



Development Permit Panel

**Council Chambers, City Hall
6911 No. 3 Road**

**Wednesday, January 12, 2022
3:30 p.m.**

MINUTES

Motion to adopt the minutes of the Development Permit Panel meeting held on November 24, 2022.



1. DEVELOPMENT PERMIT 20-910008
(REDMS No. 6784725)

APPLICANT: 1058085 BC Ltd.

PROPERTY LOCATION: 10431 No. 5 Road

Director's Recommendations

That a Development Permit be issued which would permit the construction of two duplexes at 10431 No. 5 Road on a site zoned "Arterial Road Compact Two-Unit Dwellings (RCD)"



2. New Business

3. Date of Next Meeting: January 26, 2022

ADJOURNMENT



**Development Permit Panel
Wednesday, November 24, 2021**

Time: 3:30 p.m.
Place: Remote (Zoom) Meeting
Present: Peter Russell, Director, Sustainability and District Energy, Acting Chair
James Cooper, Director, Building Approvals
Jim Young, Director, Facilities and Project Development

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 November 10, 2021 be adopted.

CARRIED

1. DEVELOPMENT PERMIT 20-920101
(REDMS No. 6763462)

APPLICANT: Khan Home Design Ltd.

PROPERTY LOCATION: 10700 Aintree Crescent

INTENT OF DEVELOPMENT PERMIT:

Permit the construction of a coach house at 10700 Aintree Crescent on a site zoned "Single Detached with Granny Flat or Coach House- Edgemere (RE1)".

Development Permit Panel

Wednesday, November 24, 2021

Applicant's Comments

Navtej Dhot, on behalf of the applicant and with the aid of a visual presentation (attached to and forming part of these Minutes as Schedule 1), provided background information on the proposed coach house, including its site context, site layout, floor plan, and architectural form and character, highlighting the following:

- the proposed coach house building includes a garage for the principal dwelling and entry, living, kitchen and powder room on the ground floor and bedrooms and a bathroom on the second floor for the coach house;
- an outdoor parking space and private outdoor space will be provided for the coach house;
- windows are proposed on the west elevation facing the lane in keeping with Crime Prevention Through Environmental Design (CPTED) principles and to provide maximum sunlight penetration;
- the choice of proposed exterior cladding materials and colour scheme will provide visual interest; and
- the proposed landscaping for the coach house will provide privacy between the principal dwelling and the coach house.

Staff Comments

Wayne Craig, Director, Development, noted that (i) the proposed coach house complies with the City's coach house design guidelines, (ii) three existing street trees along Aintree Crescent are currently proposed to be retained and will be further assessed as part of the Building Permit application for the principal dwelling, (iii) the coach house will be required to achieve Energy Step Code 3, and (iv) the applicant intends to install renewable energy sources for heating and cooling for the coach house.

Panel Discussion

In reply to queries from the Panel, Mr. Dhot acknowledged that (i) the proposed materials and colour scheme for the coach house would complement that of the principal dwelling, (ii) the future upgrade of the lane has been considered in the elevation of the proposed garage in the coach house building, and (iii) electric vehicle (EV) charging will be provided for the outdoor parking space for the coach house.

In reply to a query from the Panel, Mr. Craig noted that the principal dwelling will require a separate Building Permit and there is no form and character review for the proposed single-family development; however, the applicant intends that the design, materials and colour for the principal dwelling would be complementary to that of the coach house.

Gallery Comments

None.

Development Permit Panel
Wednesday, November 24, 2021

Correspondence

None.

Panel Decision

It was moved and seconded

That a Development Permit be issued which would permit the construction of a coach house at 10700 Aintree Crescent on a site zoned "Single Detached with Granny Flat or Coach House- Edgemere (RE1)".

CARRIED

2. DEVELOPMENT VARIANCE PERMIT 21-934492

(REDMS No. 6737193)

APPLICANT: CTA Design Group

PROPERTY LOCATION: 11120 Silversmith Place

INTENT OF DEVELOPMENT VARIANCE PERMIT:

Vary the provisions of Richmond Zoning Bylaw 8500 to increase the maximum building height of a building within the Industrial Business Park (IB1) zone from 16 m to 19.5 m, to accommodate the construction of a new polyfilm fabrication tower addition to the existing building.

Applicant's Comments

Craig Mitchell, CTA Design Group and Dave Brandle, Layfield Group, with the aid of a visual presentation (attached to and forming part of these Minutes as Schedule 2), provided background information on the proposed variance, highlighting the following:

- new equipment will be added to the existing plastic manufacturing facility which will require a new equipment tower;
- the proposed tower will go through the existing roof structure of the building and will be located adjacent to the existing towers in the subject site;
- the proposed tower will only change the original roofline of the existing building and its design would be similar to that of the existing towers; and
- proposed sustainability features associated with the proposed development variance permit application include four electric vehicle (EV) parking spaces which are ready to use, additional four EV parking spaces in the future, and use of renewable energy sources for heating the building.

Development Permit Panel

Wednesday, November 24, 2021

Staff Comments

Wayne Craig, Director, Development, noted that (i) there were two building height variances previously approved for the subject site, (ii) the proposed height variance is lower than the previously approved height variances, (iii) the proposed variance is consistent with the City's Industrial Lands Intensification Initiative objectives to better utilize the City's existing industrial lands, and (iv) the proposed installation of the new tower equipment will allow the long-standing plastics manufacturing facility to expand its operations and remain in Richmond.

Panel Discussion

In reply to queries from the Panel, the applicant acknowledged that (i) the exterior cladding materials and colour for the proposed tower would match those of the existing towers, (ii) a roof hatch will be added for the new tower, (iii) an interior stair structure will be installed to access the new equipment for maintenance, (iv) the applicant is confident that the existing building foundation would be able to support the weight of the new equipment and will conduct a review at the Building Permit stage, and (v) a ventilation system will be installed for the proposed tower.

Gallery Comments

None.

Correspondence

None.

Panel Discussion

The Panel expressed support for the project, noting the proposed sustainability features and the existing manufacturing facility's investment to the community.

Panel Decision

It was moved and seconded

That a Development Variance Permit be issued which would vary the provisions of Richmond Zoning Bylaw 8500 to increase the maximum building height of a building within the Industrial Business Park (IB1) zone from 16 m to 19.5 m, to accommodate the construction of a new polyfilm fabrication tower addition to the existing building.

CARRIED

Development Permit Panel
Wednesday, November 24, 2021

3. New Business

It was moved and seconded

That the Development Permit Panel meeting tentatively scheduled on Wednesday, December 8, 2021 be cancelled.

CARRIED

4. Adjournment

It was moved and seconded

That the meeting be adjourned at 4:02 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, November 24, 2021.

Peter Russell
Acting Chair

Rustico Agawin
Committee Clerk

Schedule 1 to the Minutes of the
Development Permit Panel
meeting held on Wednesday,
November 24, 2021.

CIVIC ADDRESS:

10700 - Aintree Crescent, Richmond BC
PID : 008 909 717

LEGAL DESCRIPTION:

LOT 32 SEC 35 BLK 4N RG 6W PL NWP20612

CALCULATIONS:

ZONE: RE-1
LOT AREA = 7094.0 S.F. (659.0 m²)
PER F.A.R. = 3628.0 S.F. (337.04 m²)
PLUS 538.0 S.F. (50.0 m²) FOR ENCLOSED PARKING

PROPOSED F.A.R.

MAIN FLOOR AREA = 1839.0 S.F. (170.84 m²)
SECOND FLOOR AREA = 1128.0 S.F. (104.79 m²)
PLUS 645.0 S.F. (59.92 m²) FOR COACH HOUSE
TOTAL = 3612.0 S.F. (335.55 m²)

PLUS 480.0 S.F. (44.59 m²) OF ENCLOSED PARKING

PER. SITE COVERAGE = 45 % OF 7094 S.F. (659.0 m²)
= 3192.0 S.F. (296.53 m²)

PROPOSED SITE COVERAGE = 788.0 + 1890.0 = 2678.0 S.F. (248.78 m²)

PER. COVD. PATIO 10 % OF 3628.0 S.F. = 362.80 S.F. (33.70 m²)
PROPOSED COVD. PATIO = 50.0 S.F. (4.64 m²)

PER. IMPERMEABLE COVERAGE = 70 % OF 7094.0 S.F. (659.0 m²)
= 4979.0 S.F. (462.54 m²)

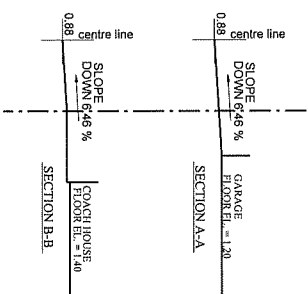
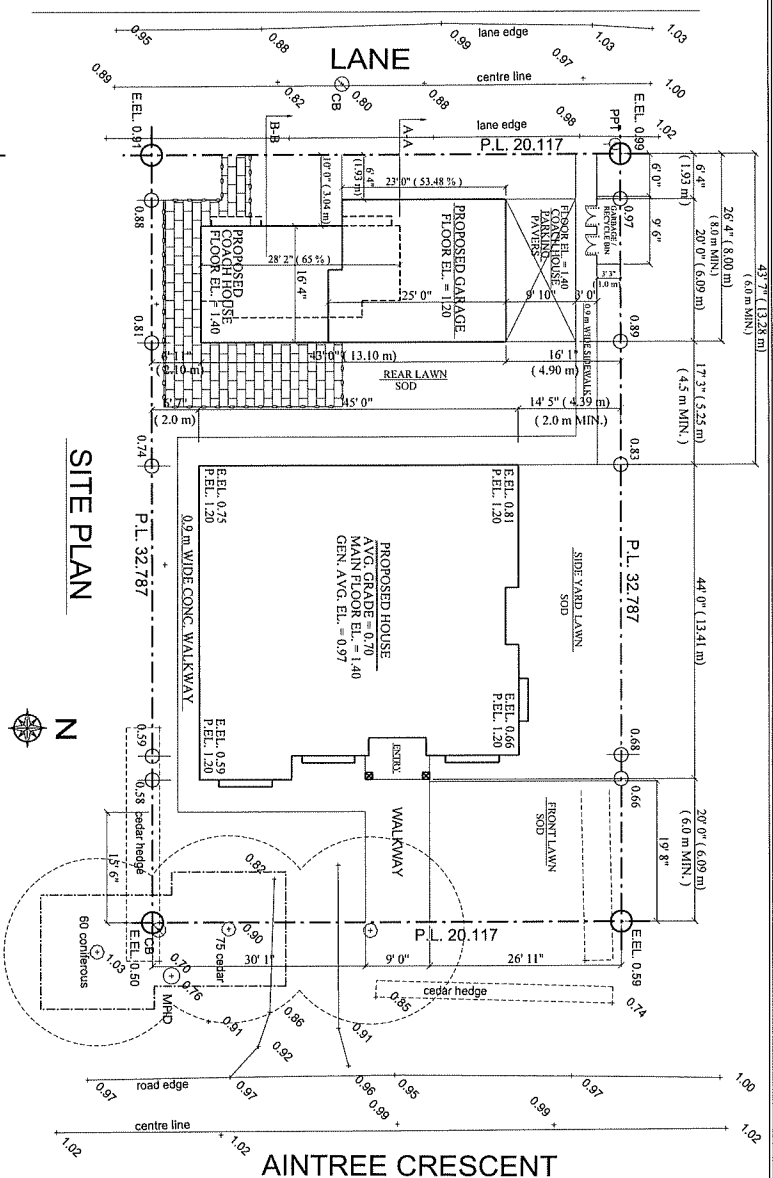
PROPOSED IMPERMEABLE COVERAGE = 4282.0 S.F. (397.80 m²)

PER. LANDSCAPE SURFACE = 30 % OF 7094.0 S.F. (659.0 m²)
= 2115.0 S.F. (196.48 m²)
PROPOSED LANDSCAPE SURFACE = 2812.0 S.F. (261.23 m²)

F.E.L. = EXISTING ELEVATION
P.E.L. = PROPOSED ELEVATION

TOTAL COACH HOUSE AREA = 307.0 + 338.0 = 645.0 SF (29.92 m²)
COACH HOUSE MAIN FLOOR AREA = 307.0 SF (28.52 m²) (45.60 %)

FRONT YARD = 19' 8" X 66' 0" = 1298.0 SF (120.58 m²)
REQUIRED FRONT YARD LANDSCAPE SURFACE = 55 % = 714.0 SF (66.33 m²)
PROPOSED FRONT YARD LANDSCAPE SURFACE = 996.0 SF (92.52 m²)



COACH HOUSE SETBACK
AT 1.9 m = 53.48 %
AT 3.04 m = 65 %

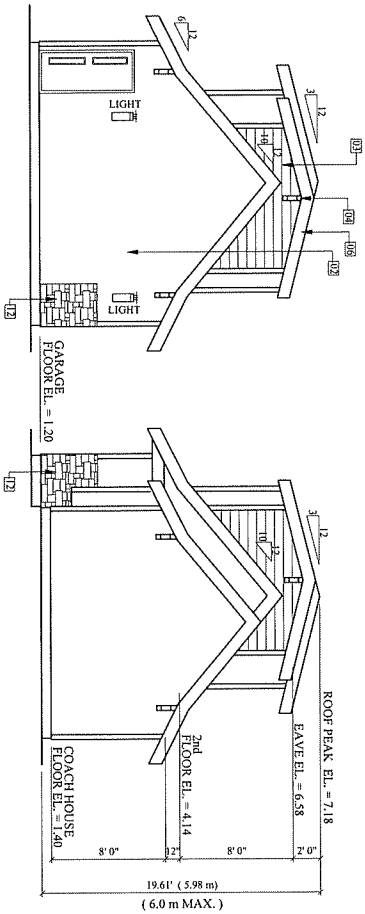
THESE PLANS CONFORM TO
B.C.A.C. 2018 EDITION

DRAWN BY	Astoria Design & Detailing Ltd.		
	19732 - 718 Ave. Jumbly B.C.		
CHECKED BY	P.H. 604 539 1740 FAX: 1 604 539 1741		
	E.L. 604 539 1740 FAX: 1 604 539 1741		
DATE	10/07/20		
	10/07/20		
SCALE	1:100		
	1:100		
PROJECT	10700 - Aintree Crescent, Richmond BC		
	10700 - Aintree Crescent, Richmond BC		
SHEET	1 of 1		
	1 of 1		

DP 20-920101
20-9201/PLAN # 1
NOV 3 2021

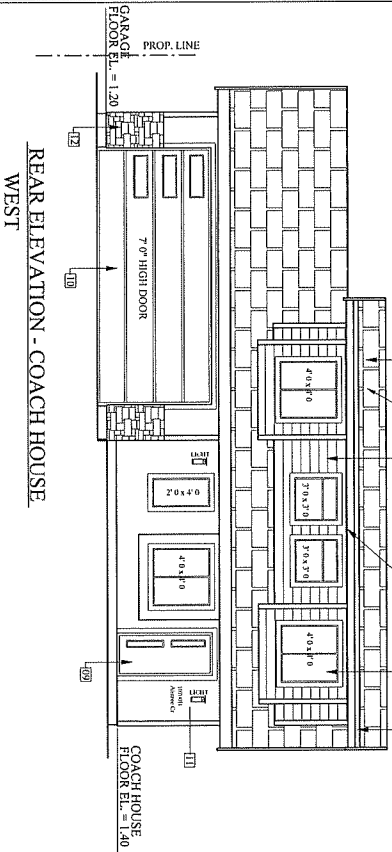
EXTERIOR FINISHES SCHEDULE

01	ASPHALT SHINGLES ROOF COLOR: BLACK (BY KO)	07	ALUMINUM GUTTER COLOR: CHARCOAL GREY
02	HORIZ. HARDIE PLANKS COLOR: DARK GREY	09	FRONT ENTRY FIBRE GLASS DOOR COLOR: GREY / BROWN
03	HORIZ. HARDIE PLANKS COLOR: LIGHT GREY	10	10'X7' METAL GARAGE DOOR MATCH FRONT ENTRY DOOR COLOR: GREY
04	DECORATIVE WOOD BRACKET COLOR: NATURALLY STAINED CEDAR	11	EXTERIOR WALL LIGHTING
05	VINYL WINDOW W/ LOW "E" DOUBLE GLAZING MODEL: APEX ALLOY COLOR: WHITE	12	STONE CLADDING CULTURED STONE (BLACK)
06	2"X4" PT FASCIA TRIM BOARD COLOR: WHITE		



RIGHT SIDE ELEVATION
COACH HOUSE
NORTH

LEFT SIDE ELEVATION
COACH HOUSE
SOUTH



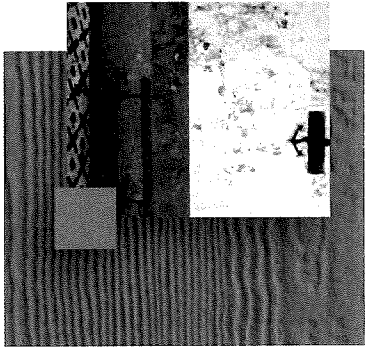
REAR ELEVATION - COACH HOUSE
WEST

FRONT ELEVATION - COACH HOUSE
EAST

THESE PLANS CONFORM TO
B.C. B.C. 2018 EDITION

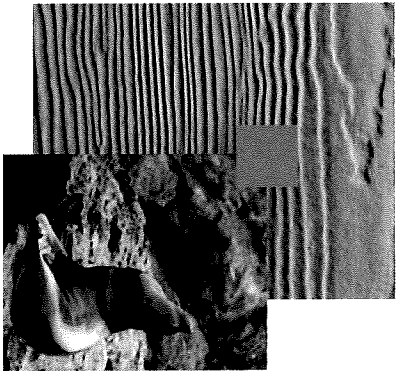
ASTONISH DESIGN & DRAFTING LTD.	19712 - 718 Ave. Langley B.C.
TEL: 604 391 1004 FAX: 604 539 1741	
CELL: 604 728 0389 EMAIL: astonishdesign@gmail.com	
PROJECT: COACH HOUSE ELEVATIONS	
DATE: 10700 Antree Crescent Richmond, B.C.	
REVISION: 1st	DATE: 17/03/2021

DP 20-920101
20-9201PLAN # 2
NOV 3 2021



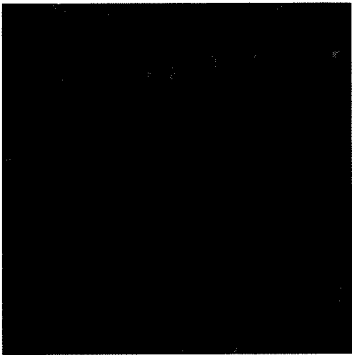
GRAY SLATE

02-DARK GREY HORIZONTAL HARDIE PLANK



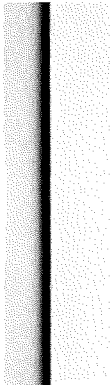
MONTEREY TAUPE

03-LIGHT GREY/TAUPE HORIZONTAL HARDIE PLANK



Black Tusk Prostack

12-STONE ACCENT



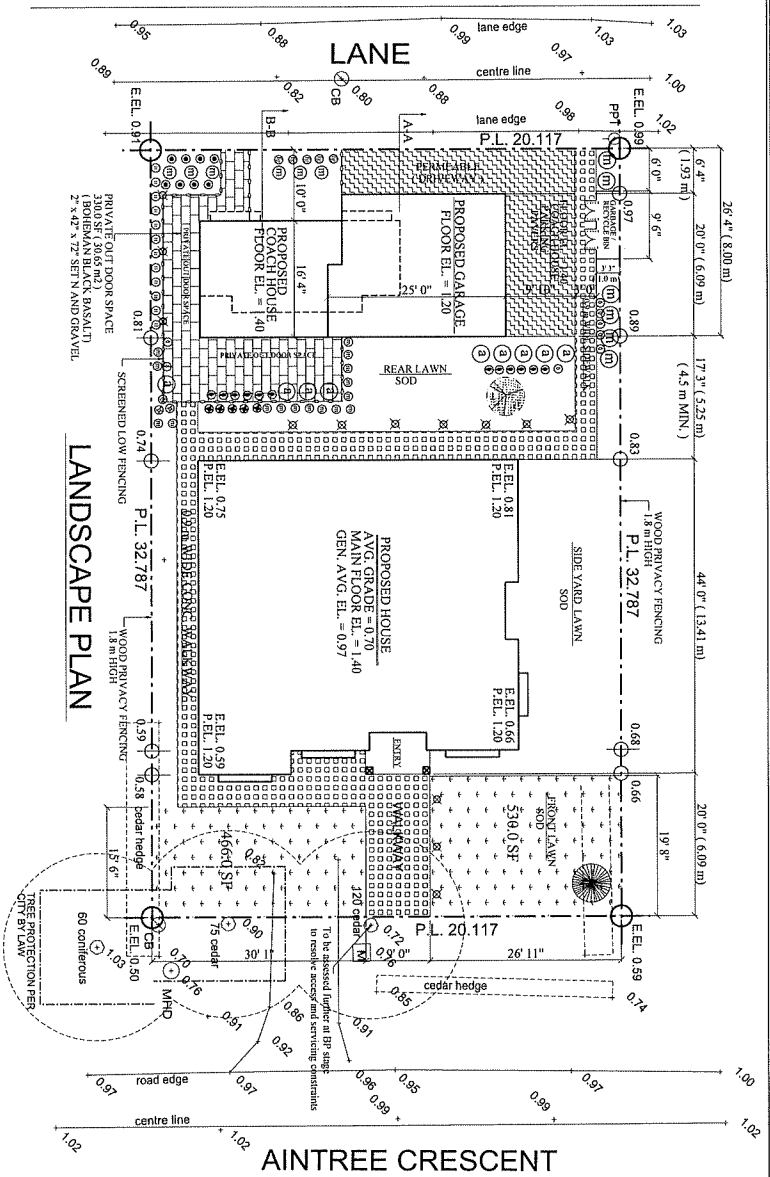
ARCTIC WHITE

06-TRIM

THESE PLANS CONFORM TO
B.C.B.C. 2018 EDITION

Astomish Design & Detailing Ltd.		<input checked="" type="checkbox"/>
19732 - 718 Ave, Langley, B.C.		
Tel: 1 604 539 1341 Fax: 1 604 539 1341		
Email: info@astomish.com Website: www.astomish.com		
Title: COACH HOUSE PLAN - COLOURS		
Revision	10700 Aintree Crescent Richmond, B.C.	
Drawn	DATE: 10/11/2021	10/11/2021
Scale	1/4" = 1'-0"	1/4" = 1'-0"

DP 20-920101
20-9201PLAN # 3
NOV 3 2021



LANDSCAPE PLAN

LEGEND

SYM NAME

PLANT SCHEDULE

SYM QTY BOTANICAL NAME

LARGE SHRUBS

- | | | |
|----|----|--|
| 11 | 12 | CHAMAECYPARIS ORTUISA 'NANA AUREA' |
| 7 | 7 | DAUPHINE ODORA |
| 20 | 20 | MISCANTHUS SINENSIS VAR. PURPUREASCENS |
| 5 | 5 | ROTHMELLODIA GARDENI 'JADE PLATT' |
| 6 | 6 | HYDRANGEA MACROPHYLLA 'LEMON DADDY' |
| 6 | 6 | HYDRANGEA ANOMALA SUBSP. PETIOLARIS |

SMALL SHRUBS

- | | | |
|----|----|--------------------------------------|
| 27 | 27 | GARDENIA JASMINOIDES 'KLEIM'S HARDY' |
| 7 | 7 | HEMEROCALLIS |
| 13 | 13 | TAXUS X MEDIA 'HICKSII' |
| 11 | 11 | KUDRUECKIA HIRTA |

- | | |
|--|--------------------------------------|
| | CORE GRASS PERVIOUS PARKING HEX GRID |
| | AQUA PAVE PERVIOUS CONCRETE PAVERS |
| | BOHEMIAN BLACK BASALT |
| | 2' x 4' x 7' 2" SET N AND AND GRAVEL |

- | | |
|--|--------------------------|
| | PROPOSED DECIDUOUS TREE |
| | PROPOSED CONIFEROUS TREE |
| | PATHWAY LIGHT 121 |

- | | |
|--|--|
| | ALL INSTALLATION TO BE AS PER BCLM/BCLA STANDARDS ONLY |
| | IRRIGATION STRATEGY NECESSARY |

NOTES:

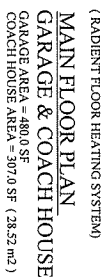
- ALL PLANT MATERIAL SHALL BE IN ACCORDANCE WITH THE BCCLA AND BCNTA LANDSCAPE STANDARD, LATEST EDITION.
- COMPLETE PROTECTION OF EXISTING STREET TREES IN ACCORDANCE WITH THE CITY OF RICHMOND'S TREE PROTECTION GUIDELINES.
- ALL LANDSCAPE AREAS WILL BE IRRIGATED WITH LOW-VOLUME AUTOMATIC IRRIGATION SYSTEM, C/W RAIN SENSOR.
- ALL UTILITY OR UNDERGROUND WORK TO BE COORDINATED WITH A CERTIFIED ENGINEER TO ENSURE PROTECTION OF ALL SYSTEMS AND PROTECTED TREES.

THESE PLANS CONFORM TO
B.C.B.C. 2018 EDITION

DATE	10700 - Aintree Crescent, Richmond BC		
	DESIGNED	DRAWN	CHECKED
TITLE	LANDSCAPE PLAN		
	DATE	BY	DATE

Astonish Design & Drafting Ltd.
10732-718 Ave., Langley B.C.
V3A 4G5
TEL: 1-604-228-0389 FAX: 1-604-228-0390
EMAIL: info@astonishdesign.com

DP 20-920101
20-9201 PLAN # 4
NOV 3 2021



TOTAL COACH HOUSE AREA = 307.0 + 338.0 = 645.0 SF (59.92 m²)
COACH HOUSE MAIN FLOOR AREA = 307.0 SF (28.52 m²) (45.60 %)



(TOTAL OFFSET @ 1.77 m = 34.89 %)
(MAX. ALLOWED 65 % AT 1.2 m %)

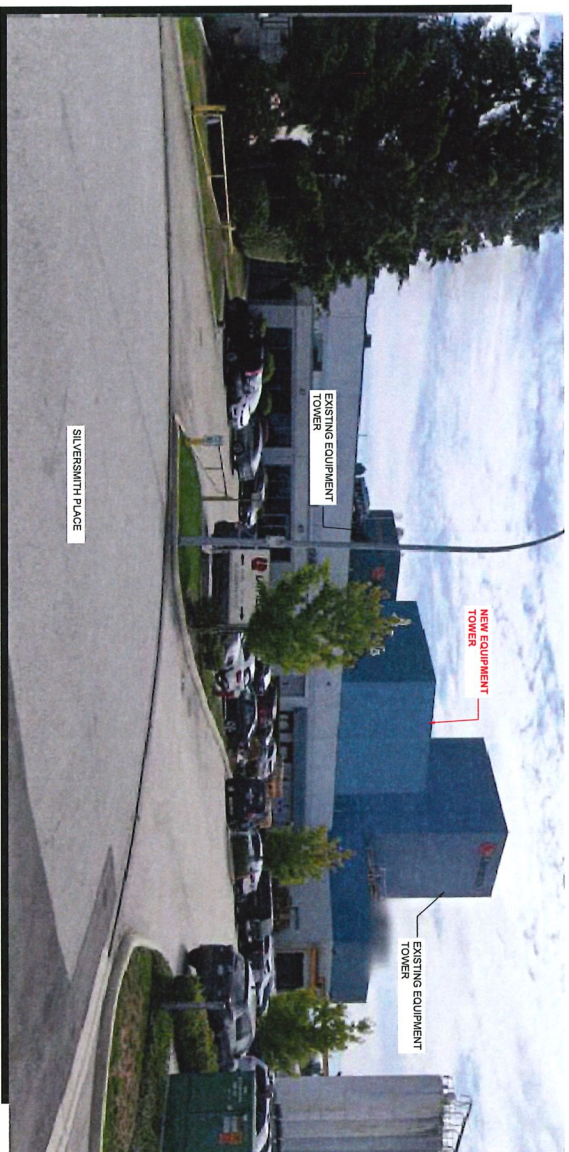


THESE PLANS CONFORM TO
B.C.B.C. 2018 EDITION

[illegible]

DP 20-920101
REFERENCE PLAN
NOV 3 2021

Schedule 2 to the Minutes of the Development Permit Panel meeting held on Wednesday, November 24, 2021.

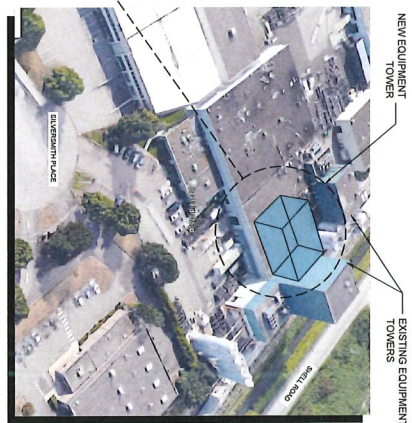


1 PERSPECTIVE VIEW
SCALE: N=1/8"

NEW EQUIPMENT TOWER FOR

LAYFIELD

11120 SILVERSMITH PLACE

[illegible]



City of
Richmond

Report to Development Permit Panel

To: Development Permit Panel

Date: December 21, 2021

From: Wayne Craig
Director, Development

File: DP 20-910008

Re: Application by 1058085 BC Ltd. for a Development Permit at 10431 No. 5 Road

Staff Recommendation

That a Development Permit be issued which would permit the construction of two duplexes at 10431 No. 5 Road on a site zoned "Arterial Road Compact Two-Unit Dwellings (RCD)".

A handwritten signature in black ink, appearing to read "Wayne Craig".

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

WC:na
Att. 3

Staff Report

Origin

1058085 BC Ltd. (Sajid Hassan) has applied to the City of Richmond for permission to develop two duplexes on a subdivided lot with each lot being provided with driveway access via the rear lane at 10431 No.5 Road. The site is being rezoned from “Single Detached (RS1/E)” to “Arterial Road Compact Two-Unit Dwellings (RCD)” under Bylaw 10195 (RZ 18-829789), which received third reading at the Public Hearing on September 8, 2020. The single-family dwelling is currently owner occupied and the house does not contain a secondary suite. Demolition of the single-family house is expected once rezoning approval is granted.

A Servicing Agreement is required prior to subdivision approval, and includes, but is not limited to, the following improvements:

- Laneway improvements, including landscaping adjacent to the driveways, and a new concrete sidewalk and landscaped boulevard along the No. 5 Road frontage with closure of existing front access driveway.

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

Development surrounding the subject site is as follows:

- To the north: A single-family dwelling on property zoned “Single Detached (RS1/B)” and designated in the Arterial Road Land Use Policy for Arterial Road Compact Lot Duplex.
- To the east: Across No. 5 Road, property zoned “Agriculture (AG1)”.
- To the south: A single-family dwelling on property zoned “Single Detached (RS1/E)” and designated in the Arterial Road Land Use Policy for Arterial Road Townhouse.
- To the west: Across the lane, single-family dwellings on property zoned “Single Detached (RS1/E)”.

Rezoning and Public Hearing Results

During the rezoning process, staff identified the following design issues to be resolved at the Development Permit stage:

- Compliance with Development Permit Guidelines for duplex projects in the 2041 Official Community Plan (OCP).
- Review of the architectural character, scale and massing to ensure that the proposed duplexes are well designed and fit well into the neighbourhood.
- Review aging-in-place features in all units and the provision of a convertible unit on each lot.

- Refinement of the proposed site grading to ensure survival of the protected tree, and to provide appropriate transition between the proposed development and adjacent existing developments.
- Refinement of landscape design, including the location and type of fence along the front property line within the Statutory Right-of-Way (SRW), the provision of a holding area for garbage/recycling material collection, and the size and species of on-site replacement trees to achieve an acceptable mix of conifer and deciduous trees on-site.

The Public Hearing for the rezoning of this site was held on September 8, 2020. At the Public Hearing, no concerns about rezoning the property were expressed.

Staff worked with the applicant to address the Development Permit Application requirements noted above in the following ways:

- Further refinement of the design with colour and material schemes included to address detailed information required and Advisory Design Panel (ADP).
- The drawing package includes streetscape elevations showing the height of the proposed duplexes relative to adjacent dwellings. The maximum building height is 9.0 m or two storeys, which is equivalent to the maximum building height contained in single-family zones, including the “Single detached (RS1/E)”.
- A shadow study plan is included in Attachment 2 to demonstrate that the duplexes would have similar shading impact as a single family dwelling.
- Each of the proposed duplexes include a three-bedroom unit, with unit sizes ranging between 114 m² (1,227 ft²) and 120 m² (1,292 ft²).
- The overall architectural character is generally the same as what was proposed at rezoning stage although changes have been made to break up the horizontal expression of the buildings, including the addition of contrasting white trim. A second colour palette has been added to provide distinct visual identity for each building.
- Balcony spaces facing inward towards the internal shared pathway between the two duplexes have been located to reduce overlook to both the adjacent single-family homes to the north and south.
- A preliminary sketch plan of the space between City lane and private property to be included as part of the Development Permit staff report with further refinement through Servicing Agreement.
- Additional details on the architectural character, aging-in-place features, and landscape design are provided in the Analysis section of this report.

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 (OCP) and is generally in compliance with the “Arterial Road Compact Two-Unit Dwellings (RCD)” zone.

Advisory Design Panel Comments

On June 9, 2021, the Advisory Design Panel supported the subject Development Permit application moving forward to the Development Permit Panel subject to the applicant giving consideration to the Panel's comments. A copy of the relevant excerpt from the Advisory Design Panel Minutes is attached for reference (Attachment 3). 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 north side yard of the proposed development abuts the side yard of a single-family dwelling. A combination of stepping stones and gravel bed for side yard access are proposed for the majority of this interface with sections of hedging near private outdoor space. The existing fence along the property line is to remain and the site grade will meet adjacent neighbouring grade.
- The south side yard of the proposed development abuts the side yard of a single-family dwelling. Similar to the north side yard, a combination of stepping stones and gravel bed for side yard access are proposed for the majority of this interface with sections of hedging near private outdoor space. The existing fence along the property line is to remain and the site grade will meet adjacent neighbouring grade.
- The height of the buildings and the placement of upper storey windows has been designed to avoid overlook on adjacent existing properties.
- The front yards include a 4 m landscape buffer. The landscape buffer is intended to provide a buffer between the residential uses on the subject site and any agricultural uses on the east side of No. 5 Road within the Agricultural Land Reserve (ALR).
- The rear yard abuts the laneway that runs north-south along the section of the neighbourhood with the exception of additional undesignated laneway area in front of the rear property line. Staff have worked with the developer to maximize the amount of landscaping within the laneway abutting the subject site. The final design and construction of these works will be completed through a Servicing Agreement required at the time of subdivision.

Urban Design and Site Planning

- The proposed development involves subdivision of the lot to create two properties, each of which would contain one front-to-back duplex.
- Vehicular access to each duplex lot is from the rear laneway.
- A 1.5 m wide shared pathway along the shared property line provides access to each unit. A statutory right of-way (SRW) agreement establishing this shared pedestrian pathway access arrangement is required as part of this application.
- Each unit has access to a single car garage with tandem arrangement for a second vehicle. All resident spaces are provided with Level 2 EV charging as per Richmond Zoning Bylaw 8500.
- A garbage and recycling enclosure for each unit is provided near the garages.

Architectural Form and Character

- The proposed development contributes to the low-rise residential character of the neighbourhood by using simple massing, pitched roofs, and craftsman-inspired details. The design includes articulation on each elevation, and the two buildings have varied massing to avoid being mirror images.
- Second storey balconies are included facing the internal shared pedestrian pathway to add visual interest and animate the space.
- The proposed cladding materials include hardie board siding, asphalt shingles, and white trim. The material palette is consistent with the Official Community Plan (OCP) guidelines and complements the surrounding neighbourhood character.
- The colour palette is simple, in keeping with the proposed materials and massing. Each duplex utilizes contrasting tones of brown to help distinguish the units. Both duplexes use white, beige, dark brown, light brown, fiery brown, and a slate tile blue. Vertical white trim is used strategically on the longer building facades to break up the horizontal expression.

Landscape Design and Open Space Design

- One on-site palm tree (tag #3) is proposed to be retained in the front yard of proposed Lot 2. Tree retention was secured through the rezoning, and a Tree Management Plan is included in the Development Permit on Plan 11. A bridge pathway will be included as part of maintaining the central pathway connection but also avoiding any impact on the critical root zone, and site grade will be maintained. Installation of tree protection fencing is required prior to demolition of the existing dwelling, and arborist supervision is required for all works within the tree protection area.
- Two on-site trees and two City trees in poor condition were approved for removal through the rezoning. Eight new trees are proposed and include a mix of coniferous and deciduous species. A \$1,950.00 contribution to the City's Tree Compensation Fund in lieu of the City trees at the rear being replaced was secured through the rezoning.
- Planting within the 4.0 m wide ALR buffer is a mix of Pacific Dogwood deciduous trees, Dogwood shrubs, ferns, broadleaf Evergreen shrubs, Black Pine coniferous trees and Juniper and Huckleberry shrubs to improve dense layering and mitigation of noise pollution and farm odours.
- The proposed overall landscaping is consistent with the ALR buffer to ensure private spaces and shared spaces are well defined with mix of deciduous and coniferous trees (Vine Maple, Pacific Dogwood, Honey Locust, and Black Pine) and shrubs (Juniper, Dwarf Mugo Pine, Hick's Yew, Dwarf Strawberry Tree, Golden Euonymus, Salal, Rhododendron, Huckleberry, Dogwood, and Currant) both at the front and rear of the property.
- Exterior lighting is proposed as building mounted and downward focused with placement of dimmable LED lighting next to each unit entry and along the shared pathway to avoid light pollution.
- The proposal includes private outdoor space for each unit consistent with the Official Community Plan (OCP) requirements. The outdoor space for each unit includes both soft and hard landscape elements.
- The on-site drive aisle access via the rear lane is paved with a combination of permeable pavers and concrete. Permeable pavers are used to help improve and manage storm water runoff.

- A planted area is provided between the drive aisles, in the private outdoor spaces, along the shared pathway down the east-west corridor, and in the front yards on both lots.
- Landscaping is provided around each private outdoor space to ensure adequate screening is maintained for noise reduction and definition of space.
- Irrigation is provided for all planted areas on-site.
- To ensure that the proposed landscaping works are completed, the applicant is required to provide a Landscape Security in the amount of \$28,902.74 prior to issuance of the Development Permit.

Crime Prevention Through Environmental Design

- Fencing is not included along the front yard property line to ensure landscaping included fully utilizes the agricultural landscape 4 m wide buffer required. Private and communal space is distinguished however through landscaping and coloured permeable pavers.
- Six foot high Cedar fencing along the side yard is incorporated and Cedar hedges are proposed around the perimeter of the site with specific concentration of hedging near rear private outdoor spaces.
- Each of the rear units has a covered entry, which provides weather protection and clearly defines the unit entrance.

Sustainability

- The proposed development is required to achieve Step 3 of the BC Energy Step Code and the applicant has indicated that they intend to achieve Step 3. The proposed measures to achieve this target include improved air tightness, dimmable downward facing LED lighting, and a combined condensing boiler system for all units.

Accessible Housing

- The proposed development includes two convertible units that are designed with the potential to be easily renovated to accommodate a future resident in a wheelchair (Unit 2 and unit 4). The potential conversion of these units will require installation of a stairway lift. These units would include ramps or level entryway access for wheelchair accessibility
- All of the proposed units incorporate aging-in-place features to accommodate mobility constraints associated with aging. These features include:
 - Stairwell hand rails.
 - Lever-type handles for plumbing fixtures and door handles.
 - Solid blocking in washroom walls to facilitate future grab bar installation beside toilets, bathtubs and showers.
 - Space for installation of ramps to access the doorsteps of Unit 2 and Unit 4.

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.



Nathan Andrews
Planning Technician
(604-247-4911)

NA:blg

Attachments:

Attachment 1: Development Application Data Sheet

Attachment 2: Shadow Study Diagram

Attachment 3: Excerpt from the Draft Minutes of the Advisory Design Panel

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

- Receipt of a Letter-of-Credit for landscaping in the amount of \$28,902.74.
NOTE: staff to ensure that landscape estimates include a 10% contingency cost.
- Registration of a cross-access easement, statutory right-of-way, and/or other legal agreements or measures, as determined to the satisfaction of the Director of Development, over the internal shared property line in favour of all units including the installation of a 1.5 m wide pedestrian pathway on the subject property.

Prior to a Demolition Permit issuance, the developer is required to complete the following:

- 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.

At subdivision stage, the developer must complete the following:

- Provide a cash-in-lieu contribution in the amount of \$16,653.00 for future lane construction to fulfill ultimate standards.
- Payment of current year's taxes, Development Cost Charges (City and GVS & DD), School Site Acquisition Charge, and Address Assignment Fees.
- Enter into a Servicing Agreement for the design and construction of works within the lane (including landscaping), frontage and servicing works. 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.

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

- 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>).
- Incorporation of CPTED, sustainability, and accessibility measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.



DP 20-910008

Attachment 1

Address: 10431 No. 5 Road

Applicant: 1058085 BC Ltd.

Owner: 1058085 BC Ltd.

Planning Area(s): Shellmont

	Existing	Proposed
Site Area:	781 m ²	Two lots each 390.5 m ²
Land Uses:	Single-family dwelling	Compact Duplex
OCP Designation:	Neighbourhood Residential	No change
Zoning:	Single Detached (RS1/E)	Arterial Road Compact Lot Duplex (RCD)
Number of Units:	1	4

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.60	Lot 1: 0.60 Lot 2: 0.60	none permitted
Gross Floor Area:	234.2 m ² (2,521 ft ²) per lot Total: 468.4 m ² (5,042 ft ²)	234.2 m ² (2,521 ft ²) per lot	none
Lot Coverage:	Buildings: Max. 50% Non-porous surfaces: Max. 70% Live Landscaping: Min. 20% Front Yard Landscaping: Min. 50%	Buildings: 45% per lot Non-porous surfaces: 61% Live Landscaping: 25% Front Yard Landscaping: 55%	none
Lot Size:	Min. 360 m ²	390.5 m ² per lot	none
Lot Dimensions (m):	Width: Min. 9.0 m Depth: Min. 40.0 m	Width: 9.15 m per lot Depth: 42.71 m per lot	none
Setback – Front Yard:	Min. 6.0 m	6.3 m	none
Setback – Front Yard – Accessory Buildings:	Min. 15.0 m	31.1 m	none
Setback – Interior Side Yard:	Min. 1.2 m	1.2 m	none
Setback – Rear Yard – Principal Building:	Min. 10.0 m	14.8 m	none
Height (m) – Principal Building:	Max. 2.5 storeys or 9.0 m, whichever is less	8.05 m	none
Height (m) –Garage:	Max. 4.0 m	3.97 m	none

On-site Vehicle Parking Spaces:	2 spaces per dwelling unit	2 spaces per dwelling unit (8 spaces total)	none
Tandem Parking Spaces	1 tandem parking space per dwelling	1 tandem parking space per dwelling	none

ATTACHMENT 2

ERIC LAW
ARCHITECT

210 228 WEST HEDGE, RICHMOND BC
V6V 1A6
TEL: (604) 203-1099

CONSENT REQUIRED: THIS PLAN AND
NOTHING MORE IS TO BE USED TO OBTAIN
THE CITY OF RICHMOND'S CONSENT TO THE
PROPOSED DEVELOPMENT. THE CITY OF
RICHMOND IS NOT RESPONSIBLE FOR THE
ACCURACY OF THE INFORMATION PROVIDED
HEREIN. THE CITY OF RICHMOND IS NOT
TO BE USED TO OBTAIN ANY OTHER
PERMITS.

REVISIONS

1. PREPARED FOR CITY OF RICHMOND
2. PREPARED FOR CITY OF RICHMOND
3. PREPARED FOR CITY OF RICHMOND

SHADOW STUDY
MARCH 21-9:00AM



SHADOW STUDY
JUNE 21-9:00AM



SHADOW STUDY
MARCH 21-12:00PM



SHADOW STUDY
JUNE 21-12:00PM



SHADOW STUDY
MARCH 21-3:00PM



SHADOW STUDY
JUNE 21-3:00PM



PROPOSED
COMPACT DUPLEX
10431 NO. 5 RD
RICHMOND BC
SHADOW DIAGRAM

PROJECT NUMBER: 18-08
ISSUED: 5/28/2021
DRAWN BY: EL
CHECKED BY: EL
FILENAME: 18-08_04_310327-40P.DWG

DP 20-910008

SHADOW

DEVELOPMENT PERMIT

**Annotated Excerpt from the Draft Minutes from
Advisory Design Panel Meeting**

Wednesday, June 9, 2021 – 4:00 p.m.

DP 20-910008 – ARTERIAL ROAD COMPACT DUPLEX DEVELOPMENT

ARCHITECT: Eric Law Architect Inc.

LANDSCAPE ARCHITECT: Donald V.S. Duncan Development Consultant

PROPERTY LOCATION: 10431 No. 5 Road

Applicant's Presentation

Architect Eric Law, Eric Law Architect Inc., and Landscape Architect Donald Duncan, Donald V.S. Duncan Development Consultant, presented the project and together with Sajid Hasan, Hasan Contracting, answered queries from the Panel.

Panel Discussion

Comments from Panel members were as follows:

- appreciate the thorough and informative presentation of the applicant;
- appreciate the details provided by the applicant with regard to the accessibility features of the convertible units, e.g. windows operable with one hand and provision for future installation of chairlift;
- appreciate the accessible walkway beside the garage to provide space for loading of a wheelchair into a vehicle;
- appreciate the provision of electrical outlets at the top and bottom of staircases and other areas in the convertible units; however, also consider installing grounded electrical outlets near the toilet in the washroom on the ground floor and at the accessible bathroom on the second floor to allow for the use of specialized toilets and lift mechanisms;

Grounded electrical outlet noted on drawings A4

- in lieu of a shower lip, consider sloping the shower floor at 1.5 percent with one retention bump for wheelchair accessibility and water drainage;

Changes added to drawings A4

- appreciate the proposed convertible units design, which meets most of the accessibility guidelines for SAFERhome standards; consider getting a certification from SAFERhome Standards Society as it would also increase the value of the property;
- appreciate the landscape design presentation and choice of planting; the proposed soft landscaping materials are appropriate for the proposed development;
- there is a significant amount of asphalt in the backyards of rear duplex units; consider introducing pervious materials or greenery;

The parking pads behind the garages have been converted to pervious paving, significantly increasing the permeability of the site.

- appreciate the building massing which fits well into the streetscape; consider introducing further articulation and additional details on the building elevations;

Additional details adjusted on the elevations

- consider introducing variations in the design of the entry porch for each duplex unit (i.e., front and back units);

Additional entry details and variations are provided on the porches at the front and back units.

- concerned about the privacy of private outdoor yards of duplex units due to lack of separation from the shared central walkway, e.g. no fences are installed;

While visual separation in the front yards would not be possible to any significant degree using fences, given the mandated maximum height of 1.2 metres in the front yard setback, there is currently a significant physical separation offered by the dry stream bed element and the plantings. In the rear private areas, screening is provided by the use of vine maples and taller growing shrubs adjacent to the spinal walkway. These green elements will filter views.

- concerned about the location of the windows of the north and south duplex units along the shared walkway as they directly face each other and may give rise to privacy issues;

The size of windows facing the shared walkway are reduced and the windows are offset so that they do not face each other directly

- review the location and usability of balconies on the second floor of the north and south front units as they directly face each other across the shared walkway; the balcony above the entry porch of the north front unit would be more usable;

The balconies that face the shared walkway are designed with doorways that do not directly face the other to avoid direct overlook.

- consider further design development to the covered garbage accessory sheds and consolidating them with the garages;

The refuse / recycling structure has been modified to give more interest and gates have been added for a neater appearance.

- concerned about how the future chair lifts for the convertible units would work in the wood frame duplex buildings;

The stair width is widened to allow for chair lift and it can be mounted to wood frame buildings. A diagram is provided to illustrate the stair clearance required.

- building colours appear dark; consider using materials with lighter colours to provide more sun reflection into all areas of the buildings;

A lighter beige colour scheme is proposed as indicated on A8

- appreciate the choice of materials; massing works well and fits well with the neighbourhood context;

- concerned about the small site; the parking spaces occupy a significant area in the site; consider retaining just the garage of the north duplex building to shift the building to the west in order to mitigate shadowing on the adjacent property to the north and to shift the location of windows and balconies along the shared walkway to enhance the privacy of duplex units;

the RCD zoning requires each dwelling to have 1 garage and 1 outdoor parking, and therefore removing any parking space is not allowed.

- confirm whether the solar heat gain coefficient (SHGC) for windows of “0.30 or higher” is the correct terminology;

higher SHGC allows more solar radiation into the home and subsequently released as heat inside the space. This is more energy efficient as less heating is required in winter.

- clarify the proposed locations for the gas meters and review their appropriateness in terms of providing accessibility for servicing by gas utilities;

the location of gas meter is shown next to the HWT on the side yard. See A2

- understand the condition of trees proposed to be removed adjacent to the rear lane; however, investigate opportunities to retain the smaller tree and/or landscaping in order to delineate the lane curve and introduce some soft landscaping to mitigate the amount asphalt on the area adjacent to the lane;

The location of the trees adjacent to the lane has been reviewed. Retention of either one would considerably increase the difficulty of entering and leaving the adjacent garage. For this reason, it is preferable to remove both trees.

- support the Panel comment to offset one of the buildings along the streetscape;
significant offsetting the buildings is not possible because of the requirements of the front yard, rear yard size and parking setback requirements

- consider introducing a softer landscaping in the back yards of rear units and a small amount of hard landscaping on the front yards to balance the hard and soft landscaping for the front and back yards of duplex units; and

Given the limited direct light between the garages and the residences, the viability of a lawn or other walkable green surface is questionable. And, given the intimate nature of these spaces, it is important not to crowd the area with too much shrubbery. For this reason, a portion of the space that would otherwise be devoted to grass, was planted with ground cover inset with paving slabs. The intent of this is to provide a green surface that is walkable but practical in this lower light environment. In the front yards the paved surface has been expanding slightly to give more usable hard surface.

- the proposed electric hot water tank is not the most energy efficient; consider a condensing boiler or a heat pump to provide consistency to the project's sustainability features.

We will propose a combined condensing boiler as indicated on A2.

Panel Decision

It was moved and seconded

That DP 20-910008 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



City of Richmond

Development Permit

No. DP 20-910008

To the Holder: 1058085 BC LTD.
Property Address: 10431 No. 5 ROAD
Address: C/O 6411 BLUNDELL ROAD
RICHMOND, BC V7C 1H7

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 to #15 attached hereto.
4. Sanitary sewers, 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 \$28,902.74 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.

Development Permit
No. DP 20-910008

To the Holder: 1058085 BC LTD.
Property Address: 10431 NO. 5 ROAD
Address: C/O 6411 BLUNDELL ROAD
RICHMOND, BC V7C 1H7

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 , .

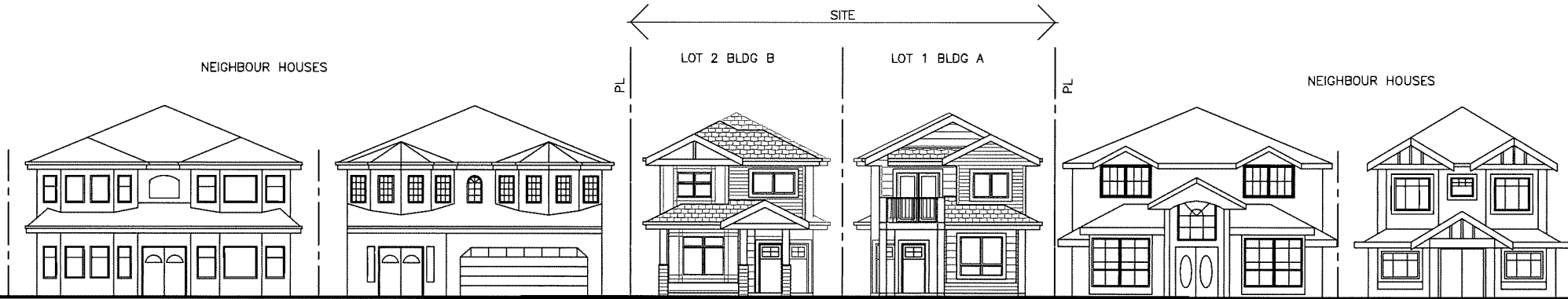
MAYOR

PROPOSED DUPLEX AT 10431 NO. 5 ROAD, RICHMOND, BC

DEVELOPMENT DATA

- (A) CIVIC ADDRESS:10431 NO 5 ROAD, RICHMOND, BC
- (B) LEGAL DESCRIPTION:"A" LOT 356 SECTION 36 BLOCK 4 NORTH RANGE 6 WEST, NWD 44778
- (C) LOT AREA:390.5 SM (4,203 SF) FOR EACH LOT AFTER SUBDIVISION INTO 2 LOTS. ORIGINAL LOT SIZE 781 SM
- (D) ZONING USE:CURRENT: RS1/F, PROPOSED: RCD

	CURRENT ZONING (UNDER RS1/E ZONING)	PROPOSED REZONING (RCD)	PROPOSED
(E) FLOOR AREA RATIO	0.55 TO 454.5 SM 0.3 TO REST OF SITE AREA	0.6 PER LOT (WITH AFFORDABLE HOUSING CONTRIBUTION) TOTAL FAR FLOOR AREA PER LOT 0.60 X390.5 SM = 234.3 SM (2,521 SF) (TOTAL FAR AREA = 468.6 SM FOR 2 LOTS) COVERED PORCH 10% = 23.4 SM (252 SF) GARAGE 25 SM PER UNIT (269 SF)	0.6 234.2SM (2521 SQ. FT.) PER LOT TOTAL FAR AREA 468.4SM (5042 SQ. FT) FOR 2 LOTS 15.8SM (170.5 SQ. FT.) 7% COVERED PORCH 19.4 SM (209 SQ. FT.) GARAGE PER UNIT
(F) NUMBER OF UNIT:	1 PER LOT	2 PER LOT	2 UNITS PER LOT
(G) BUILDING COVERAGE:	MAX - 45%	SITE COVER - MAX 50% (2101 SF) POROUS AREA-MIN 30% LIVE PLANT-MIN 20% LIVE PLANT AT FRONTYARD - MIN 50%	46% (1935 SQ. FT. / 4203 SQ. FT PER LOT) 47% REFER TO LANDSCAPE 25% REFER TO LANDSCAPE 66% REFER TO LANDSCAPE
(H) BUILDING HEIGHT:	MAX HEIGHT - 9M	MAX MAIN BUILDING HEIGHT - 9M MAX GARAGE HEIGHT - 4M	BUILDING HEIGHT - 8.05M GARAGE HEIGHT - 3.97M
(I) SETBACK:	FRONT YARD - 6M SIDE YARD - 2M REAR YARD - 6M	FRONT YARD - 6M SIDE YARD - 1.2M REAR YARD - 10M	FRONT YARD - 6.3M (20'6") NORTH SIDE YARD - 1.27M (4'2") SOUTH SIDE YARD - 1.27M (4'2") REAR YARD - 14.8M (48'8") GARAGE - BETWEEN 5.5M TO 11.6M FROM REAR YARD GARAGE - 1.2M SIDE YARD
(J) PARKING:	2 PER DWELLING UNIT	GARAGE BETWEEN 1.2 TO 12.5M FROM REAR YARD GARAGE SIDE YARD - 1.2M 2 PER DWELLING UNITS VISITOR - NO REQUIREMENT	2 REGULAR PARKING IN TANDEM ARRANGEMENT PER UNIT



1
A1
CONTEXT ELEVATION ALONG NO. 5 ROAD
1/8" TO 1'-0"

PLAN 1

DP 20-910008

ERIC LAW
ARCHITECT

ericlaw.architect@gmail.com
218 208 WEST AVENUE VANCOUVER BC
V6Y 1N3
TEL: (604) 505-2009

COPYRIGHT RESERVED. THIS PLAN AND
DESIGN ARE AT ALL TIMES TO REMAIN
THE EXCLUSIVE PROPERTY OF ERIC LAW
ARCHITECT INC AND MAY NOT BE USED
OR REPRODUCED WITHOUT WRITTEN
CONSENT. ALL INFORMATION SHOWN ON
THIS DRAWING IS FOR USE IN THIS
SPECIFIC PROJECT ONLY AND SHALL NOT
BE USED OTHERWISE WITHOUT WRITTEN
PERMISSION.

ISSUED

- 2020.07.29 FOR CITY DP APPLICATION
- 2021.03.07 FOR CITY ADP PRESENTATION
- 2021.05.11 FOR CITY ADP PRESENTATION
- 2021.06.09 FOR CITY ADP PRESENTATION
- 2021.08.23 FOR CITY DP REVIEW
- 2021.12.06 FOR CITY DPP REVIEW
- 2021.12.13 FOR CITY DPP REVIEW

- 2021.12.13 SPECIFY EXTERIOR DOWNLIGHT
- 2021.12.06 ADDED EXTERIOR LIGHT
- 2021.08.23 REVISED PER ADP COMMENTS
- 2021.08.27 GARAGE ELEVATION ADDED
- 2021.05.11 BLDG ELEVATION ADDED

REVISION

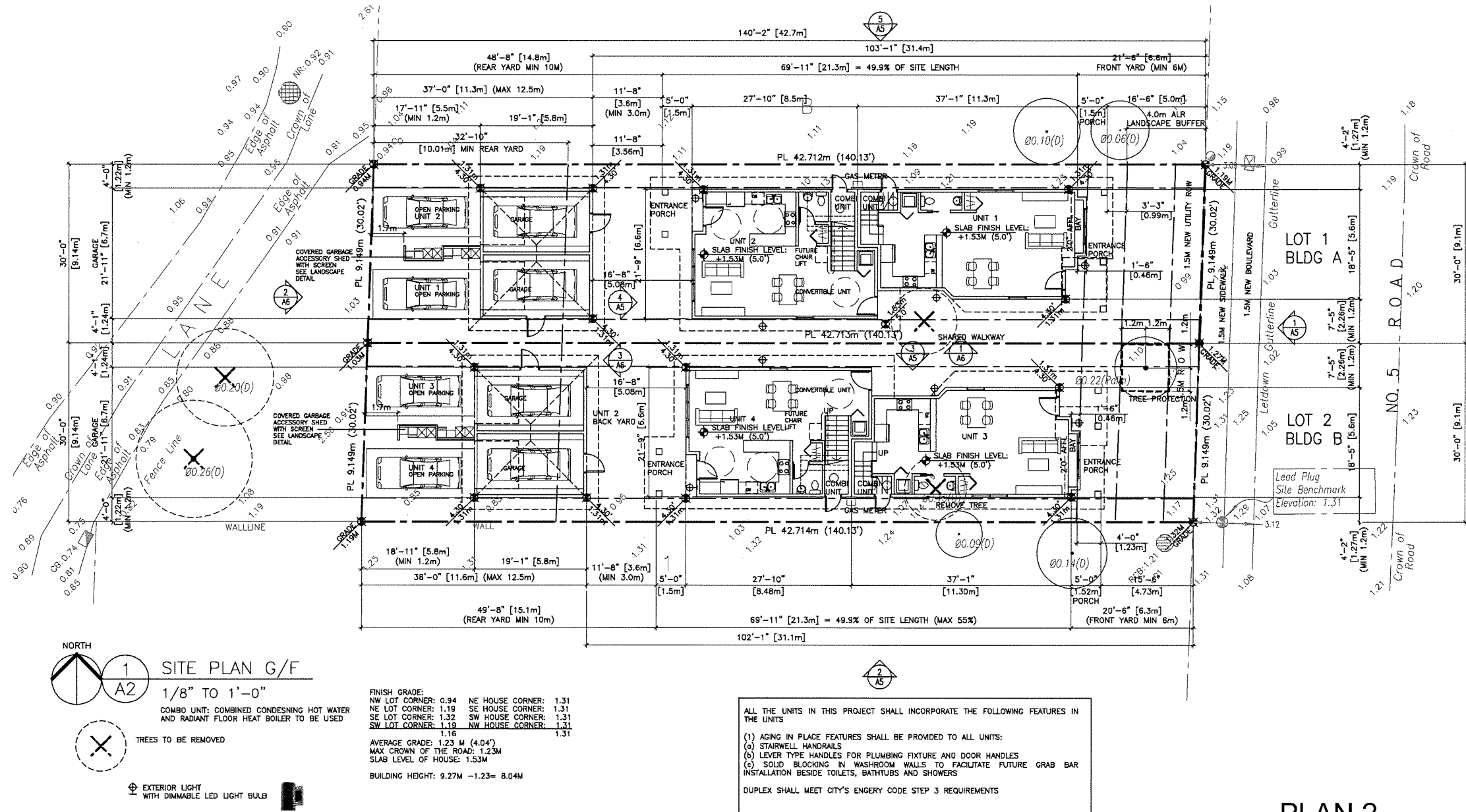
PROPOSED
COMPACT DUPLEX
10431 NO. 5 RD
RICHMOND BC

DEVELOPMENT SUMMARY

PROJECT NUMBER:18-08
ISSUED: 12/13/2021
DRAWN BY: EL
CHECKED BY: EL
FILENAME: 18-08_ONF_211213-DP.DWG

A1

DEVELOPMENT PERMIT



ERIC LAW
ARCHITECT

ericlawarchitect@gmail.com
218 128 WETH AVENUE VANCOUVER BC
V5Y1N3
TEL: (604) 505-2099

COPYRIGHT RESERVED. THIS PLAN AND
DESIGN ARE AT ALL TIMES TO REMAIN
THE EXCLUSIVE PROPERTY OF ERIC LAW
ARCHITECT INC. AND MAY NOT BE COPIED
OR REPRODUCED WITHOUT WRITTEN
CONSENT. ALL INFORMATION SHOWN ON
THIS DRAWING IS FOR USE IN THIS
SPECIFIC PROJECT ONLY AND SHALL NOT
BE USED OTHERWISE WITHOUT WRITTEN
PERMISSION.

ISSUED
1. 2020.07.20 FOR CITY DP APPLICATION
2. 2021.05.07 FOR CITY ADP PRESENTATION
3. 2021.05.11 FOR CITY ADP PRESENTATION
4. 2021.06.09 FOR CITY ADP PRESENTATION
5. 2021.08.23 FOR CITY DP REVIEW
6. 2021.12.06 FOR CITY DP REVIEW
7. 2021.12.13 FOR CITY DP REVIEW

5. 2021.12.13 SPECIFY EXTERIOR DOWNLIGHT
4. 2021.12.08 ADDED EXTERIOR LIGHT
3. 2021.08.23 REVISED PER ADP COMMENTS
2. 2021.05.27 GARAGE ELEVATION ADDED
1. 2021.05.11 BLDG ELEVATION ADDED

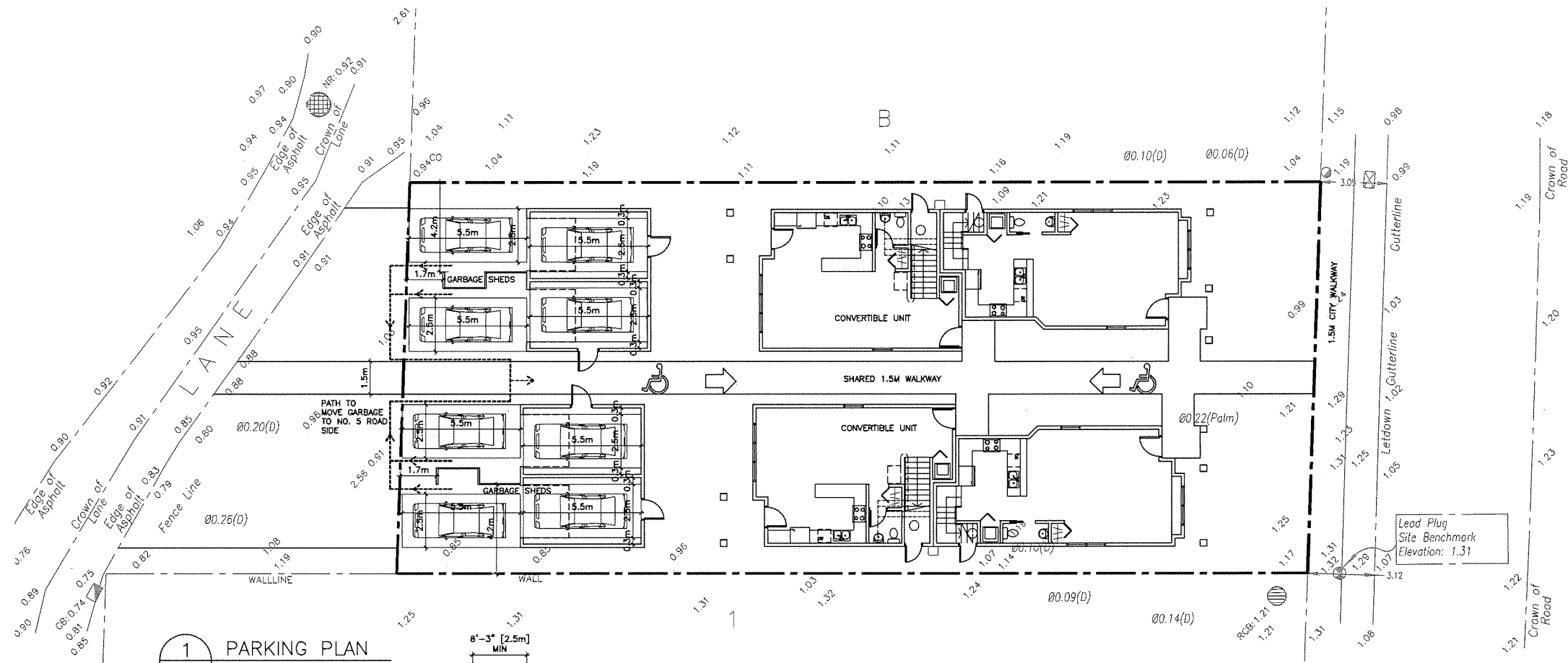
**PROPOSED
COMPACT DUPLEX
10431 NO. 5 RD
RICHMOND BC
SITE PLAN-1F**

PROJECT NUMBER:18-08
ISSUED: 12/13/2021
DRAWN BY: EL
CHECKED BY: EL
FILENAME: 18-08_ONF_211213-DP.DWG

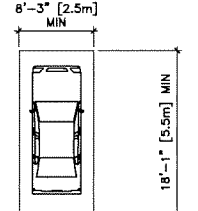
PLAN 2
DP 20-910008

A2

DEVELOPMENT PERMIT

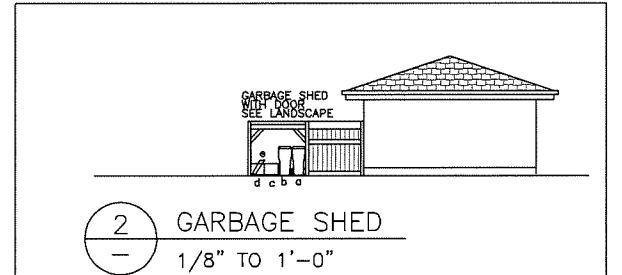
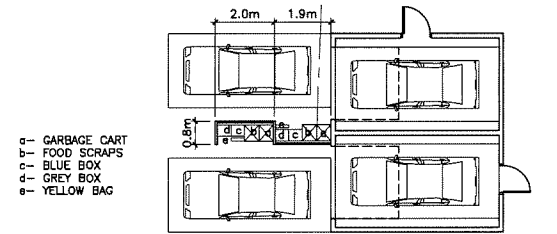


1 PARKING PLAN
1/8" TO 1'-0"



REGULAR CAR

ALL PARKING SHALL HAVE LEVEL 2 EV CHARGING OUTLETS LEVEL 2 EV CHARGING (208V TO 240V AC AND CURRENT OF 16A TO 80A)



2 GARBAGE SHED
1/8" TO 1'-0"

DP 20-910008

PLAN 3

ERIC LAW ARCHITECT

ericlawarchitect@gmail.com
216 286 WEST AVENUE VANCOUVER BC
V5Y1N5
TEL: (604) 505-2099

COPYRIGHT RESERVED. THIS PLAN AND DESIGN ARE AT ALL TIMES THE EXCLUSIVE PROPERTY OF ERIC LAW ARCHITECT INC. AND MAY NOT BE USED OR REPRODUCED WITHOUT WRITTEN CONSENT. ALL INFORMATION SHOWN ON THIS DRAWING IS FOR USE IN THIS SPECIFIC PROJECT ONLY AND SHALL NOT BE USED OTHERWISE WITHOUT WRITTEN PERMISSION.

ISSUED

1. 2020.07.29 FOR CITY OF APPLICATION
2. 2021.05.07 FOR CITY ADP PRESENTATION
3. 2021.05.11 FOR CITY ADP PRESENTATION
4. 2021.06.09 FOR CITY ADP PRESENTATION
5. 2021.08.23 FOR CITY DP REVIEW
6. 2021.12.08 FOR CITY DPP REVIEW
7. 2021.12.13 FOR CITY DPP REVIEW

5. 2021.12.13 SPECIFY EXTERIOR DOWNLIGHT
4. 2021.12.08 ADDED EXTERIOR LIGHT
3. 2021.08.23 REVISED PER ADP COMMENTS
2. 2021.05.27 GARBAGE ELEVATION ADDED
1. 2021.05.11 BLDG ELEVATION ADDED

REVISION

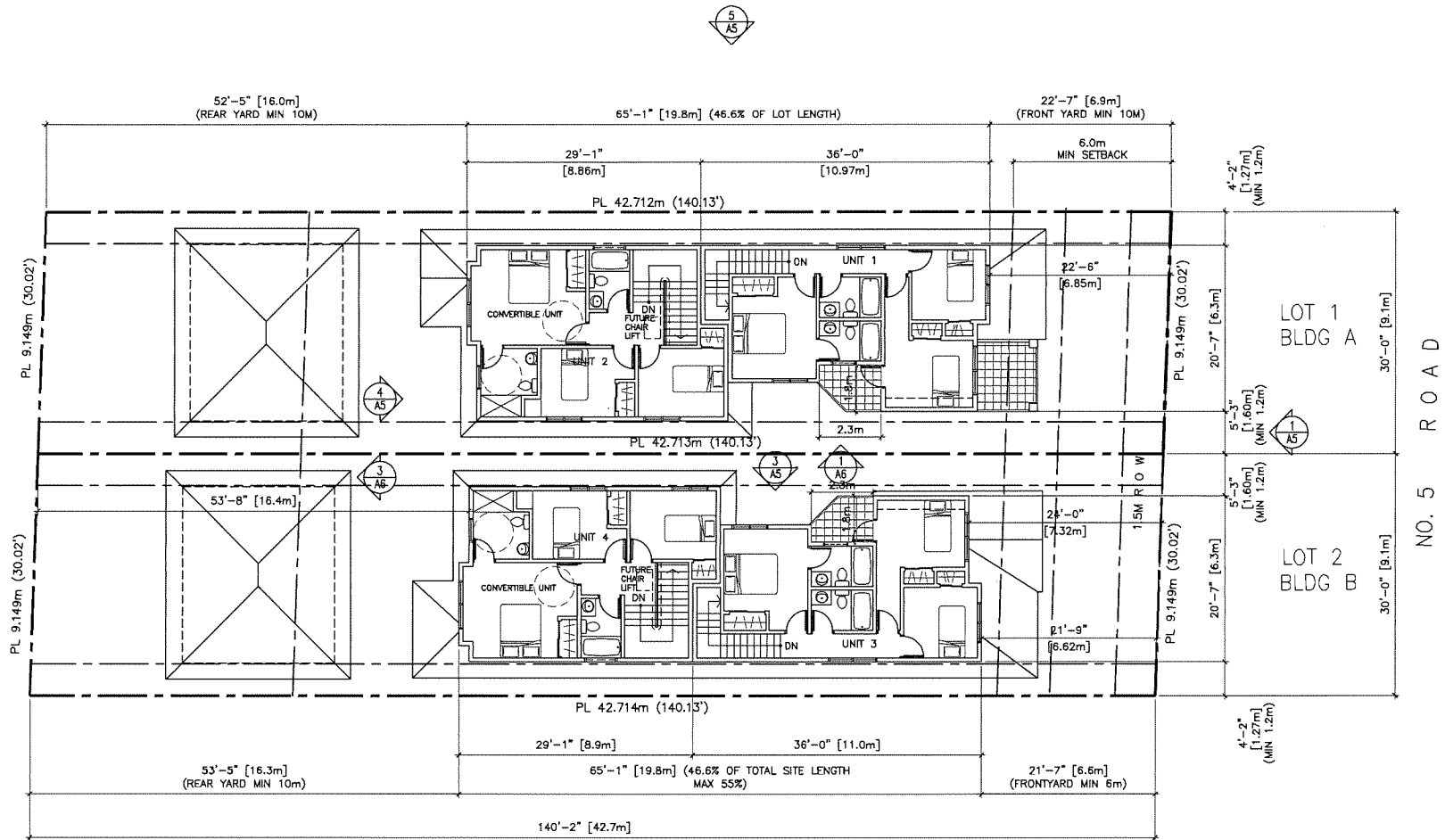
PROPOSED
COMPACT DUPLEX
10431 NO. 5 RD
RICHMOND BC
PARKING PLAN

PROJECT NUMBER: 18-08
ISSUED: 12/13/2021
DRAWN BY: EL
CHECKED BY: EL
FILENAME: 18-08_ONF_211213-DP.DWG

A2A

DEVELOPMENT PERMIT

NORTH
1 SITE PLAN 2/F
A3 1/8" TO 1'-0"



PLAN 4
DP 20-910008

ERIC LAW
ARCHITECT

ericlaw.architect@gmail.com
216 258 WINTH AVENUE VANCOUVER BC
V6Y1N5
TEL: (604) 505-2099

COPYRIGHT RESERVED. THIS PLAN AND
DESIGN ARE AT ALL TIMES THE EXCLUSIVE
PROPERTY OF ERIC LAW ARCHITECT INC AND
MAY NOT BE USED OR REPRODUCED WITHOUT
WRITTEN CONSENT. ALL INFORMATION SHOWN ON
THIS DRAWING IS FOR USE IN THIS SPECIFIC
PROJECT ONLY AND SHALL NOT BE USED
OTHERWISE WITHOUT WRITTEN PERMISSION.

ISSUED

1. 2020.07.28 FOR CITY DP APPLICATION
2. 2021.05.07 FOR CITY DP PRESENTATION
3. 2021.05.11 FOR CITY DP PRESENTATION
4. 2021.05.09 FOR CITY DP PRESENTATION
5. 2021.06.23 FOR CITY DP REVIEW
6. 2021.12.08 FOR CITY DP REVIEW
7. 2021.12.13 FOR CITY DP REVIEW

5. 2021.12.13 SPECIFY EXTERIOR DOWNLIGHT
4. 2021.12.08 ADDED EXTERIOR LIGHT
3. 2021.06.23 REVISED PER ADP COMMENTS
2. 2021.05.27 GARAGE ELEVATION ADDED
1. 2021.05.11 BLDG ELEVATION ADDED

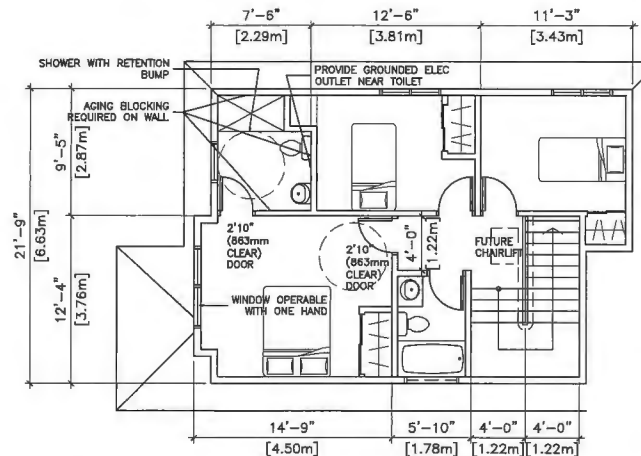
REVISION

PROPOSED
COMPACT DUPLEX
10431 NO. 5 RD
RICHMOND BC
SITE PLAN-2F

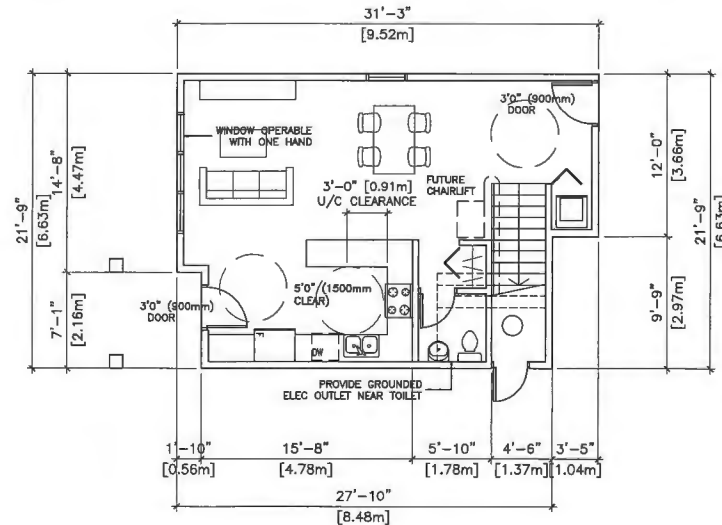
PROJECT NUMBER: 18-08
ISSUED: 12/13/2021
DRAWN BY: EL
CHECKED BY: EL
FILENAME: 18-08_ONF_211213-DP.DWG

A3

DEVELOPMENT PERMIT



2/F



1/F

1 CONVERTIBLE UNIT PLAN

3/16" TO 1'-0"

ALL THE UNITS IN THIS PROJECT SHALL INCORPORATE THE FOLLOWING FEATURES IN THE UNITS

- AGING IN PLACE FEATURES SHALL BE PROVIDED TO ALL UNITS:
 - STAIRWELL HANDRAILS
 - LEVER TYPE HANDLES FOR PLUMBING FIXTURE AND DOOR HANDLES
 - SOLID BLOCKING IN WASHROOM WALLS TO FACILITATE FUTURE GRAB BAR INSTALLATION BESIDE TOILETS, BATHTUBS AND SHOWERS

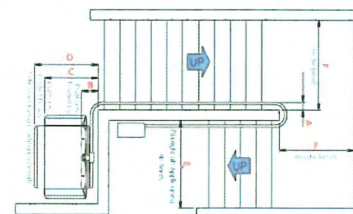
DUPLEX SHALL MEET CITY'S STEP CODE 3 REQUIREMENTS

CONVERTIBLE UNIT GUIDELINES	
DOORS & DOORWAYS	<ul style="list-style-type: none"> ENTRY DOORS ARE A MINIMUM 863 MM BUT IDEALLY 914 MM AND HAVE CLEAR ACCESS. ENTRY DOOR CLEAR EXTERIOR FLOOR SPACE MIN. 1220 MM DEPTH BY DOOR WIDTH PLUS 600 MM ON LATCH SIDE (NOT NEEDED IF ROUGH IN WIRING PROVIDED FOR FUTURE AUTOMATIC DOOR OPENER). INTERIOR DOORS TO MAIN LIVING AREAS, 1 BATHROOM AND 1 BEDROOM, MIN. 863 MM CLEAR OPENING WITH FLUSH THRESHOLDS MAX. 13 MM HEIGHT. DEMONSTRATE WHEELCHAIR ACCESS BETWEEN THE HALLWAY AND ROOMS AND WIDEN HALLWAY AND/OR DOORWAY(S) IF NECESSARY TO SECURE ACCESS. PATIO/BALCONY MIN. 860 MM CLEAR OPENING. NOTE HDW ACCESSED. — ALL INTERIOR THRESHOLDS WITHIN UNITS COMPLY WITH BC BUILDING CODE. LEVER-TYPE HANDLES FOR ALL DOORS.
VERTICAL CIRCULATION	<ul style="list-style-type: none"> STAIR LIFT, STAIRCASE WIDTH, FRAMING SUPPORT, AND LANDINGS, AS NOTED ON FLOOR PLANS IN COMPLIANCE WITH MANUFACTURER SPECIFICATIONS. AT THE TOP OF ALL STAIRWAYS, WALLS ARE REINFORCED WITH 2" X 12" SOLID LUMBER AT 914 MM TO CENTRE.
HALLWAYS	— MIN. 900 MM WIDTH.
BATHROOM (MIN. 1)	<ul style="list-style-type: none"> TOILET CLEAR FLOOR SPACE MIN. 1020 MM IN FRONT. WALL BLOCKING FOR FUTURE GRAB BAR INSTALLATION AT TOILET, TUB AND SHOWER. REINFORCED WITH 2" X 12" SOLID LUMBER IN ALL BATHTUB, SHOWER, AND TOILET LOCATIONS. LEVER-TYPE HANDLES FOR PLUMBING FIXTURES. PRESSURE AND TEMPERATURE CONTROL VALVES ARE INSTALLED ON ALL SHOWER FAUCETS. CABINETS UNDERNEATH SINK(S) ARE EASILY REMOVED. DEMONSTRATE BATH AND SHOWER CONTROLS ARE ACCESSIBLE (LAYOUT OR FIXTURE PLACEMENT).
KITCHEN	<ul style="list-style-type: none"> CLEAR AREA NEEDED UNDER FUTURE WORK SPACE. PLUMBING AND GAS PIPES (IN-WALL AND IN-FLOOR) LOCATED CLEAR OF UNDER COUNTER AREA OF FUTURE WORK SPACE (STOVE, SINK & MIN. 810 MM WIDE COUNTER). ALL PIPES ARE BROUGHT IN NO HIGHER THAN 304 MM TO 355 MM TO THE CENTRE OF THE PIPE FROM FLOOR LEVEL. — CABINETS UNDERNEATH SINK ARE EASILY REMOVED. 1500 MM TURNING DIAMETER OR TURNING PATH DIAGRAM. LEVER-TYPE HANDLES FOR PLUMBING FIXTURES.
WINDOWS	— MIN. 1 WINDOW THAT CAN BE OPENED WITH A SINGLE HAND (BATHROOM, KITCHEN, LIVING ROOM)
OUTLETS & SWITCHES	<ul style="list-style-type: none"> PLACEMENT LOCATIONS OF ELECTRICAL OUTLETS: BESIDE WINDOW, BOTTOM OF STAIRWAYS, BESIDE TOILET, ABOVE EXTERNAL DOORS (OUTSIDE AND INSIDE), ON FRONT FACE OF KITCHEN COUNTER, WITHIN PROXIMITY OF CONTROL CENTRE FOR SMART HOME OPTIONS. UPGRADE TO FOUR-PLEX OUTLETS IN MASTER BEDROOM, HOME OFFICE, GARAGE, AND RECREATION ROOM.

FUTURE CHAIRLIFT

Dimensions

Turning Clearances



Platform Sizes

Dim	Attachment Method	700 x 750 mm (27" x 29")	
A	Direct Mount	125	4"
	Tower Mount	150	5"
B	Direct Mount	330	13"
	Tower Mount	355	14"
C	Direct Mount	900	35"
	Tower Mount	925	36"
D	Direct Mount	1115	44"
	Tower Mount	1140	45"
E	Direct Mount	920	36"
	Tower Mount	945	37"
F	Direct Mount	1025	40"
	Tower Mount	1050	41"

PLAN 5

DP 20-910008

ERIC LAW
ARCHITECT

eric.law.architect@gmail.com
216 208 WORTH AVENUE VANCOUVER BC
V6Y1N5
TEL (604) 505-2099

COPYRIGHT RESERVED. THIS PLAN AND DESIGN ARE AT ALL TIMES THE EXCLUSIVE PROPERTY OF ERIC LAW ARCHITECT INC AND MAY NOT BE USED OR REPRODUCED WITHOUT WRITTEN CONSENT. ALL INFORMATION SHOWN ON THIS DRAWING IS FOR USE IN THIS SPECIFIC PROJECT ONLY AND SHALL NOT BE USED OTHERWISE WITHOUT WRITTEN PERMISSION.

ISSUED

- 2020.07.26 FOR CITY DP APPLICATION
- 2021.05.07 FOR CITY ADP PRESENTATION
- 2021.08.11 FOR CITY ADP PRESENTATION
- 2021.08.09 FOR CITY ADP PRESENTATION
- 2021.08.23 FOR CITY DP REVIEW
- 2021.12.08 FOR CITY DP REVIEW
- 2021.12.13 FOR CITY DP REVIEW

- 2021.12.13 SPECIFY EXTERIOR DOWNLIGHT
- 2021.12.08 ADDED EXTERIOR LIGHT
- 2021.08.23 REVISED PER ADP COMMENTS
- 2021.08.27 GARAGE ELEVATION ADDED
- 2021.05.11 BLDG ELEVATION ADDED

REVISION

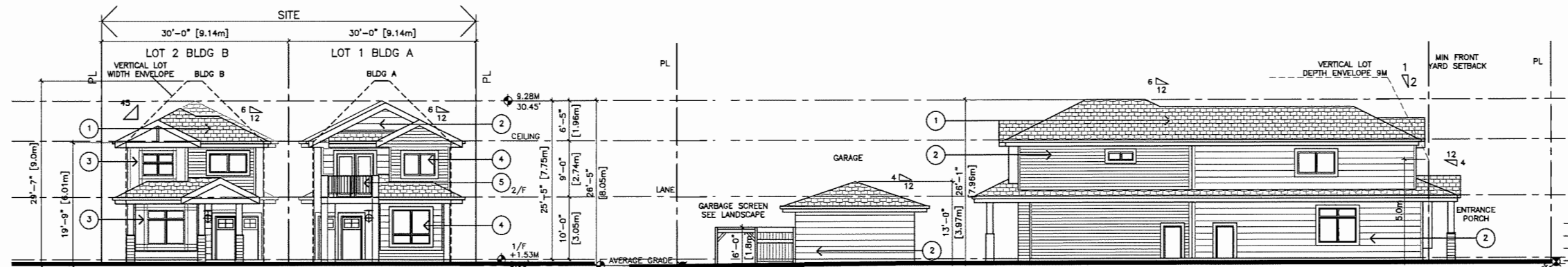
PROPOSED
COMPACT DUPLEX
10431 NO. 5 RD
RICHMOND BC

CONVERTIBLE UNIT

PROJECT NUMBER: 18-08
ISSUED: 12/13/2021
DRAWN BY: EL
CHECKED BY: EL
FILENAME: 18-08_ONF_211213-DP.DWG

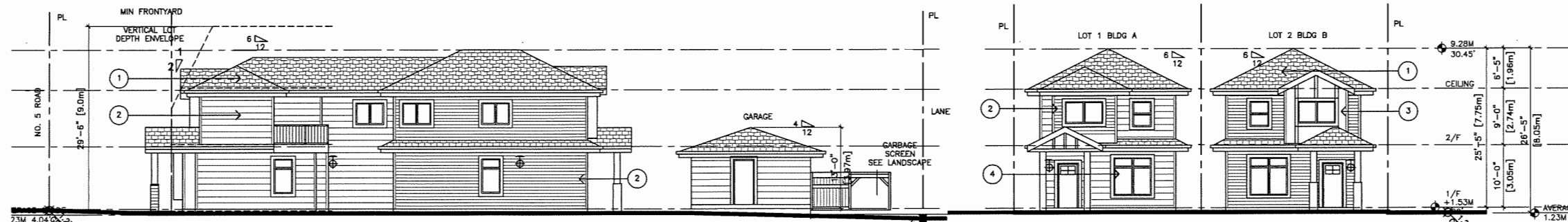
A4

DEVELOPMENT PERMIT



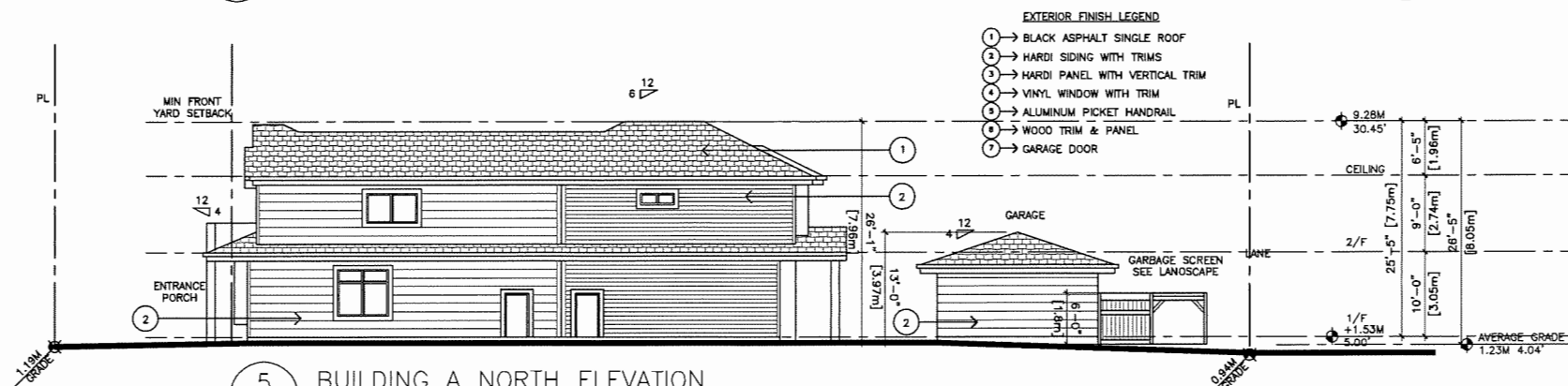
1 BUILDING A B FRONT ELEVATION (NO. 5 RD)
A5 1/8" TO 1'-0"

2 BUILDING B SOUTH ELEVATION
A5 1/8" TO 1'-0"



3 BUILDING B NORTH ELEVATION
A5 1/8" TO 1'-0"

4 BUILDING A B BACK ELEVATION (FACING LANE)
A5 1/8" TO 1'-0"



5 BUILDING A NORTH ELEVATION
A5 1/8" TO 1'-0"

ERIC LAW
ARCHITECT

ericlawarchitect@gmail.com
2118 288 WINTH AVENUE VANCOUVER BC
V5T1N5
TEL: (604) 505-2099

COPYRIGHT RESERVED. THIS PLAN AND
DESIGN ARE AT ALL TIMES TO REMAIN
THE EXCLUSIVE PROPERTY OF ERIC LAW
ARCHITECT INC. AND MAY NOT BE USED
OR REPRODUCED WITHOUT WRITTEN
CONSENT. ALL INFORMATION SHOWN ON
THIS DRAWING IS FOR USE IN THIS
SPECIFIC PROJECT ONLY AND SHALL NOT
BE USED OTHERWISE WITHOUT WRITTEN
PERMISSION.

ISSUED:

1. 2020.07.29 FOR CITY DP APPLICATION
2. 2021.03.07 FOR CITY ADP PRESENTATION
3. 2021.03.11 FOR CITY ADP PRESENTATION
4. 2021.06.09 FOR CITY ADP PRESENTATION
5. 2021.08.23 FOR CITY DP REVIEW
6. 2021.12.28 FOR CITY DP REVIEW
7. 2021.12.13 FOR CITY DP REVIEW

5. 2021.12.13 SPECIFY EXTERIOR DOWNLIGHT
4. 2021.12.08 ADDED EXTERIOR LIGHT
3. 2021.08.23 REVISED PER ADP COMMENTS
2. 2021.05.27 GARAGE ELEVATION ADDED
1. 2021.05.11 BLDG ELEVATION ADDED

REVISION

PROPOSED
COMPACT DUPLEX
10431 NO. 5 RD
RICHMOND BC
ELEVATIONS

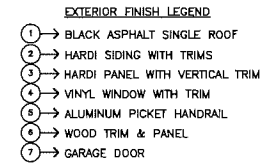
PROJECT NUMBER: 18-08
ISSUED: 12/13/2021
DRAWN BY: EL
CHECKED BY: EL
FILENAME: 18-08_ONF_211213-DP.DWG

PLAN 6
DP 20-910008

A5

DEVELOPMENT PERMIT

1.	2020.07.29	FOR CITY DP APPLICATION
2.	2021.05.07	FOR CITY ADP PRESENTATION
3.	2021.05.11	FOR CITY ADP PRESENTATION
4.	2021.06.09	FOR CITY ADP PRESENTATION
5.	2021.08.23	FOR CITY DP REVIEW
6.	2021.12.08	FOR CITY DPP REVIEW
7.	2021.12.13	FOR CITY DPP REVIEW



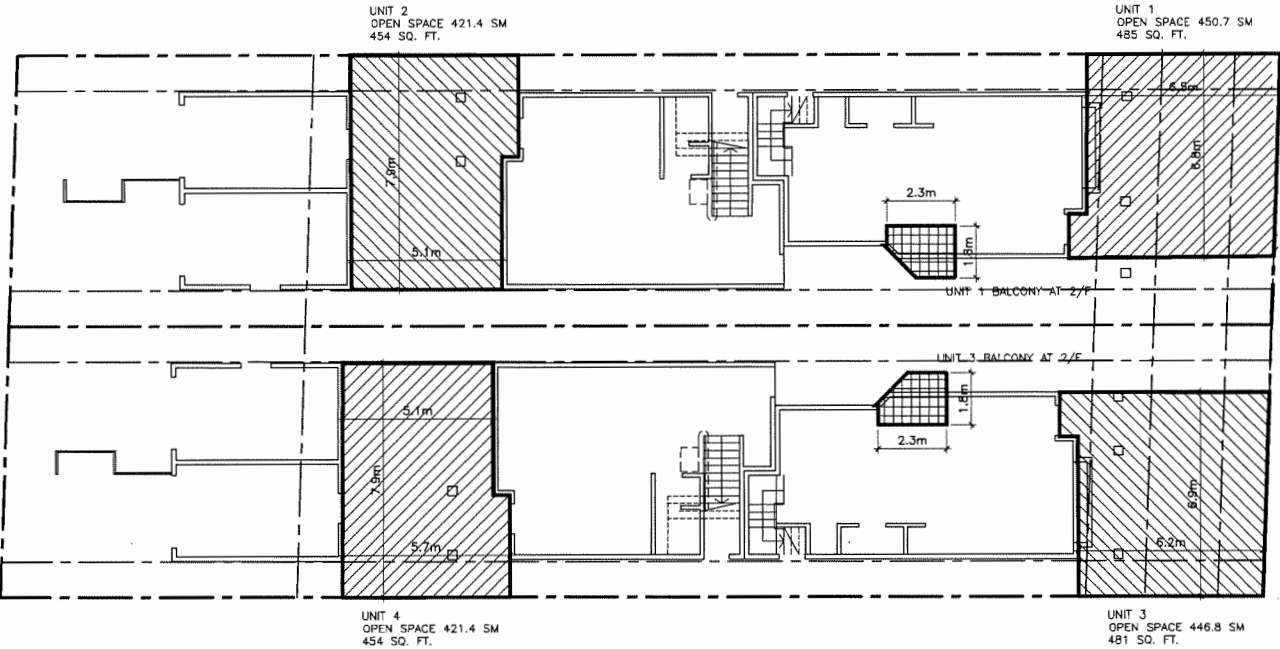
5.	2021.12.13	SPECIFY EXTERIOR DOWNLIGHT
4.	2021.12.08	ADDED EXTERIOR LIGHT
3.	2021.08.23	REVISED PER ADP COMMENTS
2.	2021.05.27	GARAGE ELEVATION ADDED
1.	2021.05.11	BLDG ELEVATION ADDED

**PROPOSED
COMPACT DUPLEX
10431 NO. 5 RD
RICHMOND BC
ELEVATIONS**

PROJECT NUMBER:	18-08
ISSUED:	12/13/2021
DRAWN BY:	EL
CHECKED BY:	EL
FILENAME:	18-08_ONF_211213-DP.DWG

A6

DEVELOPMENT PERMIT



1 OPEN SPACE
A7 1/8" TO 1'-0"



2 SITE COVER DIAGRAM
A7 1/8" TO 1'-0" SITE COVERAGE 1935 SQ. FT. FOR EACH LOT

PLAN 8
DP 20-910008

ERIC LAW
ARCHITECT

ericlawarchitect@gmail.com
219 288 WEST AVENUE VANCOUVER BC
V6Y1N5
TEL: (604) 505-2099

COPYRIGHT RESERVED. THIS PLAN AND
DESIGN ARE AT ALL TIMES TO REMAIN
THE EXCLUSIVE PROPERTY OF ERIC LAW
ARCHITECT INC AND MAY NOT BE USED
OR REPRODUCED WITHOUT WRITTEN
CONSENT. ALL INFORMATION SHOWN ON
THIS DRAWING IS FOR USE IN THIS
SPECIFIC PROJECT ONLY AND SHALL NOT
BE USED OTHERWISE WITHOUT WRITTEN
PERMISSION.

ISSUED
1. 2020.07.26 FOR CITY DP APPLICATION
2. 2021.05.07 FOR CITY ADP PRESENTATION
3. 2021.05.11 FOR CITY ADP PRESENTATION
4. 2021.06.09 FOR CITY ADP PRESENTATION
5. 2021.08.23 FOR CITY DP REVIEW
6. 2021.12.08 FOR CITY DPP REVIEW
7. 2021.12.13 FOR CITY DPP REVIEW

REVISION
5. 2021.12.13 SPECIFY EXTERIOR DOWNLIGHT
4. 2021.12.08 ADDED EXTERIOR LIGHT
3. 2021.08.23 REVISED PER ADP COMMENTS
2. 2021.05.27 GARAGE ELEVATION ADDED
1. 2021.05.11 BLDG ELEVATION ADDED

PROPOSED
COMPACT DUPLEX
10431 NO. 5 RD
RICHMOND BC
AREA DIAGRAM

PROJECT NUMBER: 18-08
ISSUED: 12/13/2021
DRAWN BY: EL
CHECKED BY: EL
FILENAME: 18-08_ONF_211213-DP.DWG

A7

DEVELOPMENT PERMIT



ALSO REFER TO **1** BUILDING A B FRONT ELEVATION (NO. 5 RD)
A5 1/8" TO 1'-0"



ALSO REFER TO **3** BUILDING B NORTH ELEVATION
A5 1/8" TO 1'-0"



ALSO REFER TO **5** BUILDING A NORTH ELEVATION
A5 1/8" TO 1'-0"



ALSO REFER TO **2** BUILDING B SOUTH ELEVATION
A5 1/8" TO 1'-0"



ALSO REFER TO **4** BUILDING A B BACK ELEVATION (FACING LANE)
A5 1/8" TO 1'-0"



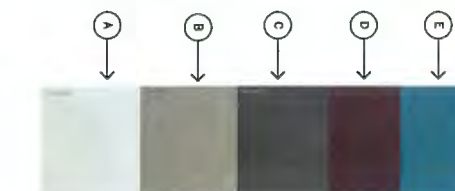
ALSO REFER TO **1** BUILDING A SOUTH ELEVATION
A6 1/8" TO 1'-0"

- EXTERIOR COLOUR
- A → SHERWIN WILLIAMS PAINT WHITE HYACINTH SW 0046
 - B → SHERWIN WILLIAMS PAINT COLONIAL REVIVAL STONE SW 2827
 - C → SHERWIN WILLIAMS PAINT ROOKWOOD DARK BROWN SW 2808
 - D → SHERWIN WILLIAMS PAINT FIERY BROWN SW 6055
 - E → SHERWIN WILLIAMS PAINT SLATE TILE SW 7624

ALL HARDI TRIM OR CORNER TRIM SHALL MATCH THE ADJACENT HARDI PANEL COLOUR

ALL WINDOW FRAME COLOUR SHALL BE WHITE
ALL GARAGE DOOR SHALL BE WHITE

ROOF ASPHALT SHINGLE TO BE BLACK



COLOUR LEGEND

DP 20-910008

PLAN 9

ERIC LAW
ARCHITECT

ericlawarchitect@gmail.com
2115 1260 WEST AVENUE VANCOUVER BC
V6J 1N5
TEL: (604) 505-2098

COPYRIGHT RESERVED. THIS PLAN AND
DESIGN ARE AT ALL TIMES TO REMAIN
THE EXCLUSIVE PROPERTY OF ERIC LAW
ARCHITECT INC AND MAY NOT BE USED
OR REPRODUCED WITHOUT WRITTEN
CONSENT. ALL INFORMATION SHOWN ON
THIS DRAWING IS FOR USE IN THIS
SPECIFIC PROJECT ONLY AND SHALL NOT
BE USED OTHERWISE WITHOUT WRITTEN
PERMISSION.

ISSUED

1. 2020.07.20 FOR CITY DP APPLICATION
2. 2021.05.07 FOR CITY ADP PRESENTATION
3. 2021.05.11 FOR CITY ADP PRESENTATION
4. 2021.06.09 FOR CITY ADP PRESENTATION
5. 2021.08.23 FOR CITY DP REVIEW
6. 2021.12.08 FOR CITY DP REVIEW
7. 2021.12.13 FOR CITY DP REVIEW

5. 2021.12.13 SPECIFY EXTERIOR DOWNLIGHT
4. 2021.12.08 ADDED EXTERIOR LIGHT
3. 2021.08.23 REVISED PER ADP COMMENTS
2. 2021.05.27 GARAGE ELEVATION ADDED
1. 2021.05.11 BLDG ELEVATION ADDED

REVISION

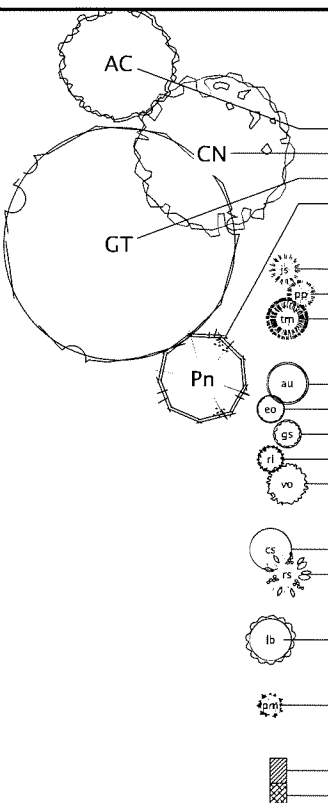
**PROPOSED
COMPACT DUPLEX
10431 NO. 5 RD
RICHMOND BC
ELEVATION COLOUR**

PROJECT NUMBER: 18-08
ISSUED: 12/13/2021
DRAWN BY: EL
CHECKED BY: EL
FILENAME: 18-08_ONF_211213-DP.DWG

A8

DEVELOPMENT PERMIT

PLOT DATE: AUGUST 18, 2021 TIME: 11:43 AM FULL PATH AND FILENAME: D:\PROJECTS\18-0041 10431 - 5 RD RICHMOND\500-DEVELOPMENT\02-20-91000-LO-01.DWG PLOTSTYLE TABLE: -----



PLANT LIST

TREES						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE
AC	2	Acer circinatum	Vine Maple	3m clump	8.68 min, 50cm root ball dia.	10m height 5m spread
CN	2	Cornus natiilli 'White Wonder'	White Wonder Pacific Dogwood	6cm cal	150cm standard	21m height 21m spread
GT	2	Gleditsia triacanthos	Honey Locust	6cm cal	150cm standard	21m height 21m spread
PN	2	Pinus nigra	Black Pine	3.5 m ht.	Dense Tight Habit	12m height 6m spread
CONIFEROUS SHRUBS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE
JS	2	Juniperus comm. 'Alpine Carpet'	Alpine Carpet Native Juniper	#2 pot	min. 60cm spread	20cm height 150cm spread
PP	10	Pinus mugo 'Pumilio'	Dwarf Mugo Pine	#2 pot	min. 30cm spread min. 20cm height	125cm height 250cm spread
TRN	14	Taxus x media 'Hicksii'	Hick's Yew	1.0m ht.	8.68 min, 45cm root ball dia.	9m height 3m spread
BROADLEAF EVERGREEN SHRUBS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE
AU	4	Arbutus unedo 'Compacta'	Dwarf Strawberry Tree	#5 pot	min. 45cm height	300cm height 300cm spread
EO	24	Euonymus j. 'Aureomarginatus'	Golden Euonymus	#2 pot	min. 30cm height	190cm height 120cm spread
GS	28	Gaultheria shallon	Sabal	#1 pot	min. 30cm height	100cm height 100cm spread
RI	31	Rhododendron 'Impeditum'	Impeditum Rhododendron	#2 pot	min. 30cm height	60cm height 75cm spread
VO	29	Vaccinium ovatum 'Thunderbird'	Evergreen Huckleberry	#2 pot	min. 60cm height	180cm height 190cm spread
DECIDUOUS SHRUBS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE
CS	10	Cornus stolonifera	Redtwig Dogwood	#1 pot	min. 50cm height heavy	300cm height 200cm spread
RS	8	Ribes s. 'King Edward VII'	King Edward VII Currant	#1 pot	min. 40cm height	240cm height 120cm spread
VINES						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE
LB	2	Lonicera br. 'Scarlet Dropmore'	Dropmore Climbing Honeysuckle	#2 pot	min. 30cm height heavy	500cm height 200cm spread
FERNS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE
PM	31	Polystichum munitum	Swordfern	#1 pot	min. 25cm height	100cm height 100cm spread
GROUND COVERS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE
AR	215	Arctostaphylos uva-ursi	Kinnikinnick	10cm pot	min. 25cm spread 20cm O.C.	10cm height 80cm spread
AJ	600	Ajuga reptans	Bugle Weed	10cm pot	min. 25cm spread 30cm O.C.	10cm height 50cm spread

NOTES

1. COMPLIANCE, GOVERNMENT - ALL WORK SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY OF RICHMOND AND SHALL COMPLY WITH ALL STANDARDS AND REGULATIONS OF THE SAME. CONTRACTORS SHALL ENSURE COMPLIANCE OF ALL WORK PRIOR TO INSTALLATION.
2. COMPLIANCE, BONTA/BCSLA - ALL MATERIAL, SHIPPING PROCEDURES, AND INSTALLATION OF LANDSCAPE ELEMENTS SHALL CONFORM TO LATEST EDITION OF BONTA/BCSLA LANDSCAPE STANDARD AVAILABLE AT COMMENCEMENT OF WORK.
3. COMPLIANCE, MMCD - ALL WORKS SHALL CONFORM TO THE LATEST MMCD DETAILS AND SPECIFICATIONS AVAILABLE AT COMMENCEMENT OF WORK WHERE NO SPECIFIC DETAIL, NOTE OR SPECIFICATION IS PROVIDED IN THE DRAWING SET OR ATTACHED MATERIALS.
4. CONCRETE, FORMS - THE CONTRACTOR SHALL COMPARE DIMENSIONS PROVIDED WITH SITE CONDITIONS AND IMMEDIATELY REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT AND THE ENGINEER, ONCE COMPLETED THE CONTRACTOR SHALL CALL FOR INSPECTION OF THE FORMS PRIOR TO PLACING STEEL REINFORCEMENT. CONTACT LANDSCAPE ARCHITECT A MINIMUM OF 48 HOURS PRIOR TO DESIRED INSPECTION TIME.
5. CONCRETE, REINFORCEMENT - ALL CONCRETE REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO POURING OF CONCRETE. CONTACT STRUCTURAL ENGINEER A MINIMUM OF 48 HOURS PRIOR TO DESIRED INSPECTION TIME.
6. GRADING, GENERAL - THE CONTRACTOR SHALL ESTABLISH GRADES SUCH THAT THERE IS, IN ALL AREAS, POSITIVE DRAINAGE TO AN ADJACENT DRAIN. MINIMUM SLOPES SHALL BE AS FOLLOWS:

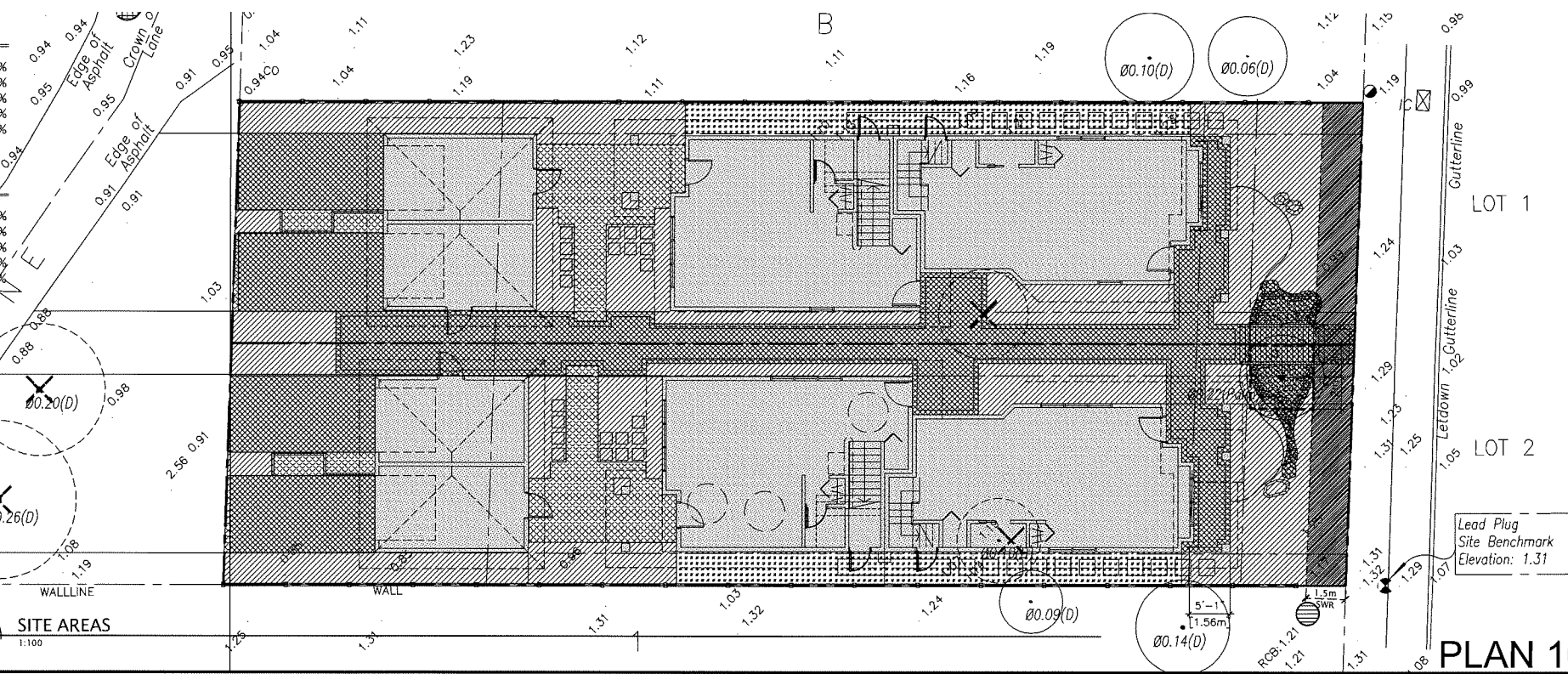
PEDESTRIAN PAVED AREAS	1%
VEHICULAR PAVED AREAS	1%
LAWN AREAS	2%
PLANTED BEDS	5%
7. GRADING, ALLOWANCES AND TOPSOIL PLACEMENT - DEPTH OF PLANTING MEDIUM AFTER SETTLEMENT SHALL BE:

GRASS AREAS	ON GRADE
SHRUB BEDS	- 150 mm
GROUND COVER AREAS	- 450 mm
TREES	- 450 mm
	- 300 mm ALL AROUND ROOTBALL
8. PLANT MATERIAL, QUANTITIES - CONTRACTOR SHALL CONFIRM ALL PLANT MATERIAL QUANTITIES. ANY DISCREPANCIES BETWEEN THE PLANT LIST AND THE DRAWING SHALL BE REPORTED TO THE CONSULTANT. IN CASE OF DISCREPANCY CONTRACTOR SHALL INSTALL PLANT MATERIAL AS PER DRAWING. IN CIRCUMSTANCES WHERE THERE IS A DISCREPANCY BETWEEN GROUND COVER QUANTITY AND SPACING THE SPACING REQUIREMENT WILL PREVAIL.
9. PLANT MATERIAL, SUBSTITUTIONS - NO SUBSTITUTIONS TO PLANT LIST SHALL BE MADE BY CONTRACTOR WITHOUT PRIOR WRITTEN AUTHORIZATION FROM CONSULTANT.
10. PLANT MATERIAL - ALL PLANT MATERIAL SHALL MEET MINIMUM SIZE REQUIREMENTS AS INDICATED IN THE PLANT LIST.
11. TREE LOCATIONS - TREES SHALL NOT BE PLANTED WITHIN 1.5 METRES OF BUILDING FOUNDATIONS, RETAINING WALLS OR FENCES EXCEPT AS SPECIFICALLY NOTED ON THE PLANTING PLAN. TREES IN LAWN AREAS SHALL BE LOCATED WITHIN A MINIMUM 1 METRE DIAMETER MULCHED RING.
12. SODDING, BOULEVARD - CONTRACTOR SHALL INSTALL TOP SOIL AND TURF WITHIN ALL STREET BOULEVARDS. SODDING SHALL CONTINUE ALONG SUCH BOULEVARDS TO THE EDGE OF DISTURBANCE OR TO THE BOUNDARY OF THE WORK AS DEFINED ON SITE BY THE LANDSCAPE ARCHITECT.
13. MULCH - PLANTING AREAS SHALL BE MULCHED WITH 50 MM OF HEMFIR BARK MULCH. THE USE OF CEDAR MULCH OR ANY MIX CONTAINING CEDAR IS NOT PERMITTED.
14. IRRIGATION - AN IRRIGATION SYSTEM SHALL BE INSTALLED AS A DESIGN/BUILD BY AN ACCREDITED IRRIGATION CONTRACTOR. THE SYSTEM SHALL PROVIDE FULL COVERAGE. THE GENERAL CONTRACTOR SHALL PROVIDE SLEEVES AND CORING AS NECESSARY. A PLAN OF THE PROPOSED SYSTEM SHALL BE PROVIDED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

LOT 1 - SITE AREA			
BLDG FOOTPRINT	157.8	m2	41%
IMPERVIOUS PAVING	23.8	m2	6%
PERVIOUS PAVING	85.0	m2	22%
LIVE PLANT	99.5	m2	25%
SIDEYARD	24.4	m2	6%
TOTALS	390.5	m2	100%

LOT 2 - SITE AREAS			
BLDG FOOTPRINT	157.8	m2	41%
IMPERVIOUS PAVING	22.8	m2	6%
PERVIOUS PAVING	87.8	m2	22%
LIVE PLANT	97.6	m2	25%
SIDEYARD	24.5	m2	6%
TOTALS	390.5	m2	100%

NOTE: FOR LOTS 1 & 2
FRONT YARD LIVE PLANT AREA = 66%



PLAN 10
DP 20-910008

DATE	ISSUED FOR	REV
2018-07-15	REZONING	A
2020-07-22	DP	B
2021-05-11	DP	C
2021-08-18	DP	D

This drawing has been prepared solely for the use of the CLIENT and there are no representations of any kind made by Donald V. S. Duncan to any party with whom Donald V. S. Duncan has not entered into a contract.

This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Landscape Architect.

Consultants

Architectural:	Eric Law Architect
Arborist:	-
Civil:	-
Structural:	-
Mechanical:	-
Electrical:	-

DV Donald V. S. Duncan
DEVELOPMENT CONSULTANT
LANDSCAPE ARCHITECT
603 - 220 Eleventh Street
New Westminster BC
Canada V3M 6N9
778-791-4323
dvsduncan@gmail.com

D Project Leader
D.Duncan
Revision
D.Duncan

RESIDENTIAL DEV.
10431 No. 5 Road
Richmond BC
prepared for:
1058085 BC LTD.
6411 Blundell Road
Richmond BC

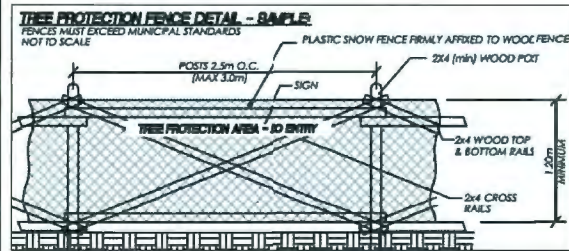
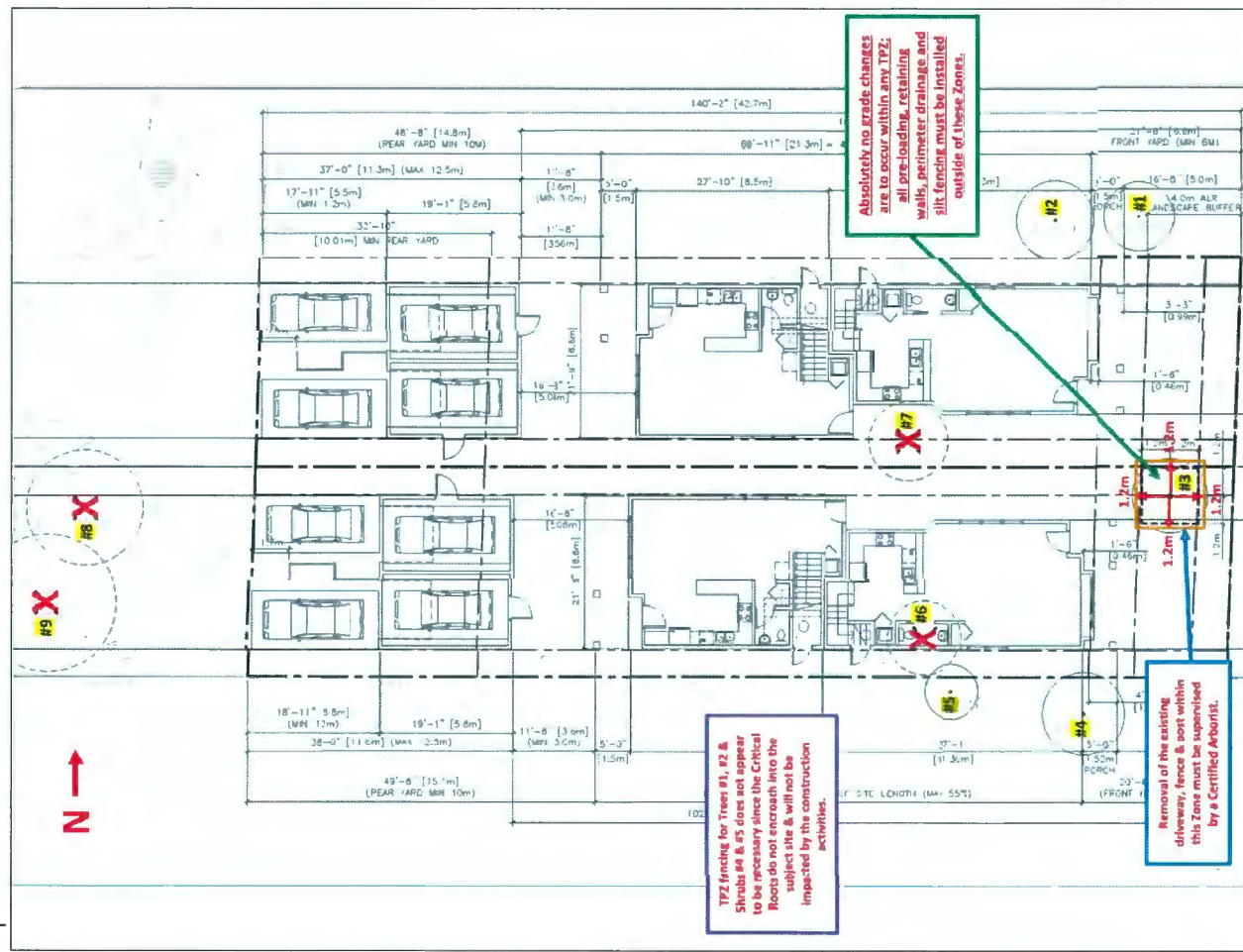
Drawing Title
INFORMATION

Check Scale (may be photo reduced)
0 1 inch 0 10mm

Project No. 18-0041
Drawing No. LO-01

Plot Date: August 18, 2021 Time: 11:44 AM Full Path and Filename: D:\PROJECTS\018-0041 10431 - 5 RD RICHMOND\500-DEVELOPMENT\02-DD\11-01.DWG PLOTSTYLE TABLE: ---

01
L1-01 TREE PROTECTION PLAN
N.T.S.



NOTE: EXTRACT FROM REPORT BY LAURA LEIGH, ARBORIST 20 AUG 2018. TREE #3 TO BE PRESERVED. TREE #3 TO BE PROTECTED BY PRESCRIBED BARRIERS AND SIGNAGE AS MANDATED BY THE CITY OF RICHMOND AND SPECIFIED BY THE REPORT OF THE ARBORIST. ALL OTHER TREES ON SITE TO BE REMOVED.

TREE PROTECTION GUIDELINES:

- TREE PROTECTION ZONE SETBACKS:**

The Tree Protection Zone (TPZ) alignments are established as directed by this office to provide a suitable setback to ensure adequate root protection to maintain tree health and tree stability. These alignments are based on site and tree conditions as determined by the project arborist, and they supersede any other tree protection setbacks provided by others (including setbacks derived from municipal guidelines), and may be conditional to certain mitigation measures being undertaken (i.e. root pruning, compensatory treatment to remaining root zone). The tree protection guidelines also apply to the overhead portions of the tree (trunk, branches and foliage), even if those tree parts extend outside of the TPZ setback.
- TREE PROTECTION FENCES (BARRIERS):**

Barriers must be erected at the specified alignments and setbacks, maintained in good condition until the project reaches substantial completion, and the restrictions and guidelines implemented as detailed herein through to the completion of the landscaping phase. The materials and installation of the fence must meet or exceed the municipal standards. Signs stating "TREE PROTECTION ZONE - NO ENTRY" must be placed on the tree protection fence at a suitable frequency at the direction of the project arborist. Arboritech will install signs in cases that we are retained to provide field services for compliance during construction. The owner, contractors, sub-contractors and trades should be made aware of the restrictions therein, and consult with this office for any access. If required, tree protection fencing must be inspected and approved by the municipality and/or the project arborist prior to commencement of any demolition, site preparation or construction work.
- SURVEY OF FENCES:**

If any tree protection fences are aligned with or within close proximity to a restrictive covenant, a property line, and/or an environmentally sensitive or protected area, the contractor must undertake a survey of the location of those property lines such that the tree protection fence can be installed and inspected accurately.
- TREE PROTECTION AND LAND CLEARING OPERATIONS:**

If large scale land clearing areas contain a TPZ and/or there is windfirming treatments required in new forest edge interfaces along the perimeters of the land clearing areas, and/or when certain trees within a TPZ are specified for removal, it is strongly recommended that the land clearing contractor should coordinate with the project arborist in advance to review their work plan and to identify retained trees and the protection measures for them, as well as during the clearing process to improve compliance and to assess new forest edges and provide tree failure risk mitigation prescriptions. For tendering purposes, the proponents should be required to provide unit costs for the following treatments (including disposal of waste) in the forest interface zones:
 - Removal of defective trees in size categories of small (dbh up to 20 cm dbh), medium (dbh 21 cm to 45 cm), large (dbh 46 to 75 cm) and very large (76 cm dbh and greater), and
 - Pruning services (hourly).Note that approvals for leaving chips or large woody debris created by the waste of these operations on the site will be investigated with affected property owners upon request. In certain cases, and subject to municipal approval, interim tree protection measures instead of standard tree protection fence installation may be acceptable, such as but not limited to:
 - Retaining the services of the project arborist to assess and direct the compliance to protection measures during the clearing scope that is in proximity to the TPZ, or
 - Installing alternative demarcation of the TPZ such as survey stakes, painting lines on the ground, and/or placing rope and flagging.

- TREE PROTECTION GUIDELINES:**

Any construction related work or activities within or directly adjacent to a TPZ requires advance approval and the on-site direction of the project arborist. The trunks, branches, foliage and roots of retained trees, as well as the soil within the tree protection zones, must not be damaged by construction activities. Except as approved and directed by the project arborist, activities within and access to the TPZ are restricted during the site preparation, construction and landscape installation phases of the project as follows:
 - Restricted low impact methods for the removal of trees and stumps within or adjacent to TPZ.
 - No soil disturbance, including trenching for underground services or utilities, stripping of organic soil for hard landscape installation, excavation for building foundation, fill placement, or trenching for irrigation or conduit installation.
 - No storage or transport of soil, soil construction materials, waste materials, etc.
 - No waste or washing of concrete, succo, drywall, paint, or other materials that may adversely impact the soil or roots.
 - No passage or operation of vehicle or equipment.
 - No placement of temporary structures or services.
 - No affixing lights, signs, cables or any other device to retained trees.
 - No unauthorized pruning or cutting of retained trees. Any pruning or other treatment of a retained tree must be completed by a qualified arborist or tree service firm employing ISA Certified Arborists and in conformance with ANSI A300 Standards, and/or under the direction of the Project Arborist from this office, and.
 - Any excavations adjacent to the TPZ will require the attendance of the project arborist and root pruning to be undertaken as necessary.
 - The use of aerial lifts, cranes or other overhead equipment is restricted in proximity to retained trees and should be planned with the size and height of the crown of the tree accordingly.It is recognized that certain unpredictable construction conflicts with a TPZ may arise that could interfere with the protection of the retained trees, however, as an arborist, it is the TPZ arborist's responsibility to ensure that the tree protection zone is maintained and that the project arborist is advised by the project arborist and the municipality. Certain TPZ restrictions or guidelines noted herein may be waived if they are considered by the project arborist to be tolerable impacts, and/or if the impacts to the trees can be successfully mitigated by implementing special measures, protection systems, compensatory treatments, and/or follow-up works, as specified and directed by this office.
- LANDSCAPING:**

The landscaping phase is when retained trees can be severely damaged. The operation of equipment, the placement of growing medium, grading and sub-base preparation for hard landscape features, (i.e. sidewalks and patios), site preparation for regrading walls and footings, excavation for fences, signs and other landscape features, digging of planting holes for new plants and trees, the digging of trenches for irrigation, drainage and lighting, and the placement of turf and other finishing works, all have a very high potential for tree and root damage. It is vital that the landscape works respect the limitations on activities within the TPZ therefore the landscape installation staff should be advised. On-site direction by the project arborist is strongly recommended.

PLAN 11
DP 20-910008

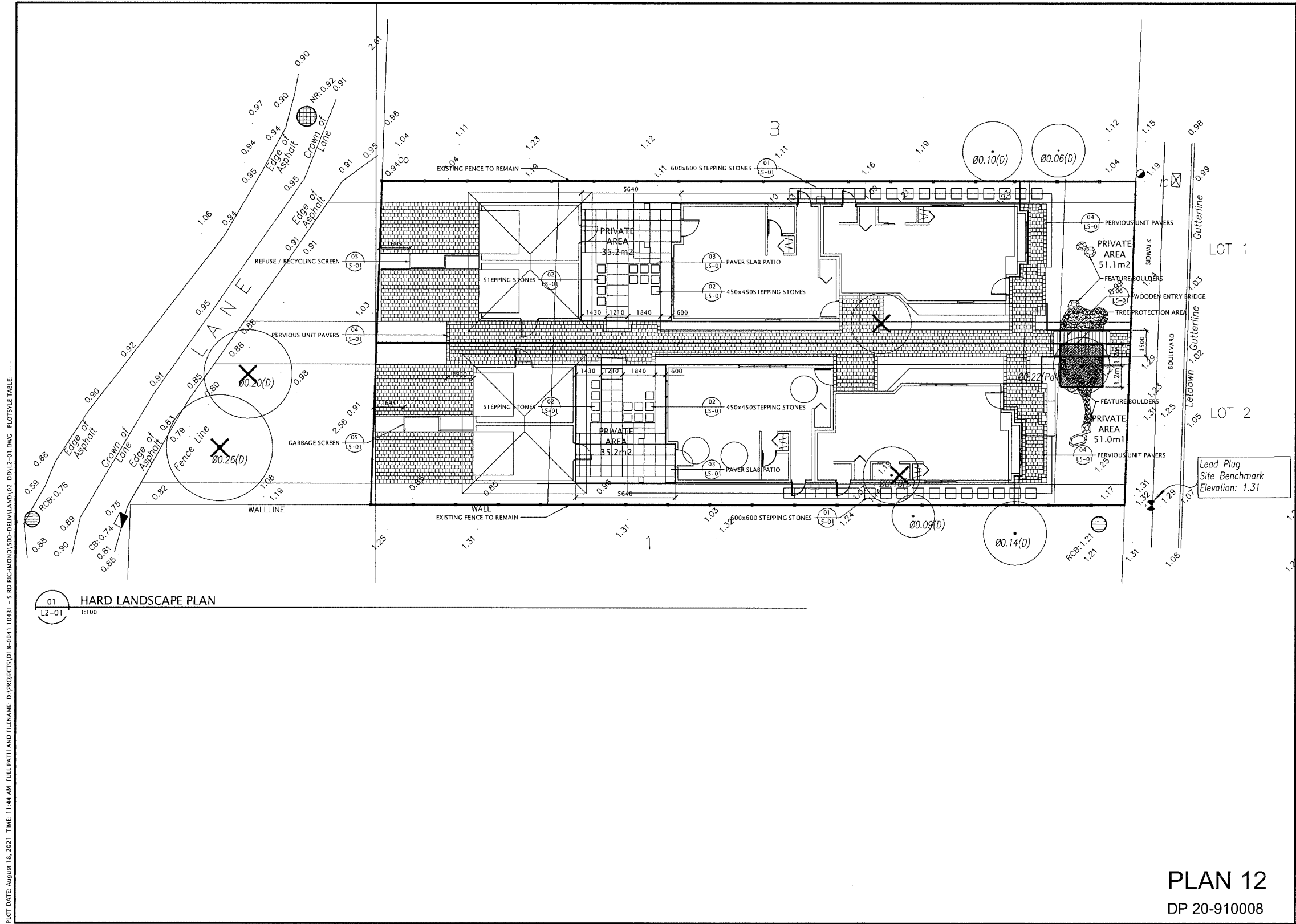
DATE	ISSUED FOR	REV
2018-07-15	REZONING	A
2020-07-22	DP	B
2021-05-11	DP	C
2021-08-18	DP	D

This drawing has been prepared solely for the use of the CLIENT and there are no representations of any kind made by Donald V. S. Duncan to any party with whom Donald V. S. Duncan has not entered into a contract.
This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Landscape Architect.

Consultants	
Architectural:	Eric Law Architect
Arborist:	-
Civil:	-
Structural:	-
Mechanical:	-
Electrical:	-

Donald S. Duncan
Landscape Architect
P. Eng.

Project Leader	
D	D. Duncan
Revision	
D	D. Duncan
RESIDENTIAL DEV. 10431 No. 5 Road Richmond BC prepared for: 1058085 BC LTD. 6411 Blundell Road Richmond BC	
Drawing Title TREE PROTECTION PLAN	
Check Scale (may be photo reduced) 0 1 inch 0 10mm	
Project No. 18-0041	
Drawing No. L1-01	



DATE	ISSUED FOR	REV
2018-07-15	REZONING	A
2020-07-22	DP	B
2021-05-11	DP	C
2021-08-18	DP	D

This drawing has been prepared solely for the use of the CLIENT and there are no representations of any kind made by Donald V. S. Duncan to any party with whom Donald V. S. Duncan has not entered into a contract.

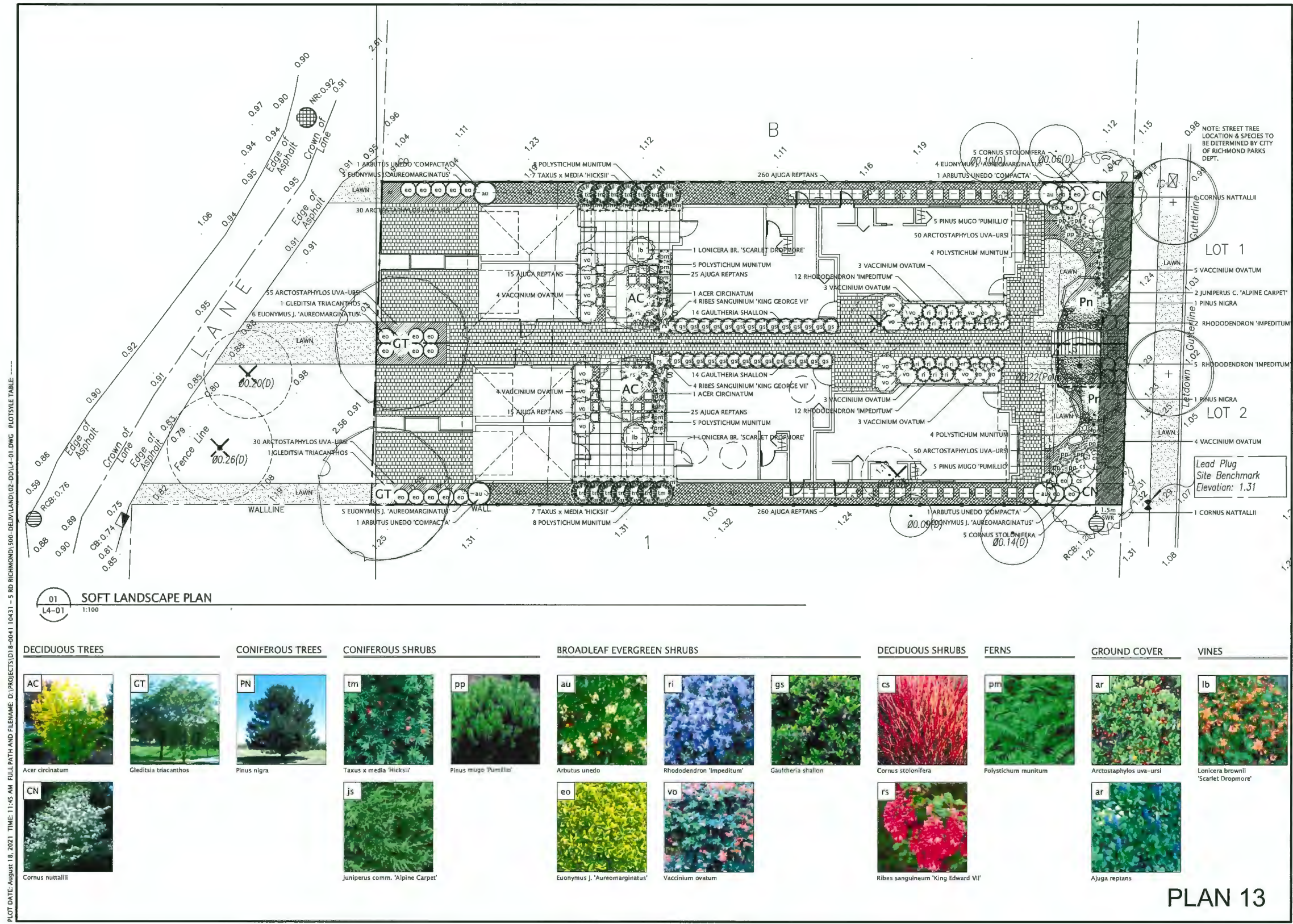
This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Landscape Architect.

Consultants	
Architectural:	Eric Law Architect
Arborist:	-
Civil:	-
Structural:	-
Mechanical:	-
Electrical:	-



DVSD Donald V. S. Duncan
DEVELOPMENT CONSULTANT
LANDSCAPE ARCHITECT
603 - 220 Eleventh Street
New Westminster BC
Canada V3M 6N9
778-791-4323
dvsduncan@gmail.com

Revision	
D	Project Leader D. Duncan
Revision	Drawn D. Duncan
RESIDENTIAL DEV. 10431 No. 5 Road Richmond BC prepared for: 1058085 BC LTD. 6411 Blundell Road Richmond BC	
Drawing Title HARD LANDSCAPE PLAN	
Check Scale (may be photo reduced) 0 1 inch 0 10mm	
Project No. 18-0041	
Drawing No. L2-01	



DATE	ISSUED FOR	REV
2018-07-15	REZONING	A
2020-07-22	DP	B
2021-05-11	DP	C
2021-08-18	DP	D

This drawing has been prepared solely for the use of the CLIENT and there are no representations of any kind made by Donald V. S. Duncan to any party with whom Donald V. S. Duncan has not entered into a contract.

This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Landscape Architect.

Consultants

Architectural: Eric Law Architect
Arboret: -
Civil: -
Structural: -
Mechanical: -
Electrical: -

DVS Donald V. S. Duncan
DEVELOPMENT CONSULTANT
LANDSCAPE ARCHITECT
603 - 220 Eleventh Street
New Westminster BC
Canada V3M 6N9
778-791-4323
dvsduncan@gmail.com

D Project Leader
Revision Drawn
D.Duncan D.Duncan

RESIDENTIAL DEV.
10431 No. 5 Road
Richmond BC
prepared for:
1058085 BC LTD.
6411 Blundell Road
Richmond BC

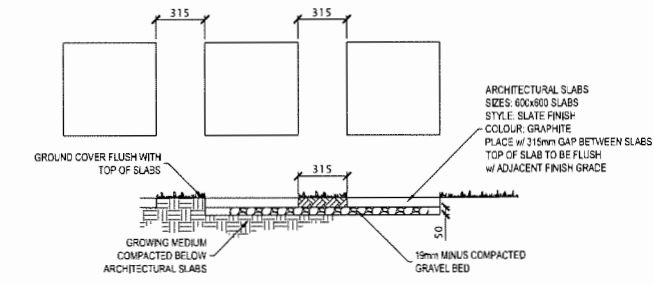
Drawing Title
SOFT LANDSCAPE PLAN

Check Scale (may be photo reduced)
0 10mm

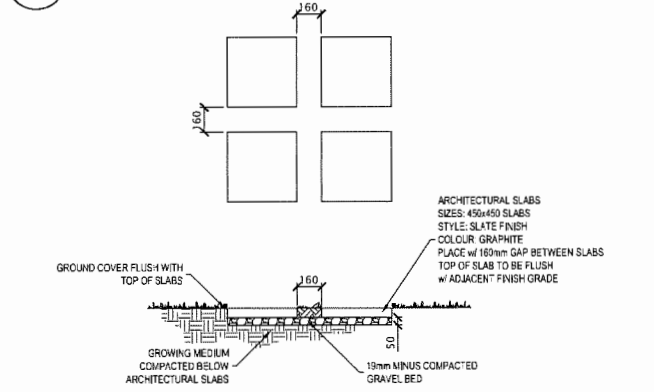
Project No. 18-0041
Drawing No. L4-01

PLOT DATE: August 18, 2021 TIME: 11:45 AM FULL PATH AND FILENAME: D:\PROJECTS\18-0041 10431 - 5 RD RICHMOND\500-BELVUE\LAND\02-DD\14-01.DWG PLOTSTYLE TABLE: ----

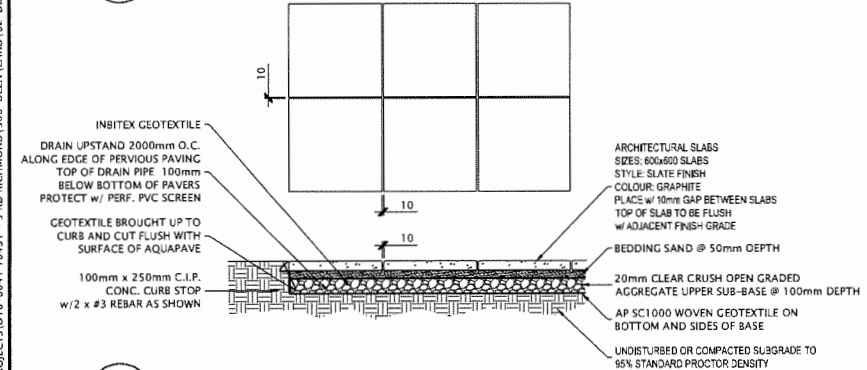
PLOT DATE: August 18, 2021 TIME: 11:46 AM FULL PATH AND FILENAME: D:\PROJECTS\18-0041 10431 - 5 RD RICHMOND\500-BELVUE\LAND 02-BD\LS-01.DWG PLOT STYLE TABLE: -----



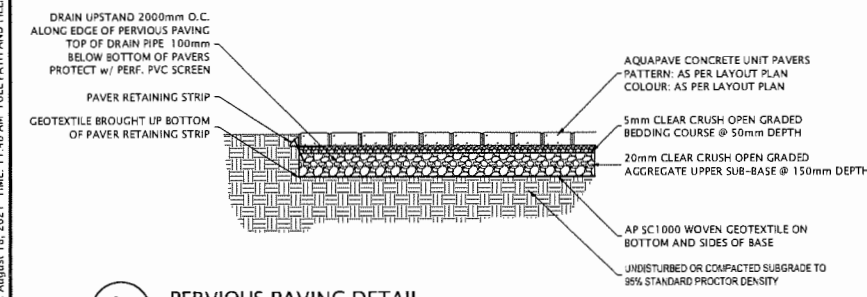
01 SIDE YARD STEPPING STONE DETAIL
LS-01 1:20



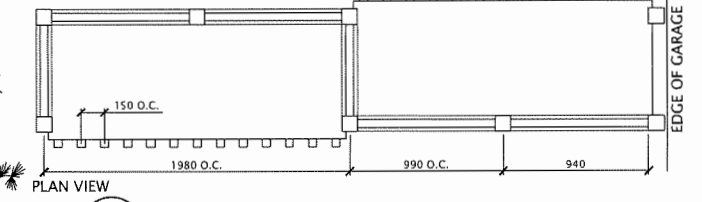
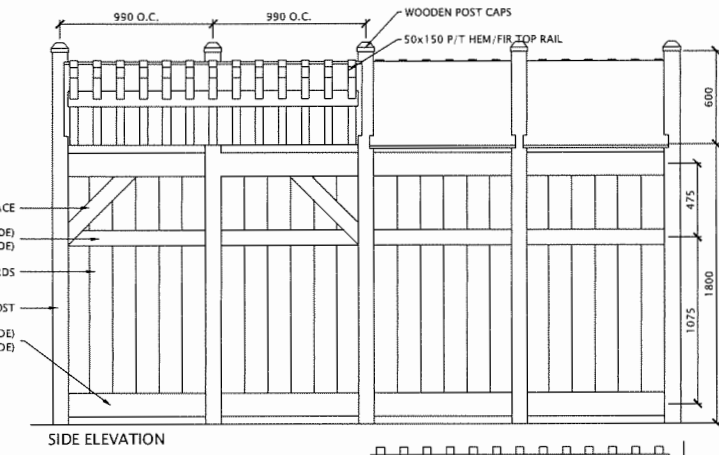
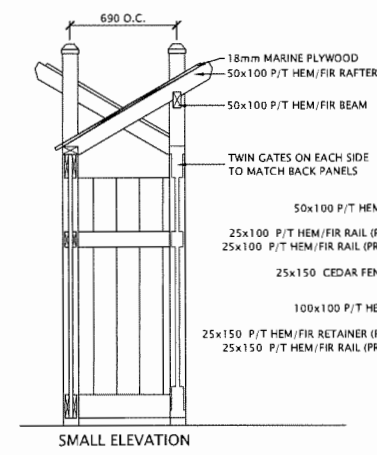
02 COURTYARD STEPPING STONE DETAIL
LS-01 1:20



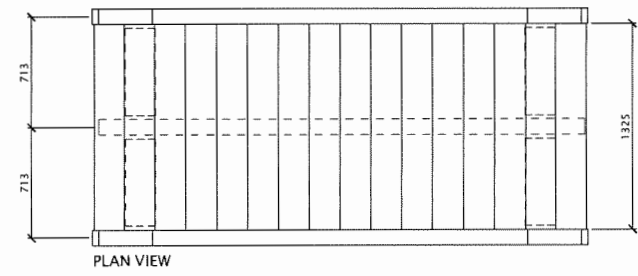
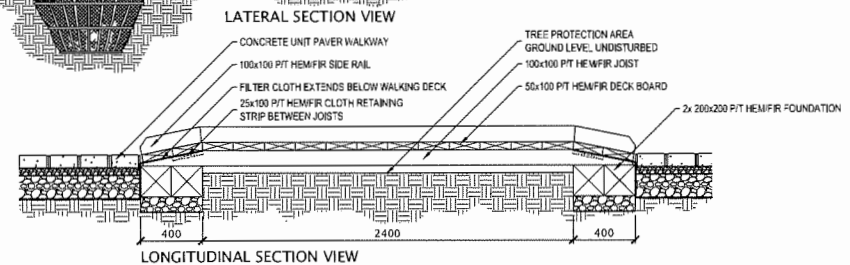
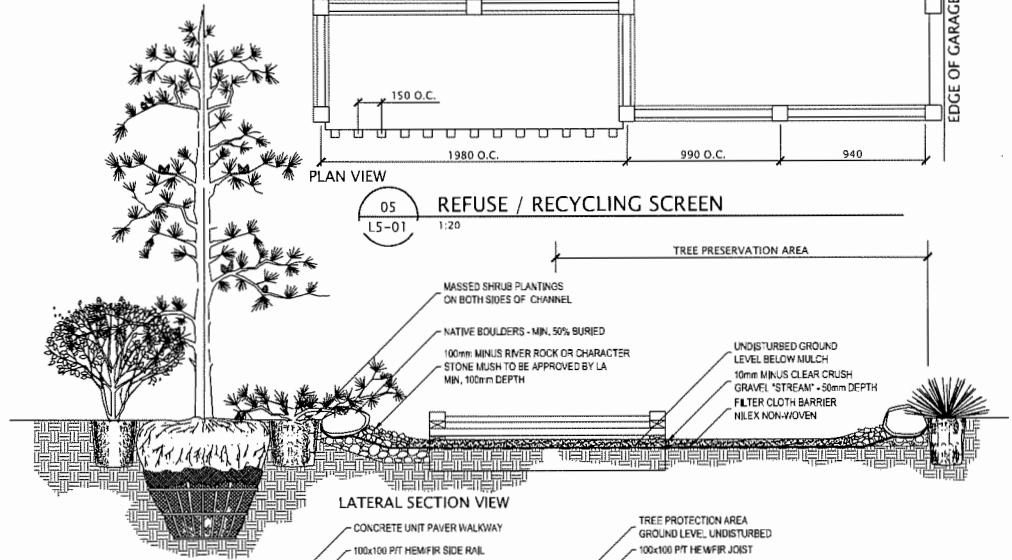
03 COURTYARD PAVER SLAB PATIO
LS-01 1:20



04 PERVIOUS PAVING DETAIL
LS-01 1:20



05 REFUSE / RECYCLING SCREEN
LS-01 1:20



06 WOODEN ENTRY BRIDGE
LS-01 1:20

PLAN 14

DP 20-910008

DATE	ISSUED FOR	REV
2018-07-15	REZONING	A
2020-07-22	DP	B
2021-05-11	DP	C
2021-08-18	DP	D

This drawing has been prepared solely for the use of the CLIENT and there are no representations of any kind made by Donald V. S. Duncan to any party with whom Donald V. S. Duncan has not entered into a contract.

This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Landscape Architect.

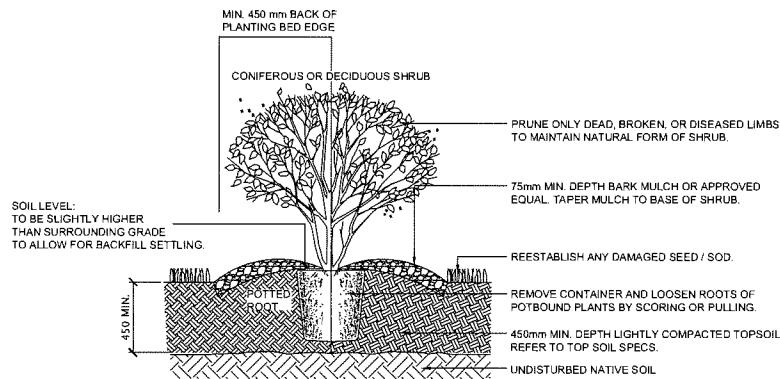
Consultants	
Architectural:	Eric Law Architect
Arborist:	-
Civil:	-
Structural:	-
Mechanical:	-
Electrical:	-



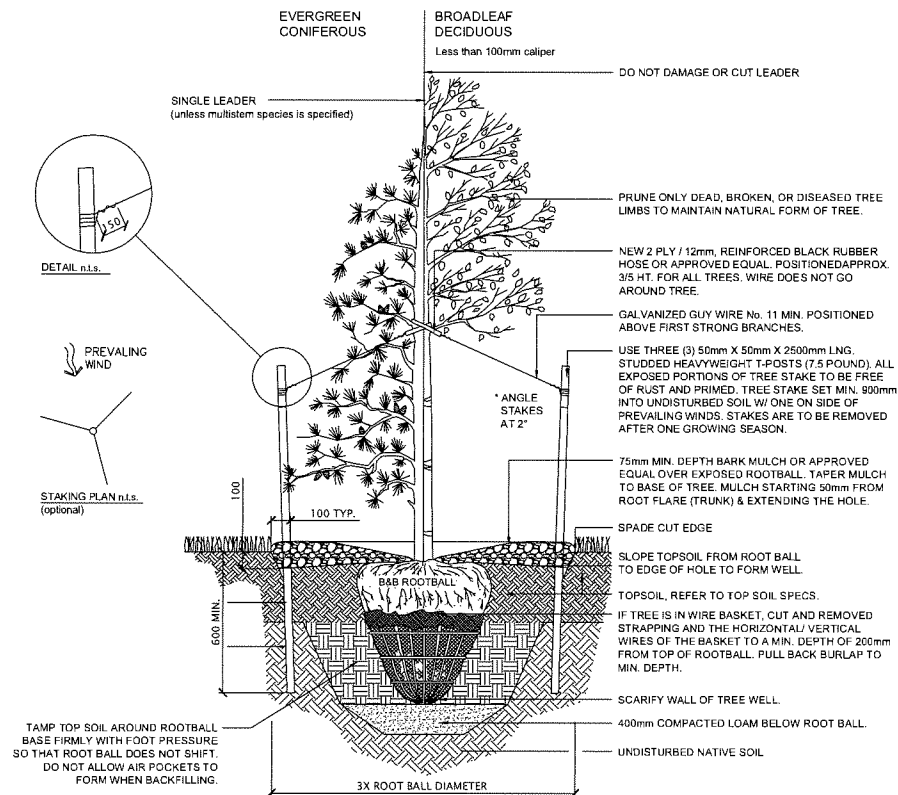
DV SD Donald V. S. Duncan
DEVELOPMENT CONSULTANT
LANDSCAPE ARCHITECT
603 - 220 Eleventh Street
New Westminster BC
Canada V3M 6N9
778-791-4323
dvsduncan@gmail.com

Revision	Project Leader D.Duncan
	Drawn D.Duncan
RESIDENTIAL DEV. 10431 No. 5 Road Richmond BC prepared for: 1058085 BC LTD. 6411 Blundell Road Richmond BC	
Drawing Title LANDSCAPE DETAILS	
Check Scale (may be photo reduced) 0 1inch 0 10mm	
Project No.	18-0041
Drawing No.	LS-01

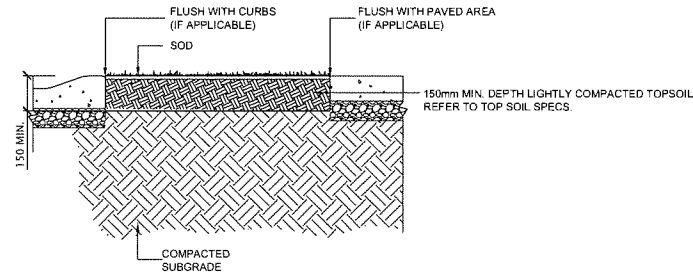
Plot Date: August 18, 2021 Time: 11:46 AM Full Path and File Name: D:\PROJECTS\018-0041-5 RD RICHMOND\500-DELIV\LAND\02-SD\LS-02.DWG PLOT STYLE TABLE: -----



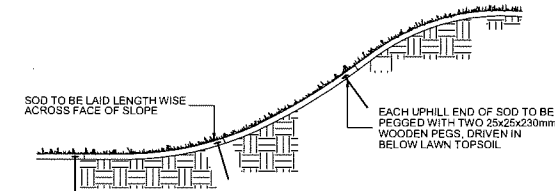
01
LS-02
SHRUB INSTALLATION DETAIL
1:20



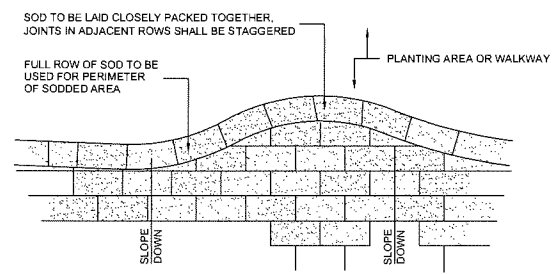
02
LS-02
TREE INSTALLATION DETAIL
1:20



SECTION THROUGH SOD



CROSS SECTION OF 3H:1V SLOPE
3H:1V SLOPE



PLAN VIEW OF SOD LAYOUT AND EDGING
NOT TO SCALE

03
LS-02
TURF INSTALLATION DETAIL
1:20

PLAN 15
DP 20-910008

DATE	ISSUED FOR	REV
2018-07-15	REZONING	A
2020-07-22	DP	B
2021-05-11	DP	C
2021-08-18	DP	D

This drawing has been prepared solely for the use of the CLIENT and there are no representations of any kind made by Donald V. S. Duncan to any party with whom Donald V. S. Duncan has not entered into a contract.
This drawing shall not be used for construction purposes until the seal appearing hereon is signed and dated by the Landscape Architect.

Consultants

Architectural: Eric Law Architect
Arborist: -
Civil: -
Structural: -
Mechanical: -
Electrical: -



DVS Donald V. S. Duncan
DEVELOPMENT CONSULTANT
LANDSCAPE ARCHITECT
603 - 220 Eleventh Street
New Westminster BC
Canada V3M 6N9
778-791-4323
dvsduncan@gmail.com

D Project Leader
D.Duncan
Revision
D.Duncan
RESIDENTIAL DEV.
10431 No. 5 Road
Richmond BC
prepared for:
1058085 BC LTD.
6411 Blundell Road
Richmond BC

Drawing Title
LANDSCAPE DETAILS

Check Scale (may be photo reduced)
0 1 inch 0 10mm

Project No. 18-0041

Drawing No. LS-02

