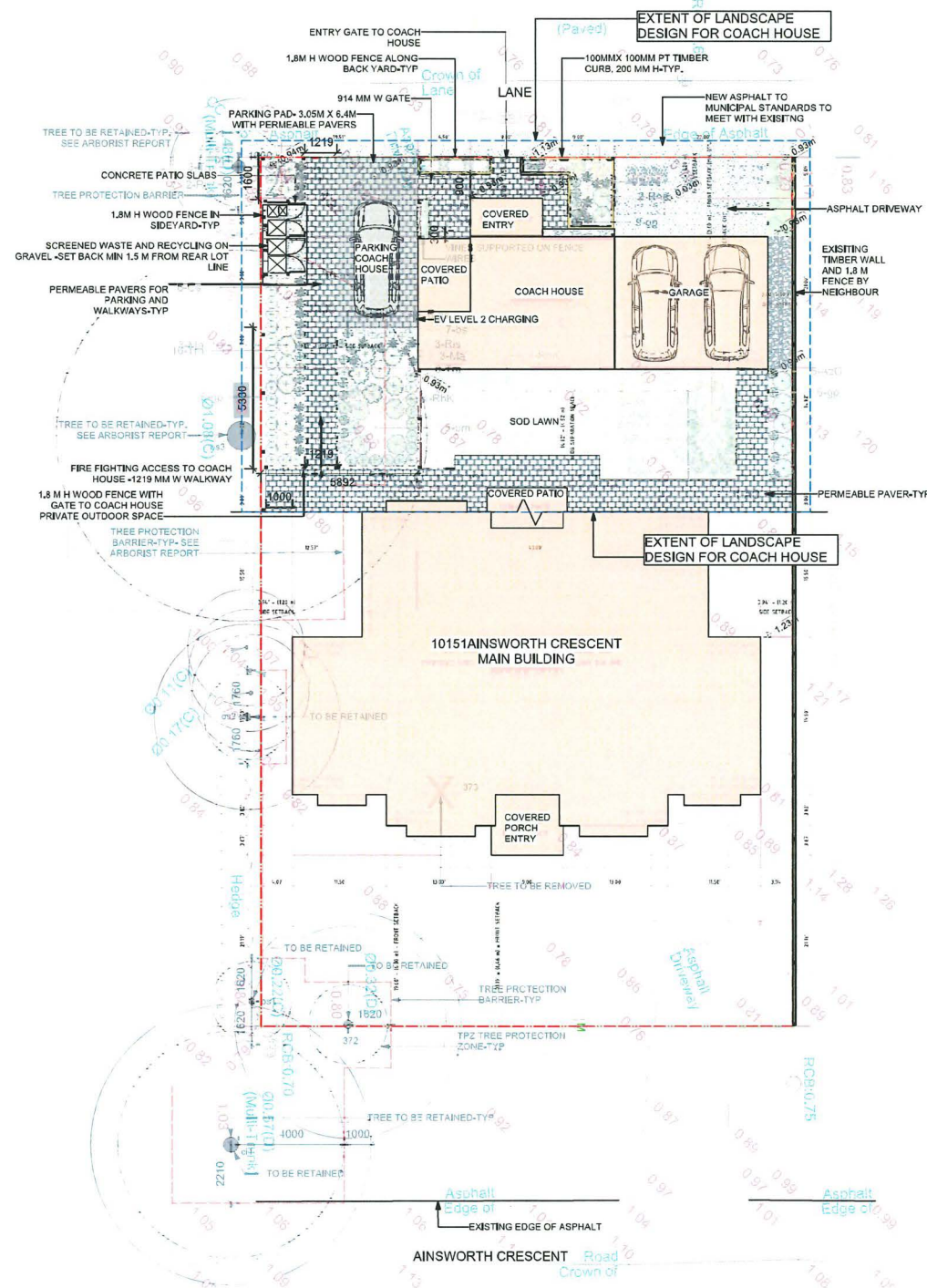


STREET VIEW OF PROJECT SITE

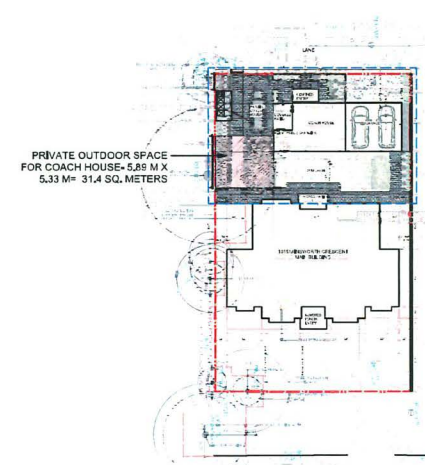
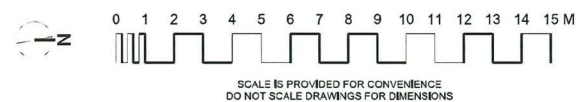
No.	Date	Issue/Revision Notes
A	1/8/2023	FOR COORDINATION
B	1/11/2023	SUBMIT FOR BP
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 sw landscape architect		
Design By	SW LANDSCAPE ARCHITECT 919 MELBOURNE AVENUE, NORTH VANCOUVER www.swlandscapearchitect.com	
Client	HARK RANA	
Project To	RANA RESIDENCE 10151 AINSWORTH CRESCENT RICHMOND, BC	
Drawn By	COVER SHEET	
Project Manager	STEVE WONG	Project ID: 2022-36
Client	SW	Job: AS NOTED
Drawn	L-0	
Date	DECEMBER 2022	Sheet No. 5
Location	AINS WORTH v1.0.vwx	

GENERAL PROJECT AND CONTRACTOR NOTES

1. Contractor shall review these plans thoroughly, make a detailed site visit, and shall immediately bring any inconsistency, site layout problem, or any other request for clarification to the Landscape Architect for resolution prior to the delivery of any bid. Failure to do so shall cause the Contractor to be ineligible for extras relating to such matters.
2. Contractor shall submit reproducible shop drawings to Landscape Architect for Owner's approval.
3. Contractor shall co-ordinate with all trades to provide complete working systems.
4. Drawings of existing facilities are, in general, diagrammatic. Exact locations shall be determined by the Contractor from field measurements taken by Contractor's personnel. Actual arrangement of the work shall follow locations shown on the drawings within the constraints of existing equipment and construction. Dimensions shall govern these drawings and they are not to be scaled. Any scales on drawings are only for the Contractor's convenience. Drawing and notes to drawings are correlative and have equal authority and priority. Should there be discrepancies in themselves or between them, Contractor shall base bid pricing on the most expensive combination of quality and/or quantity of the work indicated. In the event of discrepancies, the appropriate method of performing the work and/or items to be incorporated into the scope of the work shall be determined by the appropriate design professional (eg Landscape Architect, Architect, Engineer)
5. Contractor is responsible for the safety, actions and conduct of his employees and his subcontractors' employees while in the project area, adjacent areas and in the building and its vicinity.
6. All work described by these documents shall be performed in full accordance with all applicable codes and standards.
7. All materials, finishes, manufactured items, and equipment shall be installed in full accordance with the supplier's or manufacturer's written recommendations or these documents, whichever is more stringent.
8. Requests to substitute any product, technique, or material shall be submitted in writing to Landscape Architect for approval. Samples, product information, and drawings shall be required prior to substitution approval. Proposed substitution shall be of equal quality and performance specification to that originally specified.
9. All workmanship, material, and equipment shall be guaranteed for one year from date of Owner acceptance. Any failure or deterioration within this period shall be corrected by the contractor at the contractor's expense.
10. Coordinate landscape drawings with architect/engineer and all other consultant drawings.



1 LAYOUT
Scale: 1:100



2 COACH HOUSE PRIVATE OUTDOOR SPACE
Scale: 1:300

COACH HOUSE PRIVATE OUTDOOR SPACE

TOTAL PROPOSED 31.4 SQ M

AREA REQUIRED 30.0 SQ M










LEGEND

- | | |
|----------------|-------------------------|
| I 219.33' | EXISTING ELEVATION |
| ↓ 219.33' | PROPOSED ELEVATION |
| ↓ TW / 222.25' | PROPOSED TOP OF WALL |
| ↓ BW / 223.81' | PROPOSED BOTTOM OF WALL |
| ↓ TC / 223.81' | PROPOSED TOP OF CURB |
| ↓ BC / 223.81' | PROPOSED BOTTOM OF CURB |

- PROPERTY LINE

- AREA DI

5. TRENCH DRAIN

- | | |
|---|--------------|
|  | ASPHALT |
|  | CONCRETE |
|  | FIBER |
|  | SAND |
|  | STONEMASONRY |
|  | SLABS/TILES |
|  | WOOD DECK |
|  | GRAVEL |
|  | GRASS |

No.	Date	Issue/Revision Notes
A	1/8/2023	FOR COORDINATION
B	1/17/2023	SUBMIT FOR BP

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Design Firm
SW LANDSCAPE ARCHITECT
919 MELBOURNE AVENUE, NORTH VANCOUVER
www.swlandscapearchitect.com

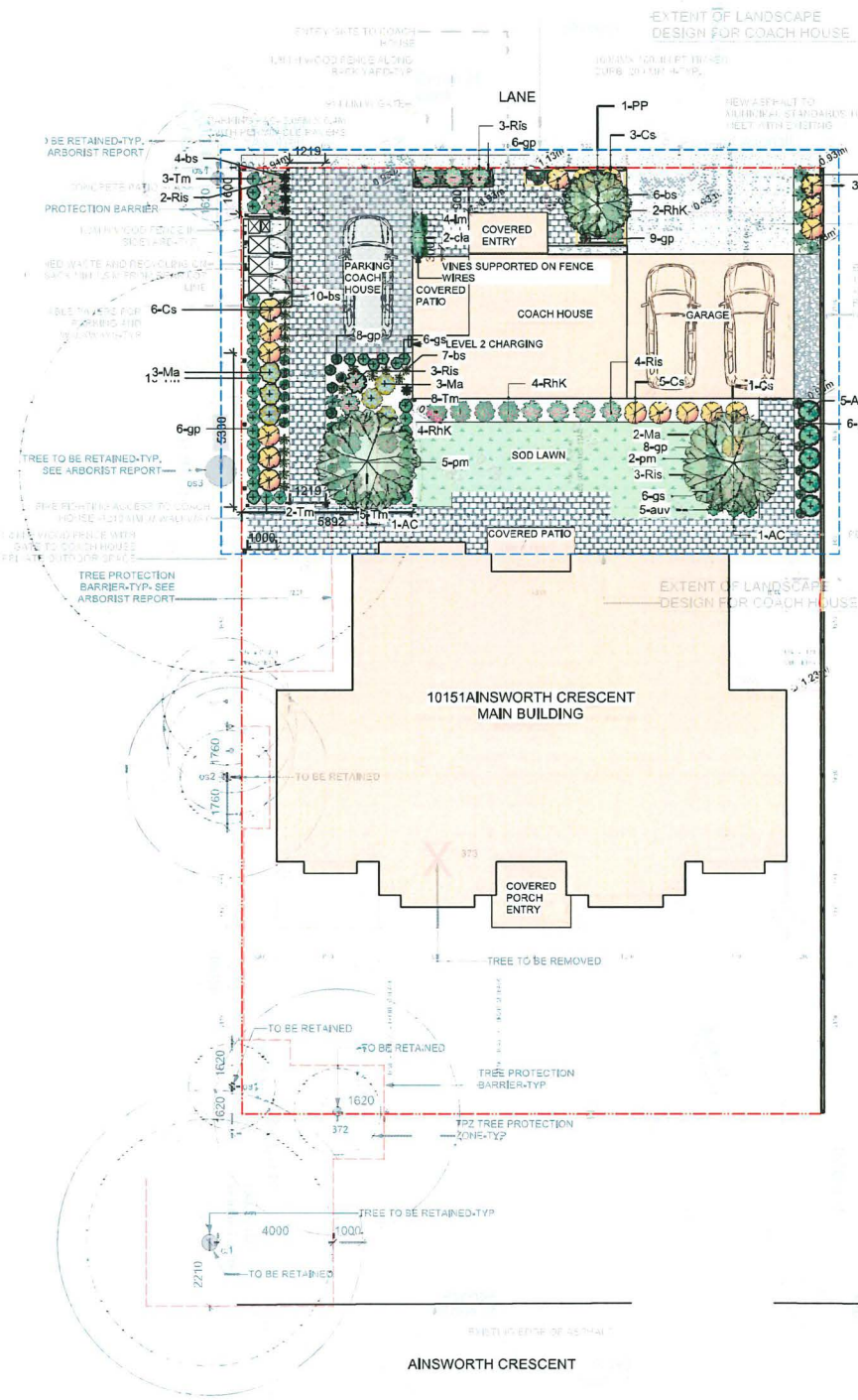
HARK RANA

Project Title

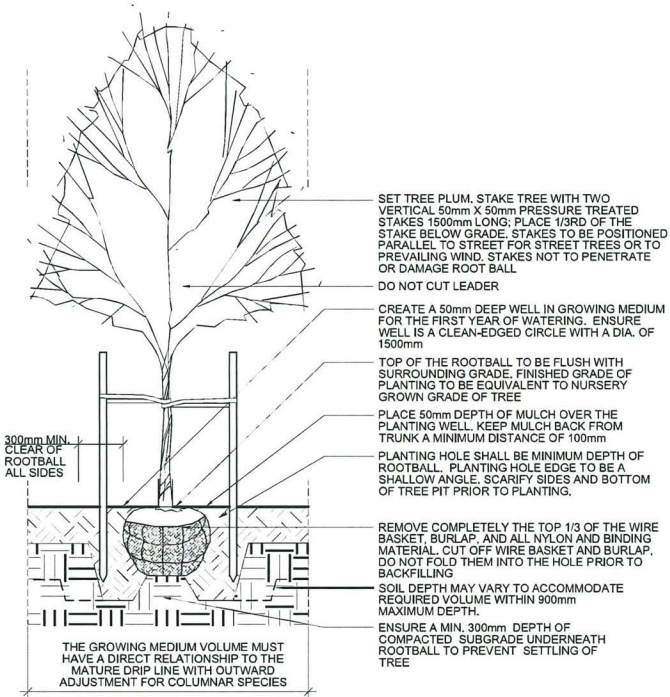
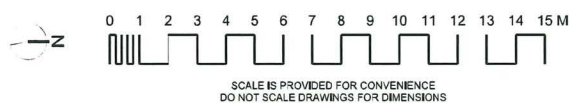
RANA RESIDENCE
10151 AINSWORTH CRESCENT
RICHMOND, BC

LAYOUT

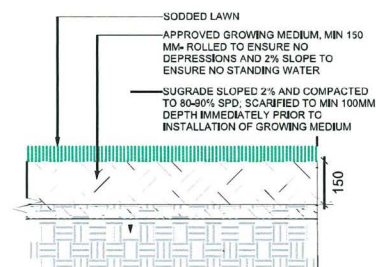
Project Manager STEVE WONG	Project ID 2022-36
Drawn By SW	Scale AS NOTED
	Sheet No. L-1
Date DECEMBER 2022	_____ of _____
CAD File Name AINS WORTH v1.vwx	5



6 PLANTING PLAN
Scale: 1:100

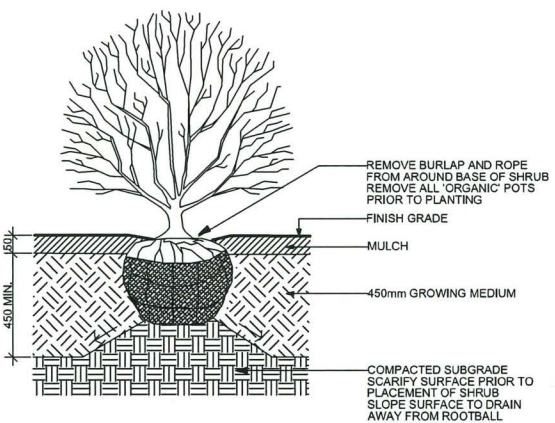


1 TREE PLANTING DETAIL
Scale: N/A



2 SODDED LAWN
Scale: 1:10

PLANT LIST 10151 AINSWORTH CR., RMD					
Botanical Name	Common Name	No.	Size	Spacing	Sym
TREES					
Acer circinatum	Vine maple	2	7 cm	as shown	AC
Parrotia persica 'Spire'	Parrotia	1	7 cm	as shown	PP
SHRUBS					
Azalea 'Girard Fuchsia'	Azalea	5	#2 pot	as shown	AzG
Cornus stolonifera	Redtwig dogwood	18	#2 pot	as shown	Cs
Mahonia aquifolium	Oregon grape	8	#2 pot	as shown	Ma
Rhododendron 'Kalinka'	Rhododendron	10	#2 pot	as shown	RhK
Ribes sanguinum	Red flowering currant	15	#2 pot	as shown	Ris
Taxus media 'Hilli'	Yew	34	1.2 m	as shown	Tm
VINES, GROUND COVERS AND HERBACEOUS PERENNIALS					
Arctostaphylos uva-ursi	Kinnikinnick	5	#1 pot	as shown	auv
Blechnum spicant	Deer fern	27	#1 pot	as shown	bs
Clematis armandii	Evergreen clematis	2	#1 pot	as shown	cla
Gaultheria procumbens	Wintergreen	43	#1 pot	as shown	gp
Gaultheria shallon	Salal	12	#1 pot	as shown	gs
Liriope muscari 'Big Blue'	Lily turf	4	#1 pot	as shown	lm
Polystichum munitum	Western sword fern	12	#1 pot	as shown	pm
Contractor to be certified by BCLNA All plants and installation to meet or exceed latest Canadian Landscape standard (CLS) #1 standards Contractor to verify numbers and placement of plants prior to installation					



- NOTES:
- SHRUB TO BE PLANTED WITH ELEVATION OF TOP OF ROOTBALL OR POT LEVEL WITH FINISH GRADE OF GROWING MEDIUM.
 - COMPOSTED BARK MULCH AT 50mm DEPTH TO BE KEPT AT LEAST 50mm AWAY FROM STEMS OF SHRUB.
 - PLANTING PIT MUST BE FREE DRAINING

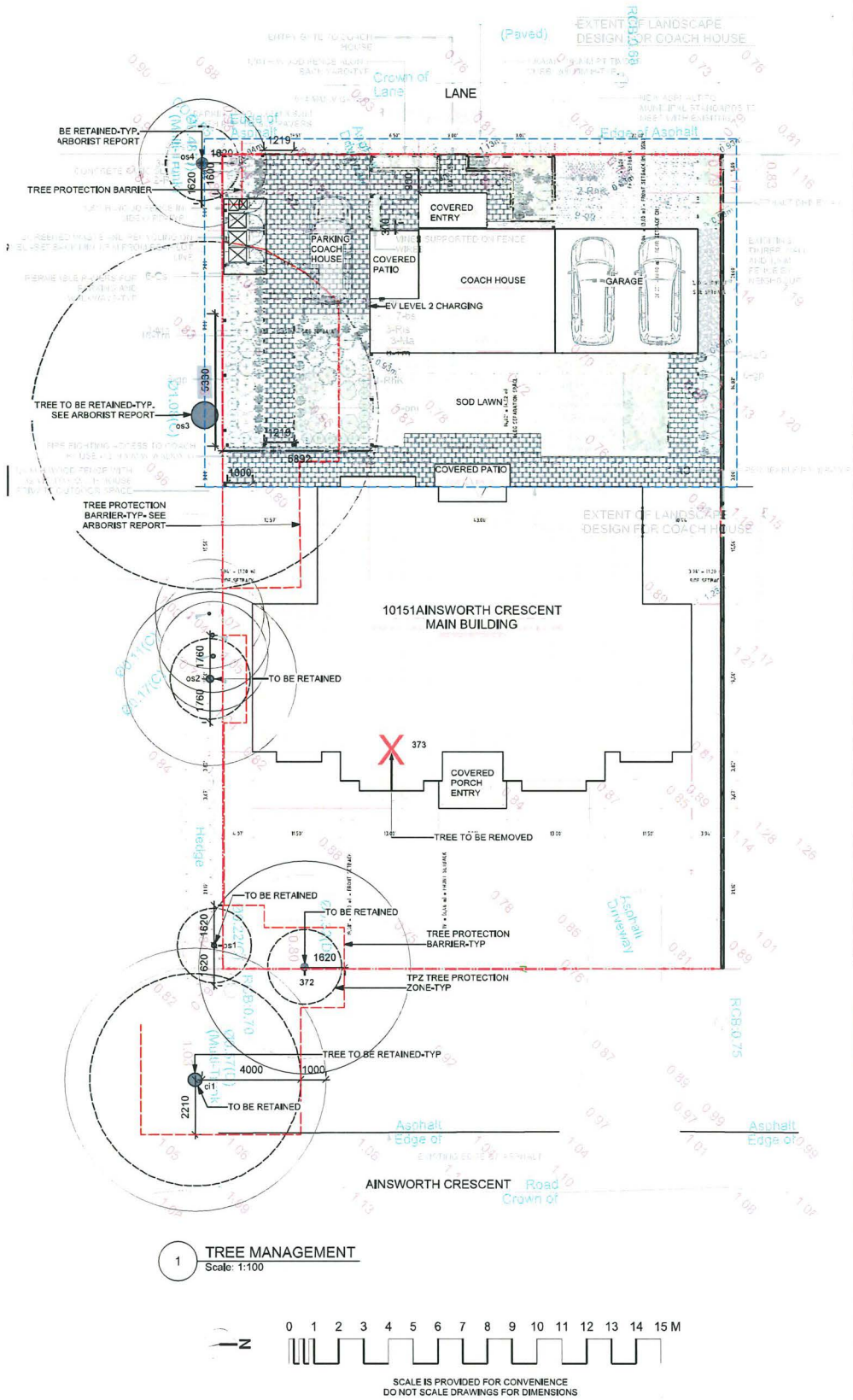
3 SHRUB PLANTING DETAIL
Scale: N/A

IRRIGATION: Supply and installation required for a complete automatic, inground irrigation system to provide supplemental water efficiently and uniformly. All components to be new, and includes all pipes, sleeves, valves, in-ground irrigation boxes, sprinkler heads, solenoid wires, controller and rain sensor. Hose bibs and quick couplers to be on their separate zone. Controller to have 2 extra zones for future expansion and if installed outside, to have controller and wiring secured in a lockable, weatherproof metal box. Irrigation components to be Rainbird, Toro or Hunter. Irrigation design and installation per Canadian Landscape Standards, latest edition. Design to be completed by a qualified designer/contractor with IABC. Shop drawings for the irrigation design are to be provided by contractor and to be approved by the landscape architect prior to installation. Contractor is responsible for providing a water service line and connecting irrigation system to water service line complete with backflow preventor, pressure reducing valve and isolation valves. Contractor to adjust irrigation controller, sprinkler heads and commission system in addition to providing as-built drawings and a one year warranty.

GENERAL PLANTING NOTES

- GROWING MEDIUM:** In accordance with CLS standards, latest edition. For Turf Areas: Level 1H (High Traffic Lawn Areas), containing by weight: 70-90% sand, maximum 25% fines (max 20% clay), 3-5% organic matter, with pH between 6-7; For Planting Areas: Level 1P (Planting Areas), containing by weight: 40-80% sand, maximum 25% fines (max 20% clay), 10-20% organic matter, with pH between 4.5-6.5. Supplied by Veratec Engineered Products (www.veratecgroup.com), DENBOW (www.denbow.com), SUMAS GRO MEDIA (www.sumasgromedia.com) or equivalent; 6"min for lawn areas on grade, 18" min for planted areas on grade, over scarified base, or as otherwise specified. A current representative soil analysis is to be done by Pacific Soil Analysis, Richmond to confirm soil sample meets specifications prior to shipping. If after shipping the quality of the soil is in question, further sampling and testing by Pacific Soil Analysis will be required at contractor's expense. If it is determined that the soil does not meet CLS Specifications, the soil is to be removed at contractor's expense. Contact information for Pacific Soil Analysis is: #5-11720 Voyager Way, Richmond, BC V6X 3G9; Phone (604) 273-8226.
- MULCH:** To be composted fir bark, having dark brown, fine texture and 1/2" minus, applied evenly at a 2" depth over plant beds. Available from Augustine Soil and Mulch (604 465-5193) or equivalent.
- PLANT MATERIAL:** All plant material are to meet current Canadian Landscape Standard (CLS) #1 and installed according to current CLS standards by qualified contractor. Plant search is generally throughout the Lower Mainland except as indicated otherwise. Any plant substitutions must be approved by Landscape Architect.
- IRRIGATION:** Supply and installation required for a complete automatic, inground irrigation system to provide supplemental water efficiently and uniformly. All components to be new, and includes all pipes, sleeves, valves, in-ground irrigation boxes, sprinkler heads, solenoid wires, controller and rain sensor. Controller to have 2 extra zones for future expansion and if installed outside, to have controller and wiring secured in a lockable, weatherproof metal box. Irrigation components to be Rainbird, Toro or Hunter. Irrigation design and installation per Canadian Landscape Standards, latest edition. Design to be completed by a qualified designer/contractor with IABC. Shop drawings for the irrigation design are to be provided by contractor and to be approved by the landscape architect prior to installation. Contractor is responsible for providing water service and connecting irrigation system to water service complete with backflow preventor, pressure reducing valve and isolation valves. Contractor to adjust irrigation controller, sprinkler heads and commission system in addition to providing as-built drawings and a one year warranty.

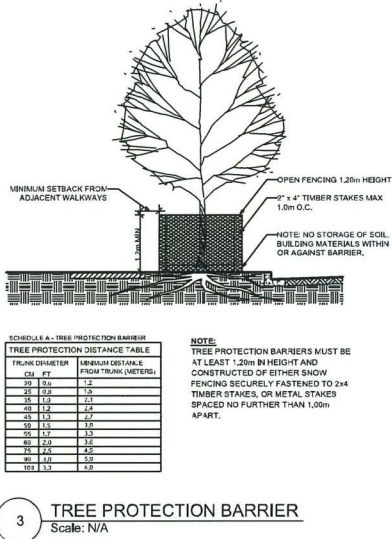
No.	Date	Issue/Revision Notes
A	1/8/2023	FOR COORDINATION
B	1/11/2023	SUBMIT FOR BP
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 sw landscape architect		
Design For: SW LANDSCAPE ARCHITECT 919 MELBOURNE AVENUE, NORTH VANCOUVER www.swlandscapearchitect.com		
Client: HARK RANA		
Project To: RANA RESIDENCE 10151 AINSWORTH CRESCENT RICHMOND, BC		
Drawing Title: PLANTING PLAN		
Project Manager: STEVE WONG	Project ID: 2022-36	
Client: SW	Job: AS NOTED	
Date: DECEMBER 2022	Sheet No: L-2	
Location: AINSWORTH v1.vwx	Page: 5	



Tree Inventory and Assessment

- DBH - Diameter at 1.4m height measured in centimeters
 - on trees with multiple stems the 3 largest sections measured at 1.4m are combined to make up the total
- critical root zone (TPZ) = dbh x 8 unless otherwise specified
- LCR = Live crown ratio, percentage of live crown remaining
- ci - City owned tree
- CR - Crown radius
- os - off site tree

ID#	Common Name	Botanical Name	DBH (cm)	LCR (%)	CR (m)	Height (m)	Condition & Comments	Action	TPZ (m)
ci1	Hawthorn	<i>Crataegus laevigata</i>	12+ 12+ 10+ 34	70	1.5	3-5	Multistem tree from the base. The canopy begins around 2.4m, and has some small deadwood. City requires a 4m protection zone area for the tree. Cutting and capping of services is to be carried out outside the 4m TPZ.	Retain Install a tree barrier 4.00m from the tree Arborist to supervise any work within 1m of the TPZ	4.00
372	Hawthorn	<i>Crataegus laevigata</i>	25	20	2	3-5	Single stem, splitting to multiple codominant leaders around 2m with bark inclusions. The tree base bulges. The canopy has significant deadwood. Proposed building does not conflict with the tree location. Landscape work will enter the TPZ of the tree	Retain Install a tree barrier 1.50m from the tree Arborist supervision recommended for landscape work that enters the TPZ	1.50
373	Cypress	<i>Chamaecyparis sp.</i>	18+ 30+ 48	80	1	3-5	Multistem tree from the base. Tree is 0.5m from the existing house. Canopy has light deadwood on the interior. The tree location conflicts with the proposed building footprint	Remove	2.88
os1	Scots Pine	<i>Pinus sylvestris</i>	21	20	1	3-5	Single stem with multiple codominant leaders beginning around 2m. The canopy is around 3m and concentrated at the tree top. Proposed building does not conflict with the tree location. Landscape work will enter the TPZ of the tree	Retain Install a tree barrier 1.50m from the tree Arborist supervision recommended for landscape work that enters the TPZ	1.50
os2	Western Red Cedar	<i>Thuja plicata</i>	27	70	2	3-5	Single stem, splitting to multiple codominant leaders around 3m with bark inclusions. Canopy has been pruned back from the subject's house. Tree is along a hedge/grow, and the canopy has light deadwood on the interior. Landscape paver installation will enter the TPZ of the tree. House foundation preparation and installation will enter the TPZ.	Retain Install a tree barrier 1.62m from the tree Arborist supervision recommended for landscape work & house footing preparation and installation that enters the TPZ	1.62
os3	Douglas Fir	<i>Pseudotsuga menziesii</i>	110	70	4	15-18	Single stem, splitting to multiple codominant leaders around 4-5m with bark inclusions. The canopy begins around 5-6m and has some light deadwood on the interior. The tree sits in a slightly raised garden bed. Installation of landscape work (sod, pavers etc.), house foundation, coach house, park pad installation enters the TPZ of the tree.	Retain Install a tree barrier 6.60m from the tree Arborist supervision recommended for house & coach house footing preparation and installation, park pad installation, walkway pavers and landscape work.	6.60
os4	Magnolia	<i>Magnolia sp.</i>	9+ 7+ 7+ 23	60	1	3-5	Multistem tree from the base. Tree has been previously topped with regenerated leaders. The canopy has some small deadwood. Garbage and recycling area installation will enter the TPZ of the tree	Retain Install a tree barrier 1.50m from the tree Arborist supervision recommended for garbage and recycling area installation or landscaping that enters the TPZ	1.50



ONSITE TREE SUMMARY

TREES REMOVED 1
TREES PLANTED 3

REFER TO ARBORIST REPORT BY
WOODBRIDGE TREE CONSULTING
ARBORIST, UPDATED DEC. 20, 2022

No.	Date	Issue/Revision Notes
A	1/8/2023	FOR COORDINATION
B	1/11/2023	SUBMIT FOR BP

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SWLA
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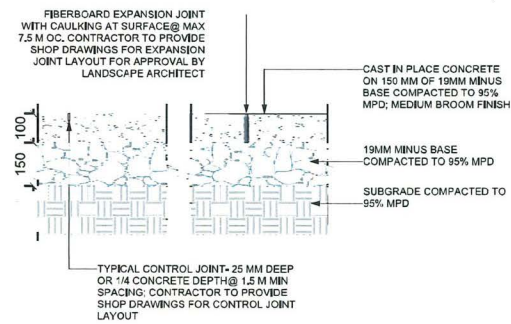
Design By: SW LANDSCAPE ARCHITECT
919 MELBOURNE AVENUE, NORTH VANCOUVER
www.swlandscapearchitect.com

Client: HARK RANA

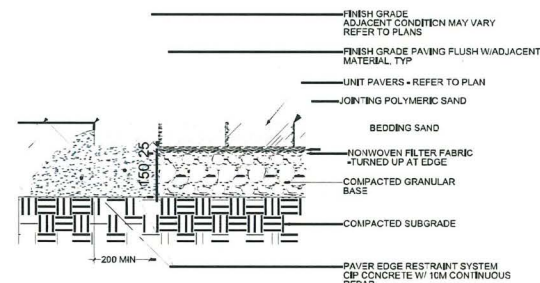
Project: RANA RESIDENCE
10151 AINSWORTH CRESCENT
RICHMOND, BC

Tree ID: TREE MANAGEMENT

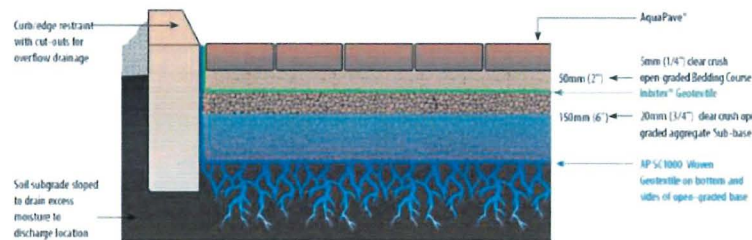
Project Manager: STEVE WONG
Client: SW
Date: DECEMBER 2022
City: VANCOUVER
Project ID: 2022-36
Scale: AS NOTED
Sheet: L-3
of 5



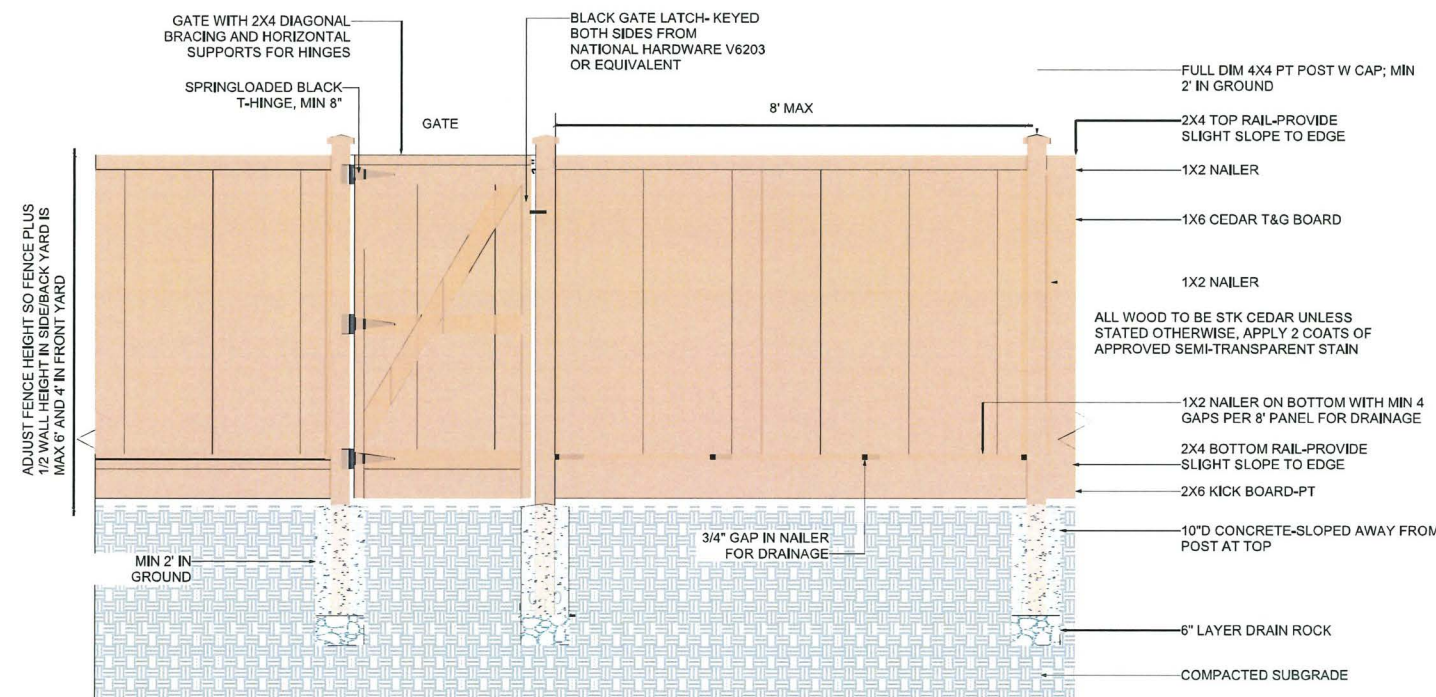
1 CIP FLATWORK
Scale: 1:10



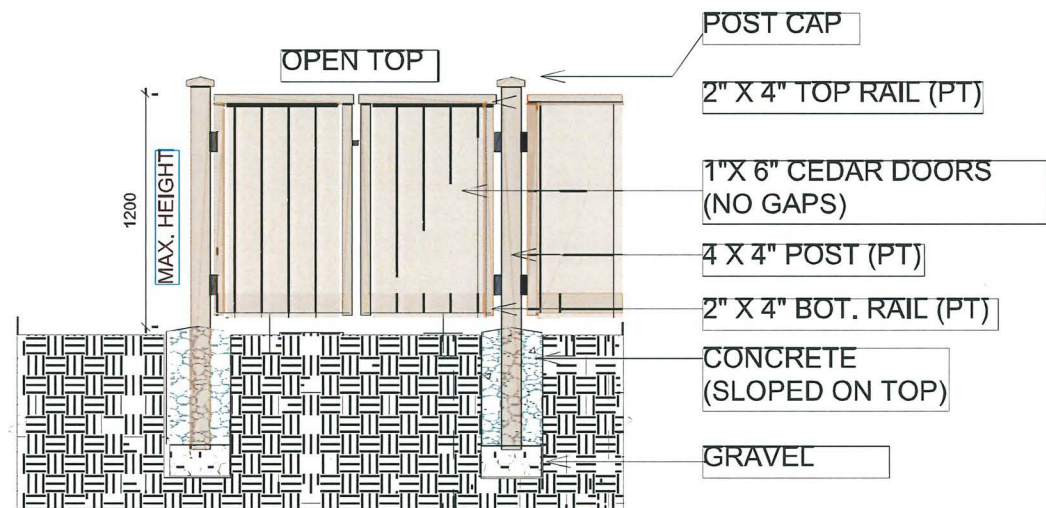
2 PATIO SLAB EDGE ON GRADE
Scale: 1:10



3 PERMEABLE PAVERS- AQUAPAVE
Scale: NTS



4 WOOD FENCE ON GRADE
Scale: 1:15



5 REFUSE/ORGANICS SURROUND
Scale: 1:15

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Client: HARK RANA

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RICHMOND, BC

Sheet Title: DETAILS

Project Manager: STEVE WONG	Project ID: 2022-36
Architect: SW	Scale: AS NOTED
Date: DECEMBER 2022	Sheet No: L-4
Client Name: AINSWORTH v1.vwx	Page: 5