THE CORPORATION OF THE CITY OF VERNON
REPORT TO COUNCIL

SUBMITTED BY: Michelle Austin
Planner, Current Planning

COUNCIL MEETING: REG ☒ COW ☐ I/C ☐
COUNCIL MEETING DATE: November 14, 2022
REPORT DATE: November 2, 2022
FILE: 3360-20 (ZON00385) / 3090-20 (DVP00569)

SUBJECT: **ZONING AND DEVELOPMENT VARIANCE PERMIT APPLICATIONS FOR 1609 43RD AVENUE**

PURPOSE:

To present for Council's consideration zoning and development variance permit applications for the property located at 1609 43rd Avenue in preparation for a 16-unit townhouse development.

RECOMMENDATION:

THAT Council support Zoning Application 00385 (ZON00385) to rezone Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) from R5 – Four-plex Residential to RH2 – Stacked Row Housing Residential as outlined in the report titled "Zoning and Development Variance Permit Applications for 1609 43rd Avenue" dated November 2, 2022 and respectfully submitted by the Current Planner;

AND FURTHER, that Council's support of ZON00385 is subject to the following:

a) that a combined Multiple Family and Environmental Development Permit is ready for issuance prior to final adoption of a bylaw to rezone the property; and

b) that a covenant, in favour of the City of Vernon, be registered on title of the land:

   i. prohibiting health services, personal services, and retail conveniences secondary uses;

   ii. limiting the maximum number of dwelling units to 16;

   iii. limiting the maximum height of buildings to the lesser of 10m or 3 storeys; and

   iv. requiring common outdoor amenity space with a playground structure;

AND FURTHER, that Council hold a public hearing, pursuant to 464(1) of the *Local Government Act*, on a proposed bylaw to rezone Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) from R5 – Four-plex Residential to RH2 – Stacked Row Housing Residential;

AND FURTHER, that Council support Development Variance Permit Application 00569 (DVP00569) to vary Zoning Bylaw 5000 for Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) by:

a) decreasing Section 9.13.6, minimum side yard (east), from 3m to 2m for Building 2;

b) decreasing Section 9.13.6, minimum side yard (east), from 3m to 2.6m for the portion of Building 4 being ≤ 2.5 storeys;

c) decreasing Section 9.13.6, minimum side yard (east), from 6m to 2.6m for the portion of Building 4 being > 2.5 storeys;

d) decreasing Section 9.13.6, minimum rear yard, from 7.5m to 3.7m for the portion of Buildings 3 and 4 ≤ 2 storeys; and

e) decreasing Section 9.13.6, minimum rear yard, from 9m to 3.7m for the portion of the Buildings 3 and 4 > 2 storeys.

ALTERNATIVES & IMPLICATIONS:

1. THAT Council support Zoning Application 00385 (ZON00385) to rezone Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) from R5 – Four-plex Residential to RH2 – Stacked Row Housing Residential as outlined in the report titled "Zoning and Development Variance Permit Applications for 1609 43rd Avenue" dated November 2, 2022 and respectfully submitted by the Current Planner;

   AND FURTHER, that Council's support of ZON00385 is subject to the following:

   a) that a combined Multiple Family and Environmental Development Permit is ready for issuance prior to final adoption of a bylaw to rezone the property; and

   b) that a covenant, in favour of the City of Vernon, be registered on title of the land:

      i. prohibiting health services, personal services, and retail conveniences secondary uses;

      ii. limiting the maximum number of dwelling units to 16;

      iii. limiting the maximum height of buildings to the lesser of 10m or 3 storeys; and

      iv. requiring common outdoor amenity space with a playground structure;

   AND FURTHER, that Council not hold a public hearing, pursuant to 464(2) of *the Local Government Act*, on a proposed bylaw to rezone Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) from R5 – Four-plex Residential to RH2 – Stacked Row Housing Residential;

   AND FURTHER, that Council direct Administration to issue a public notice of initial readings and prepare a proposed bylaw to be brought forward for Council's consideration at the Regular Meeting of December 12, 2022 to rezone Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) from R5 – Four-plex Residential to RH2 – Stacked Row Housing Residential;

   AND FURTHER, that Council be advised that Development Variance Permit Application 00569 (DVP00569) will be brought forward for Council's consideration and public input at the Regular Meeting of December 12, 2022, to vary Zoning Bylaw 5000 for Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) by:

   a) decreasing Section 9.13.6, minimum side yard (east), from 3m to 2m for Building 2;

   b) decreasing Section 9.13.6, minimum side yard (east), from 3m to 2.6m for the portion of Building 4 being ≤ 2.5 storeys;

   c) decreasing Section 9.13.6, minimum side yard (east), from 6m to 2.6m for the portion of Building 4 being > 2.5 storeys;

d) decreasing Section 9.13.6, minimum rear yard, from 7.5m to 3.7m for the portion of Buildings 3 and 4 ≤ 2 storeys; and

e) decreasing Section 9.13.6, minimum rear yard, from 9m to 3.7m for the portion of the Buildings 3 and 4 > 2 storeys.

Note: This alternative does not allow the public to make representations to Council on the proposed bylaw.

2. THAT Council not support Zoning Application 00385 (ZON00385) to rezone Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) from R5 – Four-plex Residential to RH2 – Stacked Row Housing Residential as outlined in the report titled "Zoning and Development Variance Permit Applications for 1609 43rd Avenue" dated November 2, 2022 and respectfully submitted by the Current Planner;

   AND FURTHER, that Council not support Development Variance Permit Application 00569 (DVP00569) to vary Zoning Bylaw 5000 for Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) to:

   a) decrease Section 9.13.6, minimum side yard (east), from 3m to 2m for Building 2;

   b) decrease Section 9.13.6, minimum side yard (east), from 3m to 2.6m for the portion of Building 4 being ≤ 2.5 storeys;

   c) decrease Section 9.13.6, minimum side yard (east), from 6m to 2.6m for the portion of Building 4 being > 2.5 storeys;

   d) decrease Section 9.13.6, minimum rear yard, from 7.5m to 3.7m for the portion of Buildings 3 and 4 ≤ 2 storeys; and

   e) decrease Section 9.13.6, minimum rear yard, from 9m to 3.7m for the portion of the Buildings 3 and 4 > 2 storeys.

   Note: This alternative does not support the rezoning and variances and prevents the proposed 16-unit townhouse development from moving ahead. Without rezoning approval, the property could support a maximum of eight dwelling units under the existing R5 zoning.

ANALYSIS:

A. Committee Recommendations:

At its meeting of October 12, 2022, the Advisory Planning Committee passed the following resolution:

THAT Council support Zoning Application 00385 (ZON00385) to rezone Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) from R5 – Four-plex Residential to RH2 – Stacked Row Housing Residential as outlined in the report titled "Zoning and Development Variance Permit Applications for 1609 43rd Avenue" dated September 29, 2022 and respectfully submitted by the Current Planner;

AND FURTHER, that Council's support of ZON00385 is subject to the following:

a) that a combined Multiple Family and Environmental Development Permit is ready for issuance prior to final adoption of a bylaw to rezone the property; and

b) that a covenant, in favour of the City of Vernon, be registered on title of the land:

i. prohibiting health services, personal services, and retail conveniences secondary uses;

ii. limiting the maximum number of dwelling units to 16;

iii. limiting the maximum height of buildings to the lesser of 10m or 3 storeys; and

iv. requiring common outdoor amenity space with a playground structure;

AND FURTHER, that Council hold a public hearing, pursuant to 464(1) of the Local Government Act, on a proposed bylaw to rezone Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) from R5 – Four-plex Residential to RH2 – Stacked Row Housing Residential;

AND FURTHER, that Council be advised that Development Variance Permit Application 00569 (DVP00569) will be brought forward for Council's consideration and public input on the same date as the public hearing, to vary Zoning Bylaw 5000 for Lot 1, Sec 2, TP 8, ODYD, Plan KAP48497 (1609 43rd Avenue) by:

a) decreasing Section 9.13.6, minimum side yard (east), from 3m to 2m for Building 2;

b) decreasing Section 9.13.6, minimum side yard (east), from 3m to 2.6m for the portion of Building 4 being ≤ 2.5 storeys;

c) decreasing Section 9.13.6, minimum side yard (east), from 6m to 2.6m for the portion of Building 4 being > 2.5 storeys;

d) decreasing Section 9.13.6, minimum rear yard, from 7.5m to 3.7m for the portion of Buildings 3 and 4 ≤ 2 storeys; and

e) decreasing Section 9.13.6, minimum rear yard, from 9m to 3.7m for the portion of the Buildings 3 and 4 > 2 storeys.

B. <u>Rationale:</u>

1. The subject property is located at 1609 43rd Avenue, across from Vernon Mobile Home Park and adjacent to Vernon Springs (Figures 1 and 2). There is currently one single detached dwelling located on the property planned for demolition to allow for redevelopment (Attachment 1). Development plans are to construct a 16-unit townhouse development consisting of four, four-plex buildings (Attachment 2).

2. The intent of the rezoning and variance applications are to request that Council:

   - rezone the subject property from Four-plex Residential (R5) (Attachment 3) to Stacked Row Housing Residential (RH2) (Attachment 4); and

   - support the following variance requests for the construction of Buildings 2, 3 and 4 to decrease minimum setbacks:

     - side yard (east), from 3m to 2m for Building 2;
     - side yard (east), from 3m to 2.6m for the portion of Building 4 ≤ 2.5 storeys;
     - side yard (east), from 6m to 2.6m for the portion of Building 4 > 2.5 storeys;
     - rear yard, from 7.5m to 3.7m for the portion of Buildings 3 and 4 ≤ 2 storeys; and

- rear yard, from 9m to 3.7m for the portion of the Buildings 3 and 4 > 2 storeys.

3. The site layout for the project has Buildings 1 and 2 facing 43rd Avenue with a pedestrian oriented design including direct pedestrian access to the sidewalk, patios, lighting, landscaping (Attachment 5) and decorative fencing and garages at the rear. Buildings 3 and 4 front the rear property line, also with patios, lighting, landscaping and decorative fencing and garages front the private driveway. The patio areas would meet the minimum requirement of Zoning Bylaw 5000 for the provision of private open space. Additionally, common outdoor amenity space with a playground structure is being recommended by Administration in the northwest corner of the property. Landscaping would be provided in accordance with Zoning Bylaw 5000.

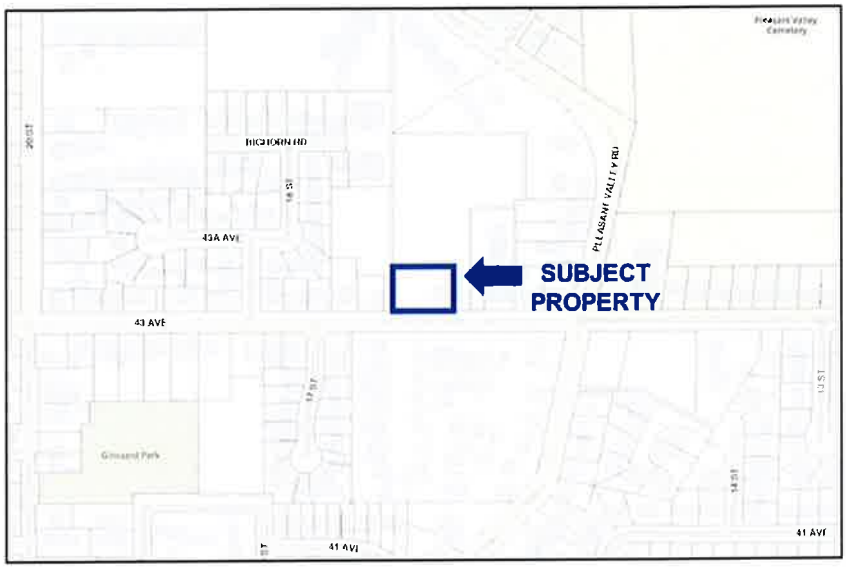

Figure 1: Property Location Map

Figure 2: Aerial Photo of Property

4. Access to the development would be from 43rd Avenue adjacent to the west side property line. The private driveway is sufficiently designed to accommodate fire and rescue services in the event of an emergency. Garbage, recycling and organics collection would be through a private contractor.

5. Each dwelling has a two-car garage, with four units having double garages and 12 units having tandem garages. Adequate visitor parking, accessible parking and bicycle parking would be provided as per Zoning Bylaw 5000.

6. Maximum height for all four buildings would be 10 meters. Buildings 1 and 2 are considered 2.5 storeys and Buildings 3 and 4 are considered three storeys. Dwelling units within Buildings 1 and 2 would have a floor area of approximately 1,238ft^2 with three bedrooms each. Dwelling units within Buildings 3 and 4 would have floor areas ranging from 1,135ft^2 to 1,655ft^2 with two or three bedrooms each.

7. The property is designated as Residential Medium Density (RMD) within the Official Community Plan (OCP). The density range within the RMD designation is between 30 units/ha (12 units/ac) and 110 units/ha (44.5 units/ac). The existing R5 zoning allows a maximum 30 units/ha, which is the low end of the RMD designation. With a lot area of 2,023.6m^2, the property can currently support a maximum of six dwelling units. The proposed RH2 zoning allows up to 100 units/ha (40.5 units/ac). If rezoned to RH2, the property could support up to 22 dwelling units. The 16-unit project would have a density of 79 units/ha (~31 units/ac), within the range allowed by the RMD designation and less than the maximum density allowed under the proposed zone.

8. Table 1 below compares the R5 and RH2 zones with respect to permitted housing form and density.

	Existing R5	Proposed RH2
Housing Form	• Single Detached Housing (SDH) • Duplex/Semi-detached Housing • Three-plex Housing • Four-plex Housing • Secondary Suites within SDH	• Apartment Housing • Row Housing • Stacked Row Housing • Semi-detached Housing • Seniors Housing (55+, Supportive and Assisted)
Max. Density	30 units/ha = 6 units	100 units/ha = 20 units 110 units/ha = 22 units with housing agreement

Table 1: Zoning Comparison – Residential Uses

9. Surrounding land uses are similar and compatible with the proposed multi-family development, as shown in Table 2.

	Zoning	Actual Use
North	R5 – Four-plex Residential	Vacant
East	R5 – Four-plex Residential	Vernon Springs Multi-Family Development
South	R7 – Mobile Home Residential	Mobile Home Park
West	RH2 – Stacked Row Housing Residential	Driveway/Four-plex Housing

Table 2: Surrounding Properties – Zoning & Actual Use

10. The applicant compared other medium density zones including the existing R5 (Four-plex Housing Residential), RM1 (Row Housing Residential), RM2 (Multiple Housing Residential), RH1 (Low-Rise Apartment Residential and the proposed RH2 (Stacked Row Housing Residential). For the proposed 16-unit project, the RH2 zone requires the least number of variances in comparison with the other medium density zones as illustrated in Attachment 6.

11. The proposed decrease in side and rear yard setbacks are anticipated to have little impact on the surrounding properties. As shown on Attachment 7, the north/east property includes an environmental protection area that can not be built on and a panhandle road access to 43rd Avenue. The property to the west also includes a panhandle road access to 43rd Avenue. Both panhandles are needed to provide access and therefore can not be built on.

12. An Environmental Assessment (EA) has been provided (Attachment 8), as the subject property has a "medium" conservation value within an Environmental Management Area. The EA observes that the property has been significantly disturbed resulting in a low conservation value. Administration recommends that the EA be followed to ensure any existing environmental values be retained. This can be accomplished through the Development Permit and Building Permit processes.

13. A Geotechnical Investigation Report and Summary Letter (Attachment 9) have also been provided confirming that "from a geotechnical standpoint, the proposed development is feasible". At the building permit or subdivision stage, the owner/developer will be required to adequately address any stormwater management issues in accordance with the Subdivision and Development Servicing Bylaw 3843.

14. Administration supports the proposed rezoning and variance requests for the following reasons:

    a) the proposal provides an increase in density (more housing) and maximizes the use of existing city infrastructure within the neighbourhood district, as supported by the OCP;

    b) the units are ground-oriented townhomes with two and three bedrooms suitable for families;

    c) form and character of the project is compatible with the existing neighbourhood character;

    d) the owner compared the medium density zones (Attachment 6) within Zoning Bylaw 5000 and determined that the RH2 zone was the best fit for the proposed development requiring the least number of variances; and

    e) the proposed decrease in side and rear yard setbacks are anticipated to have little impact on the surrounding properties to the north and east as that these areas are vacant and not proposed for development.

C. Attachments:

Attachment 1 – Photos
Attachment 2 – Design Drawings
Attachment 3 – R5: Fourplex Housing Residential Zone
Attachment 4 – RH2: Stacked Row Housing Residential Zone
Attachment 5 – Landscape Plan
Attachment 6 – Medium Density Zoning Comparison
Attachment 7 – Buffers
Attachment 8 – Environmental Assessment
Attachment 9 – Geotechnical Summary

D. Council's Strategic Plan 2019 – 2022 Goals/Action Items:

The subject application involves the following goals/actions items in Council's Strategic Plan 2019 – 2022:

- N/A

E. Relevant Policy/Bylaws/Resolutions:

1. Official Community Plan Bylaw 5470:

    - OCP Designation – Residential Medium Density (RMD)
    - Development District – 2 Neighbourhood

2. Zoning Bylaw 5000:

    - Sec. 9.13 RH2: Stacked Row Housing Residential

3. *Local Government Act*:

    - Division 3 – Public Hearings on Planning and Land Use Bylaws
    - Sec. 464 – Requirement for public hearing before adopting bylaw
      A local government is not required to hold a public hearing on a proposed rezoning bylaw if an OCP is in effect for the area that is the subject of the zoning bylaw, and the bylaw is consistent with the OCP.

BUDGET/RESOURCE IMPLICATIONS:

N/A

Prepared by:

X Michelle Austin
Michelle Austin
Current Planner

X
for Kim Flick
Director, Community Infrastructure and Development

Approved for submission to Council:

Will Pearce, CAO

Date: 03. NOV. 2022.

REVIEWED WITH

- ☐ Corporate Services
  - ☐ Bylaw Compliance
  - ☐ Real Estate
- ☐ RCMP
- ☒ Fire & Rescue Services
- ☐ Human Resources
- ☐ Financial Services
- ☒ COMMITTEE: APC (Oct. 12/22)
- ☐ OTHER:
- ☒ Operations
  - ☒ Public Works/Airport
  - ☐ Facilities
  - ☐ Utilities
- ☐ Recreation Services
- ☐ Parks
- ☒ Current Planning
- ☒ Long Range Planning & Sustainability
- ☐ Building & Licensing
- ☒ Engineering Development Services
- ☐ Infrastructure Management
- ☒ Transportation
- ☐ Economic Development & Tourism

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ATTACHMENT 1

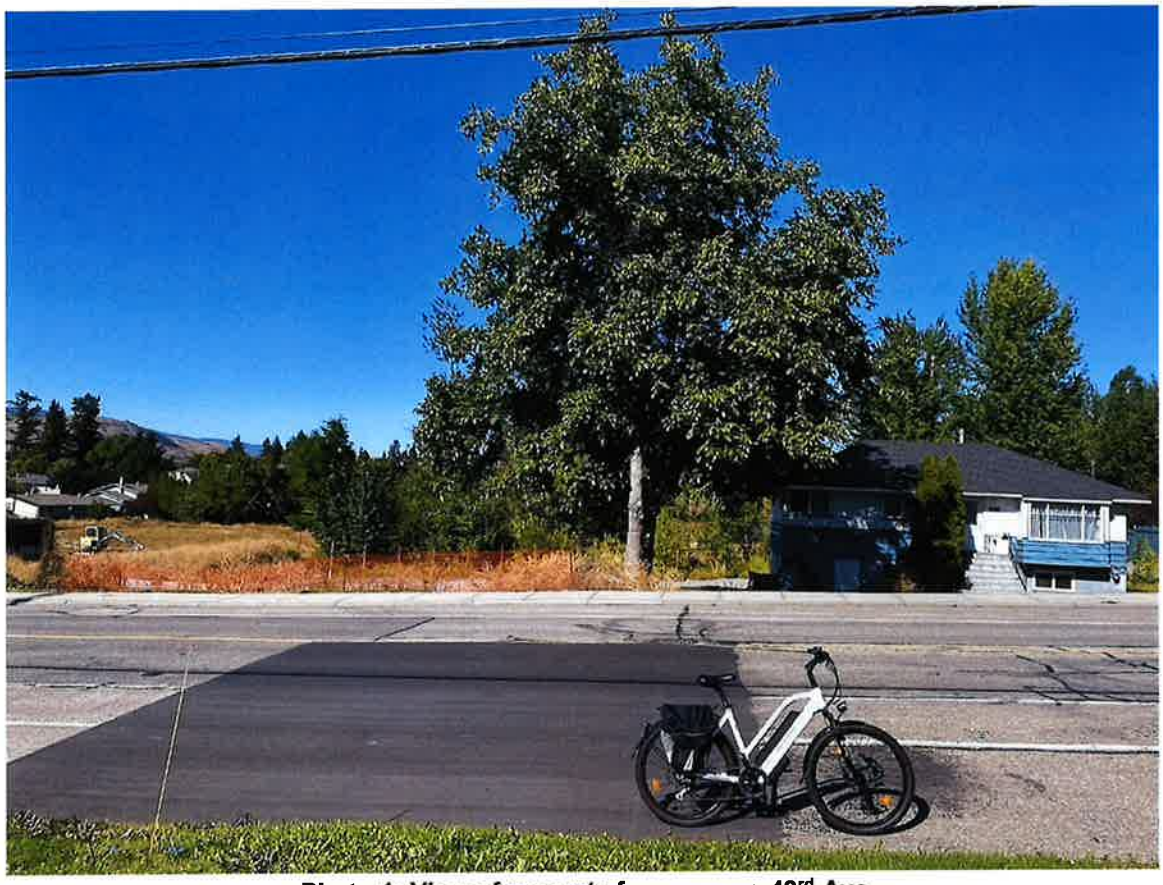

Photo 1: View of property from across 43rd Ave

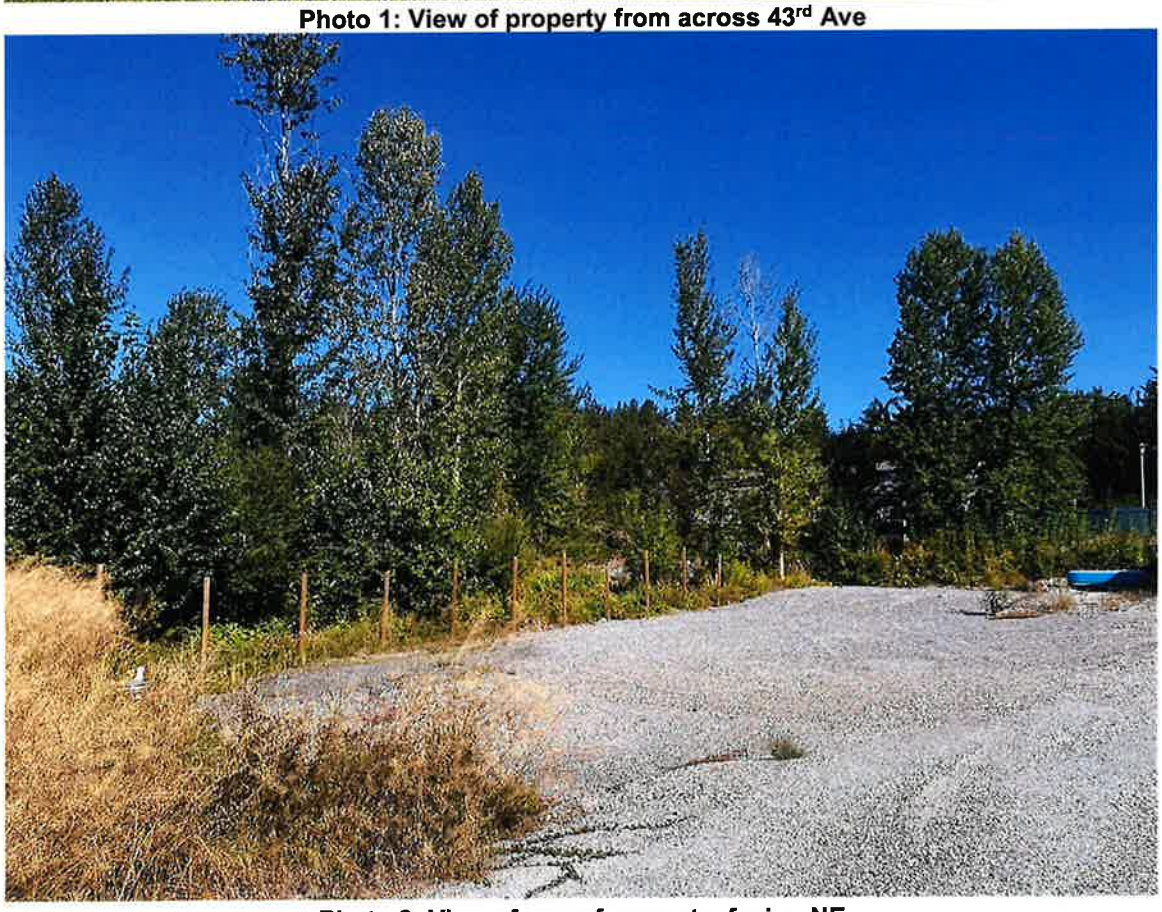

Photo 2: View of rear of property, facing NE

Photo 3: Vernon Springs entrance/side property line, facing S toward 43rd Ave

PROPOSED RESIDENTIAL DEVELOPMENT - 1609 43RD AVENUE

DWELL
DESIGN STUDIO

DWELL
DESIGN STUDIO

p 250.550.7478
e dwell@telus.net

email
Dwell Design Studio
8837 Carnac Drive
Vernon, BC, V1H 1N8

SITE NORTH

GENERAL CONDITIONS

Check and verify all critical details and dimensions prior to the start of construction and contact this office if any clarification is required. Written dimensions will always take precedence over scaled dimensions.

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DATE	ISSUED FOR

PROJECT TITLE

Proposed Residential Development

1609 43 Avenue Vernon, BC

SHEET TITLE

Cover

BOXFORT
HOMES

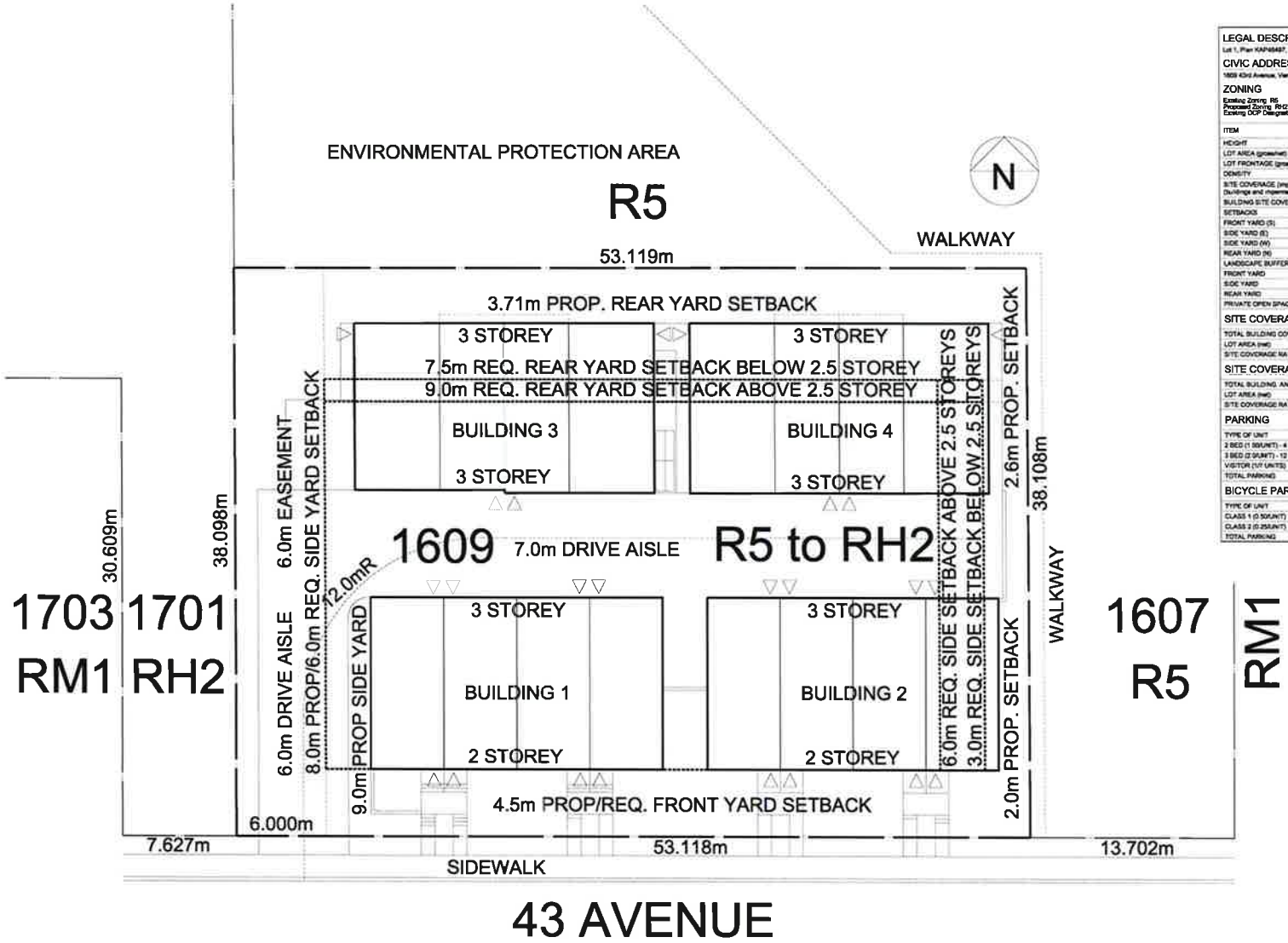
Job No.
Date
Scale
Drawn
Checked

SHEET NUMBER

A-0

OF

Attachment 2



SITE PLAN SCALE: 3/32"=1'-0"

ZONING/SETBACKS

LEGAL DESCRIPTION

Lot 1, Plan KAP46497, Sec 2, TWP 8, ODYD

CIVIC ADDRESSES

1609 43rd Avenue, Vernon, B.C.

ZONING

Existing Zoning: R5
Proposed Zoning: RH2
Existing OCP Designation: Medium Density Residential

ITEM	PERMITTED	PROVIDED
HEIGHT	18.5m or 4.0 Storeys	10.0m (3.0 Storeys)
LOT AREA (gross/net)	1400sm (min) Subdivision	2022sm (0.5A)
LOT FRONTAGE (gross/net)	30.0m Subdivision	53.12m
DENSITY	51 U/HA (Parking Bonus)	33 U/HA
SITE COVERAGE (impermeable) (buildings and impermeable paving)	75%	64%
BUILDING SITE COVERAGE	60%	43%
SETBACKS		
FRONT YARD (S)	4.5m (2 Storey)	4.5m
SIDE YARD (E)	3.0m/6.0m (Over 2.5 Storey)	2.0m/2.6m (Variance)
SIDE YARD (W)	6.0m (Over 2.5 Storey)	6.0m/9.0m
REAR YARD (N)	9.0m (Over 2 Storey)	3.71m (Variance)
LANDSCAPE BUFFERS		
FRONT YARD	1.5m (Vegetative)	1.5m
SIDE YARD	1.5m (Vegetative)	1.5m
REAR YARD	1.5m (Vegetative + Fence)	1.5m
PRIVATE OPEN SPACE	15sm/UNIT	15sm/UNIT (MIN)

SITE COVERAGE

TOTAL BUILDING COVERAGE		864sm
LOT AREA (net)		2022sm
SITE COVERAGE RATIO	(864sm/2022sm)	43%

SITE COVERAGE (IMPERMEABLE)

TOTAL BUILDING AND IMPERMEABLE PAVING COVERAGE		1287sm
LOT AREA (net)		2022sm
SITE COVERAGE RATIO	(1287sm/2022sm)	64%

PARKING

TYPE OF UNIT	STALLS REQUIRED	STALLS PROVIDED
2 BED (1.50/UNIT) - 4 UNITS	6 Stalls	6 Stalls (0 Small)
3 BED (2.0/UNIT) - 12 UNITS	24 Stalls	24 Stalls (9 small)
VISITOR (1/7 UNITS)	2 Stalls	2 Stalls
TOTAL PARKING	32 Stalls	32 Stalls (40% Small)

BICYCLE PARKING

TYPE OF UNIT	STALLS REQUIRED	STALLS PROVIDED
CLASS 1 (0.50/UNIT)	8 Stalls	16 Stalls
CLASS 2 (0.25/UNIT)	4 Stalls	4 Stalls
TOTAL PARKING	12 Stalls	20 Stalls

DWELL DESIGN STUDIO

p 250.550.7478
e dwell@telus.net

email
Dwell Design Studio
8837 Camas Drive
Vernon, BC, V1H 1N8

SITE NORTH

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DATE:	ISSUED FOR:
Dec 27, 2021	Re-issued for DP

PROJECT TITLE:

Proposed Residential Development

1609 43 Avenue Vernon, BC

SHEET TITLE:

Site Plan/ Zoning Chart

BOXFORT HOMES

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Checked	DC

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A-101

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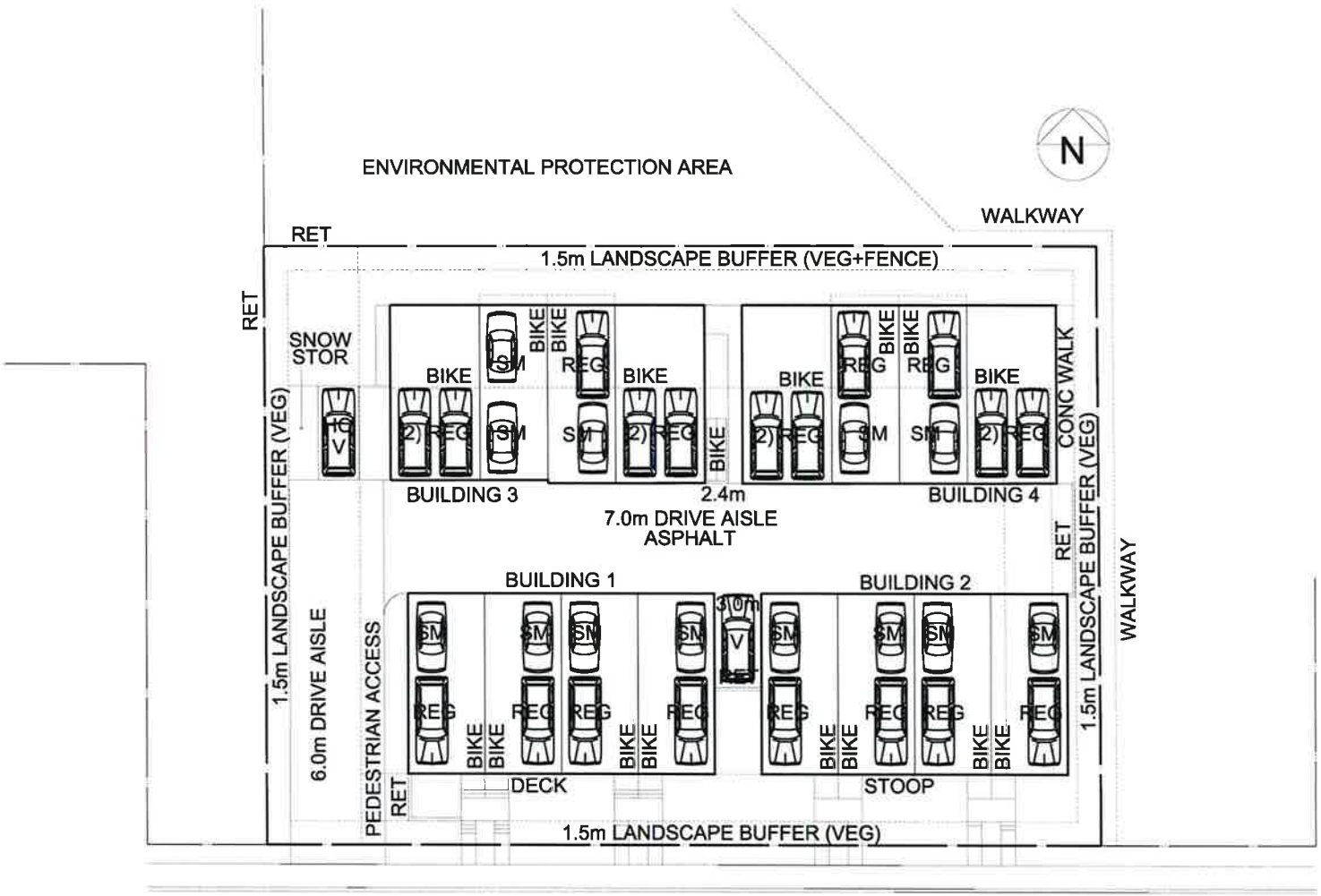

43 AVENUE

SITE PLAN SCALE: 3/32"=1'-0"

PARKING/SNOW STOR/LANDSCAPE BUFFER

DWELL DESIGN STUDIO

p. 250.550.7476
e. dwel@shaw.net

email
Dwell Design Studio
6637 Camey Drive
Vernon, BC, V1X 1N6

SITE NORTH

GENERAL CONDITIONS

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DATE	ISSUED FOR
Oct. 27, 2021	Re-issue for DP

PROJECT TITLE:

Proposed Residential Development

1009 43 Avenue
Vernon, BC

SHEET TITLE:

Site Plan Park/Land

BOXFORT HOMES

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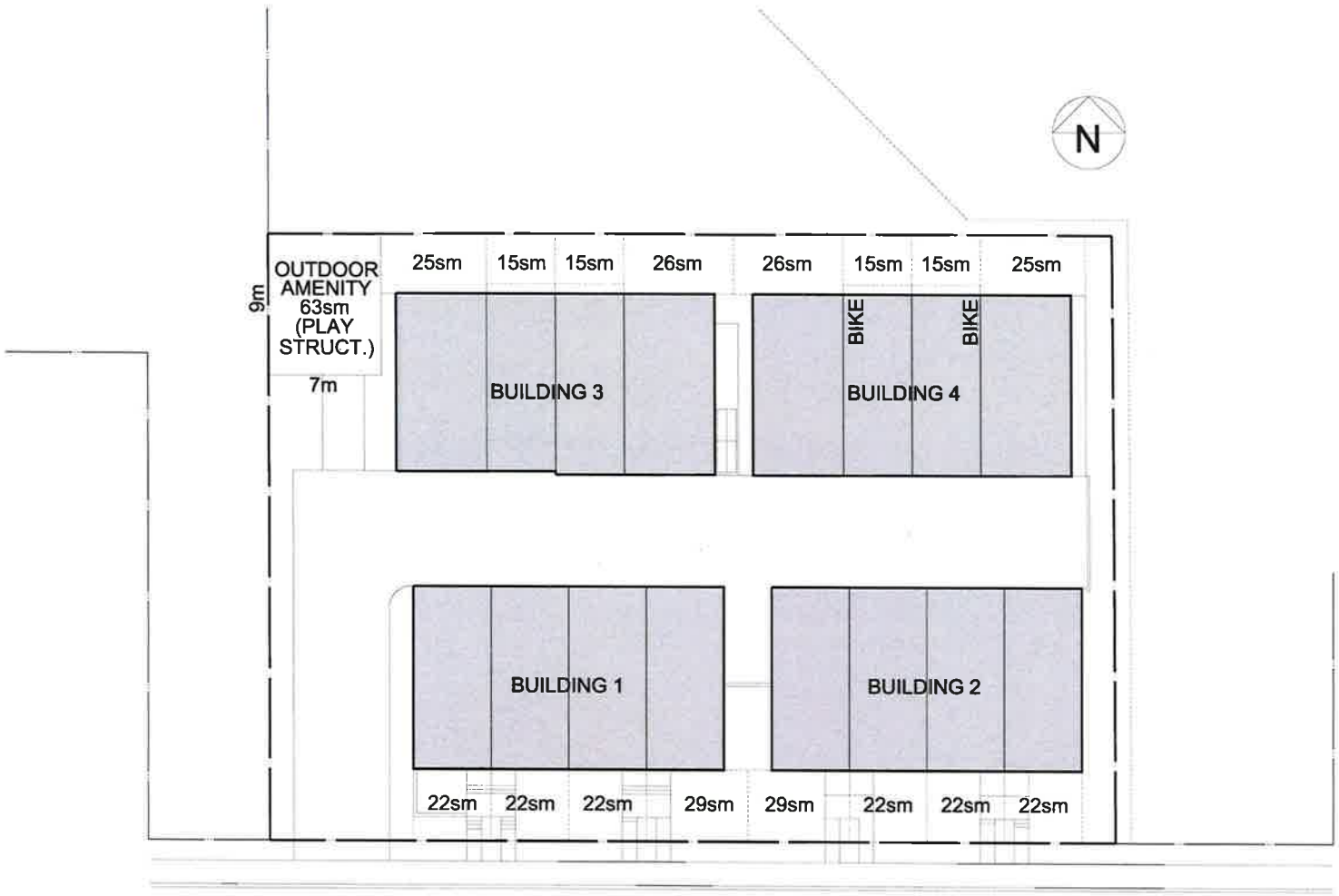

43 AVENUE

SITE PLAN SCALE: 3/32"=1'-0"

OPENSPACE

DWELL DESIGN STUDIO

p 250.550.7478
e dwell@telus.net

Dwell Design Studio
8637 Cameo Drive
Vernon, BC, V1H 1N8

DATE	ISSUED FOR
Oct. 31, 2022	Re-issued for DP

Proposed Residential Development

1609 43 Avenue
Vernon, BC

Site Plan Openspace

BOXFORT HOMES

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SHEET NUMBER

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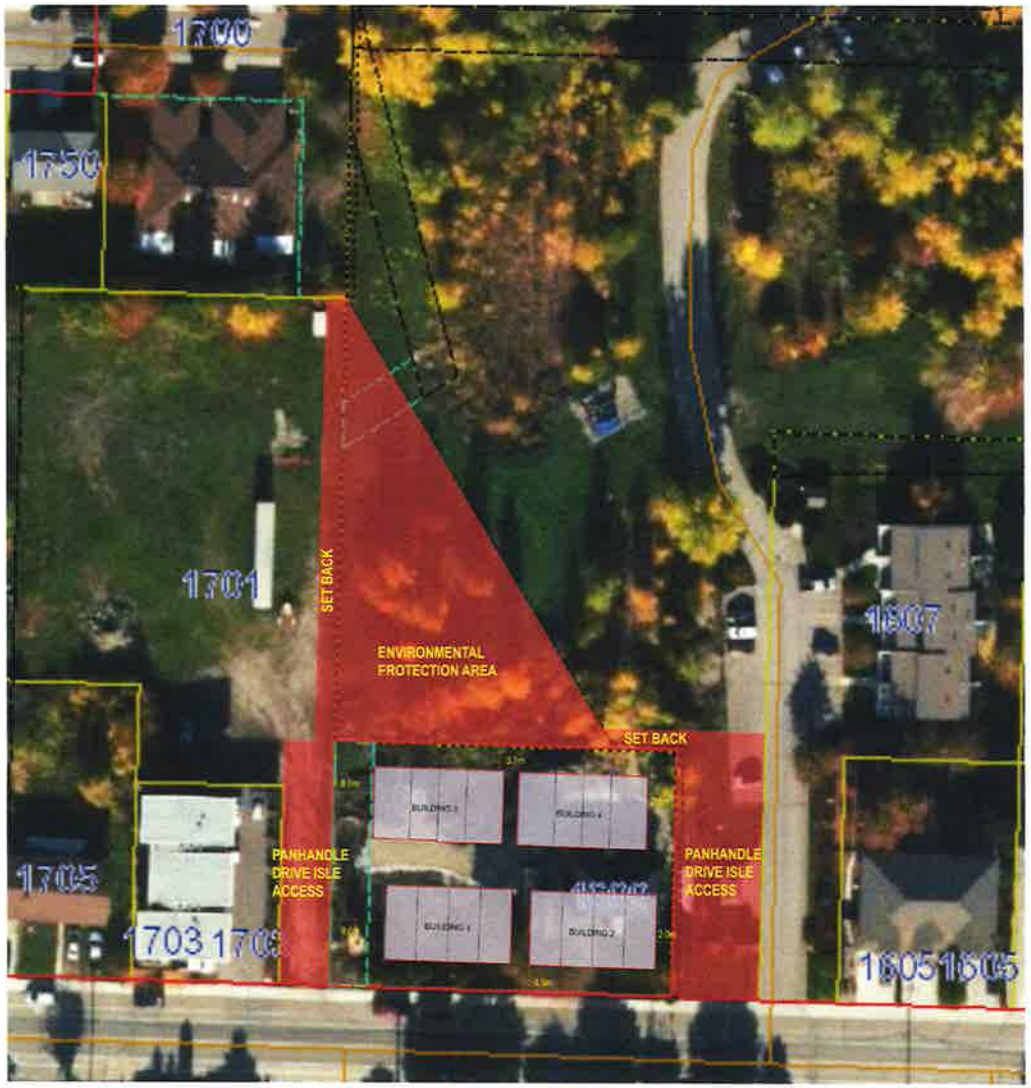

DWELL
DESIGN STUDIO

p. 250.550.7476
e. dwell@telus.net

email
Dwell Design Studio
6837 Camel Drive
Vernon, BC, V1H 1N6

SITE NORTH

GENERAL CONDITIONS

Check and verify all critical details and dimensions prior to the start of construction and contact the office if any clarification is required. Written dimensions will always take precedence over scaled dimensions.

This drawing must be read in conjunction with all drawings & specs issued for this project. Contractor is responsible to notify designer about conflicting design information. Costs to remediate such work completed before designer/engineer can issue design revisions are the sole responsibility of the Contractor.

DATE	ISSUED FOR
Oct. 21, 2022	issued for DP

PROJECT TITLE:

Proposed Residential Development

1606 43 Avenue
Vernon, BC

SHEET TITLE

No Build Zones

BOXFORT HOMES

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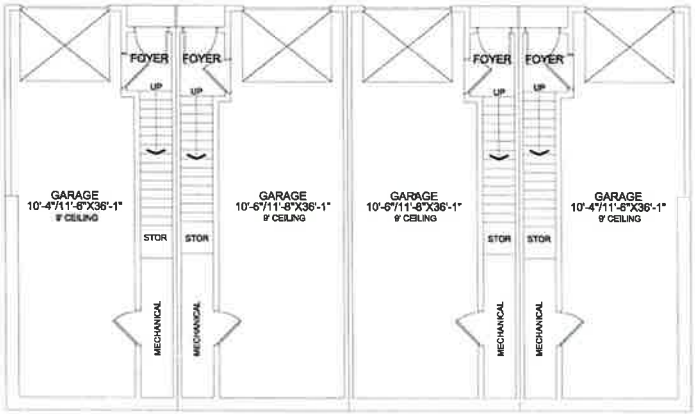
Job No	2021-22b
Date	Mar 17, 2022
Scale	3/32"=1'-0"
Drawn	DC
Checked	DC

SHEET NUMBER

A-101C

OF



16' EXTERIOR UNIT
GROSS FLOOR AREA = 30sf
GARAGE/MECH AREA = 595sf

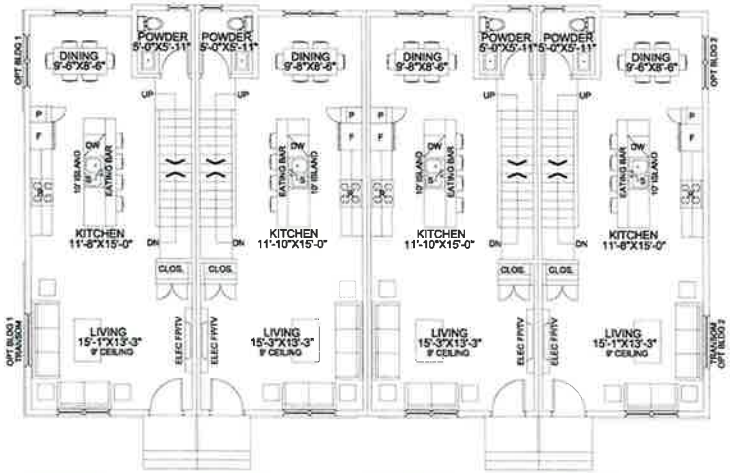
16' INTERIOR UNIT
GROSS FLOOR AREA = 32sf
GARAGE/MECH AREA = 595sf

16' INTERIOR UNIT
GROSS FLOOR AREA = 32sf
GARAGE/MECH AREA = 595sf

16' EXTERIOR UNIT
GROSS FLOOR AREA = 30sf
GARAGE/MECH AREA = 595sf

LOWER FLOOR PLAN

BUILDING 1 & 2



16' EXTERIOR UNIT
GROSS FLOOR AREA = 605sf

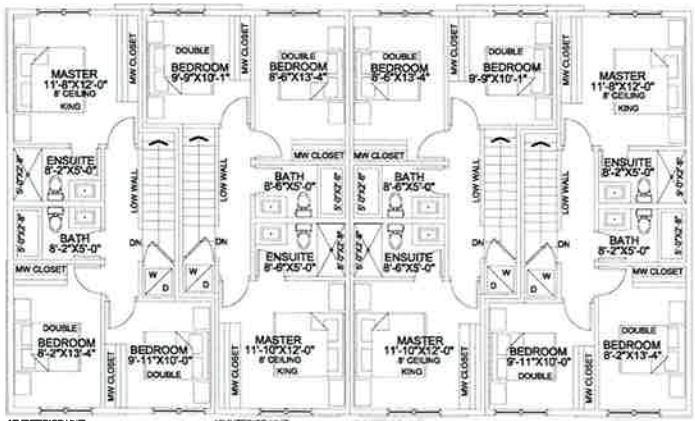
16' INTERIOR UNIT
GROSS FLOOR AREA = 599sf

16' INTERIOR UNIT
GROSS FLOOR AREA = 599sf

16' EXTERIOR UNIT
GROSS FLOOR AREA = 605sf

MAIN FLOOR PLAN

BUILDING 1 & 2



16' EXTERIOR UNIT
GROSS FLOOR AREA = 605sf

16' INTERIOR UNIT
GROSS FLOOR AREA = 605sf

16' INTERIOR UNIT
GROSS FLOOR AREA = 605sf

16' EXTERIOR UNIT
GROSS FLOOR AREA = 605sf

UPPER FLOOR PLAN

BUILDING 1 & 2

TOTAL GROSS FLOOR AREA = 1240sf

TOTAL GROSS FLOOR AREA = 1238sf

DWELL
DESIGN STUDIO

p. 250.550.7478
e. dwell@telus.net

email:
Dwell Design Studio
8637 Camen Drive
Vernon, BC, V1H 1N6

SITE NORTH

FLOOR PLANS

GENERAL CONDITIONS

DATE | ISSUED FOR

PROJECT TITLE

Proposed Residential Development

1506 43 Avenue
Vernon, BC

SHEET TITLE

Floor Plans Bldg 1 & 2

BOXFORT HOMES

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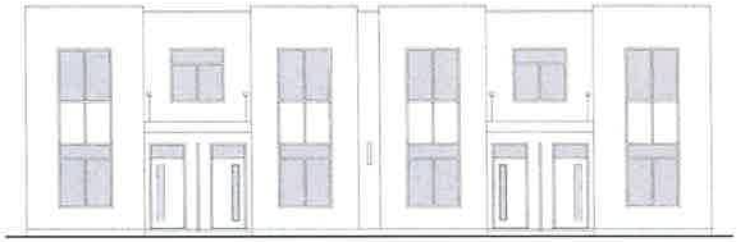
Job No.	2021 226
Date	Mar 17, 2022
Scale	3/16"=1'-0"
Drawn	DC
Checked	DC

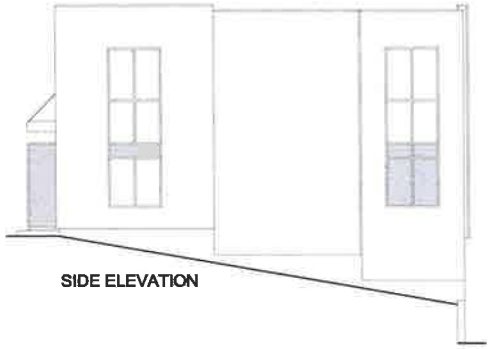
SHEET NUMBER

A-102

OF



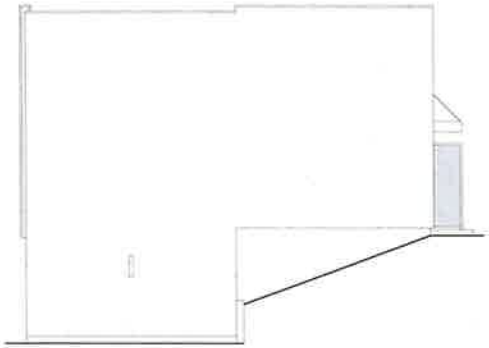
FRONT ELEVATION



SIDE ELEVATION

REAR ELEVATION

BUILDING 1 & 2



SIDE ELEVATION

DWELL
DESIGN STUDIO

p. 250.550.7476
e. dwel@telus.net

email:
Dwell Design Studio
6837 Camino Drive
Vernon, BC, V1H 1N6

SITE NORTH

GENERAL CONDITIONS:

Check and verify all written dimensions and measurements prior to the start of construction and contact this office if any clarification is required. Written dimensions will always take precedence over scaled dimensions.

This drawing must be read in conjunction with all drawings & specs issued for this project contract. Contractor is responsible to fully designate shop drawings, specifications, etc. Items to remediate must be completed before sign/seal/stamp/permit can issue. Report revisions with the new sequencing of the contractor.

DATE	ISSUED FOR

PROJECT TITLE:

Proposed Residential Development

1809 43 Avenue Vernon, BC

SHEET TITLE

Elevations Bldg 1 & 2

BOXFORT HOMES

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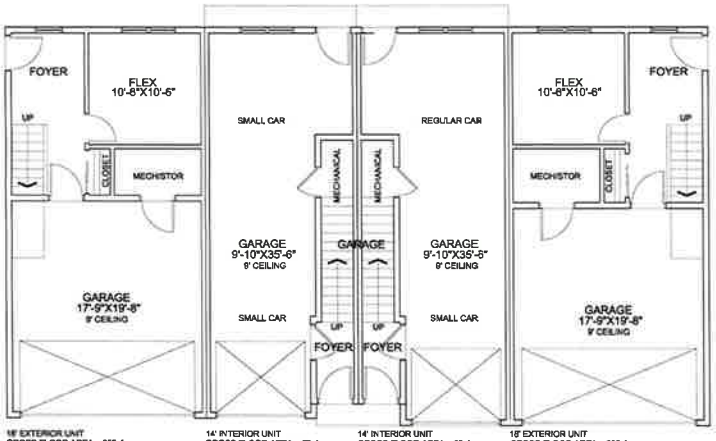
Job No:	2021-226
Date:	Mar 17, 2022
Scale:	1/4"=1'-0"
Drawn:	DK
Checked:	DK

SHEET NUMBER

A-103

OF



18' EXTERIOR UNIT
GROSS FLOOR AREA = 258sf
GARAGE/MECH AREA = 425sf

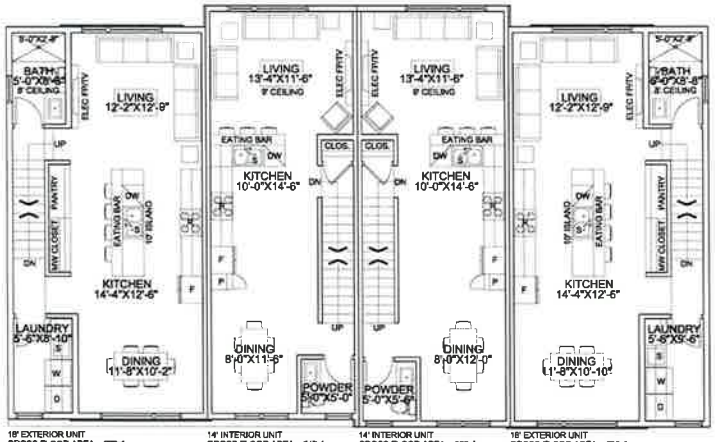
14' INTERIOR UNIT
GROSS FLOOR AREA = 32sf
GARAGE/MECH AREA = 481sf

14' INTERIOR UNIT
GROSS FLOOR AREA = 32sf
GARAGE/MECH AREA = 458sf

18' EXTERIOR UNIT
GROSS FLOOR AREA = 265sf
GARAGE/MECH AREA = 430sf

LOWER FLOOR PLAN

BUILDING 3



18' EXTERIOR UNIT
GROSS FLOOR AREA = 683sf

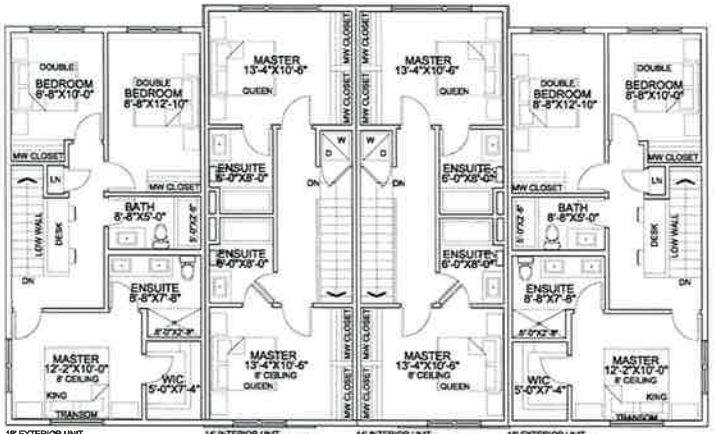
14' INTERIOR UNIT
GROSS FLOOR AREA = 547sf

14' INTERIOR UNIT
GROSS FLOOR AREA = 556sf

18' EXTERIOR UNIT
GROSS FLOOR AREA = 695sf

MAIN FLOOR PLAN

BUILDING 4



18' EXTERIOR UNIT
GROSS FLOOR AREA = 695sf

14' INTERIOR UNIT
GROSS FLOOR AREA = 556sf

14' INTERIOR UNIT
GROSS FLOOR AREA = 556sf

18' EXTERIOR UNIT
GROSS FLOOR AREA = 695sf

UPPER FLOOR PLAN

BUILDING 4

TOTAL GROSS FLOOR AREA = 1636sf

TOTAL GROSS FLOOR AREA = 1136sf

DWELL
DESIGN STUDIO

p 250 550 7476
e dwell@telus.net

email
Dwell Design Studio
8637 Camino Drive
Vernon, BC, V1H 1N6

SITE NORTH

GENERAL CONDITIONS

Check and verify all critical dimensions and elevations prior to the start of construction and contact this office if any discrepancies or inquiries, omission dimensions, with design take precedence over scaled dimensions.

This drawing must be read in conjunction with all drawings & specs issued for this project contract. Contractor is responsible to notify designer about conflicting design information. Costs to remediate such work completed before design/engineer has issue design revisions are the sole responsibility of the contractor.

DATE	ISSUED FOR

PROJECT TITLE

Proposed Residential Development

1606 43 Avenue
Vernon, BC

SHEET TITLE

Floor Plans
Bldg 4

BOXFORT HOMES

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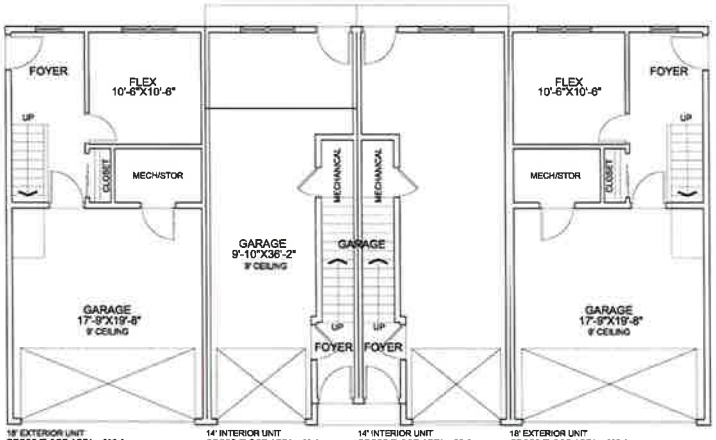
Job No	2021-226
Date	Mar 17, 2022
Scale	1/16"=1'-0"
Drawn	DC
Checked	DC

SHEET NUMBER

A-104

OF



18' EXTERIOR UNIT
GROSS FLOOR AREA = 265sf
GARAGE/MECH AREA = 430sf

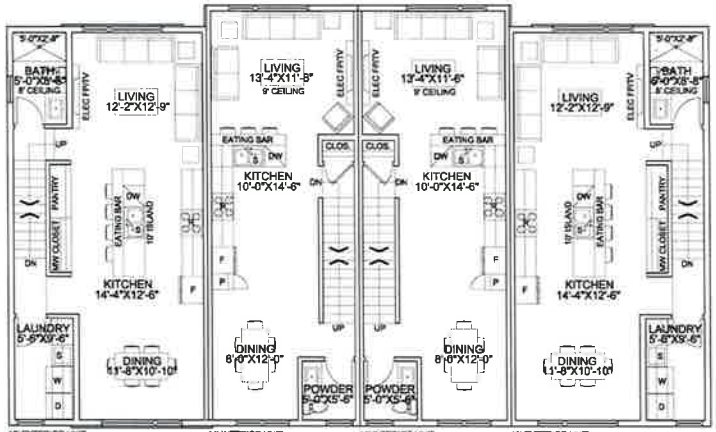
14' INTERIOR UNIT
GROSS FLOOR AREA = 32sf
GARAGE/MECH AREA = 498sf

14' INTERIOR UNIT
GROSS FLOOR AREA = 32sf
GARAGE/MECH AREA = 498sf

18' EXTERIOR UNIT
GROSS FLOOR AREA = 265sf
GARAGE/MECH AREA = 430sf

LOWER FLOOR PLAN

BUILDING 3



18' EXTERIOR UNIT
GROSS FLOOR AREA = 595sf

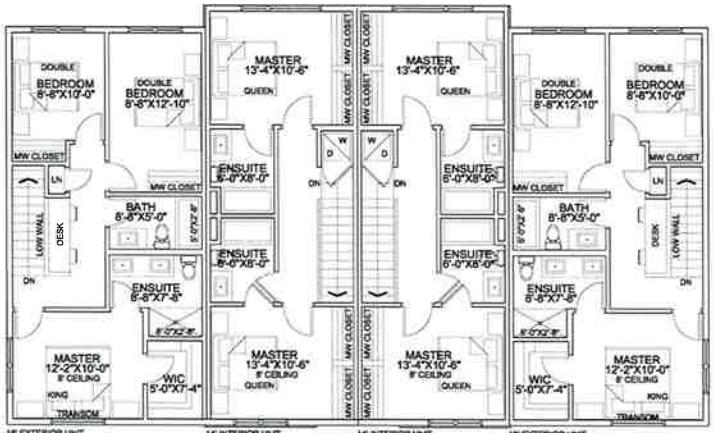
14' INTERIOR UNIT
GROSS FLOOR AREA = 556sf

14' INTERIOR UNIT
GROSS FLOOR AREA = 556sf

18' EXTERIOR UNIT
GROSS FLOOR AREA = 595sf

MAIN FLOOR PLAN

BUILDING 3



18' EXTERIOR UNIT
GROSS FLOOR AREA = 595sf

14' INTERIOR UNIT
GROSS FLOOR AREA = 556sf

14' INTERIOR UNIT
GROSS FLOOR AREA = 556sf

18' EXTERIOR UNIT
GROSS FLOOR AREA = 595sf

UPPER FLOOR PLAN

BUILDING 3

TOTAL GROSS FLOOR AREA = 1655sf

TOTAL GROSS FLOOR AREA = 1144sf

DWELL
DESIGN STUDIO

p. 250.550.7476
e. dwell@telus.net

email
Dwell Design Studio
8637 Camino Drive
Vernon, BC, V1H 1N6

SITE NORTH

GENERAL CONDITIONS

Check and verify all critical dimensions and elevations prior to the start of construction and contact this office if any discrepancies or inaccuracies, certain dimensions will always take precedence over scaled dimensions.

This drawing may be used in conjunction with all drawings & specs issued for this project (stamp). Contractor is responsible to notify designer about conflicting design instructions. Work to remediate such work completed before designer/engineer can issue design changes are the sole responsibility of the Contractor.

DATE	ISSUED FOR

PROJECT TITLE:

Proposed Residential Development

1609 43 Avenue
Vernon, BC

SHEET TITLE

Floor Plans Bldg 3

BOXFORT HOMES

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Job No	2021-226
Date	Mar 11, 2022
Scale	3/16"=1'-0"
Drawn	DC
Checked	DC

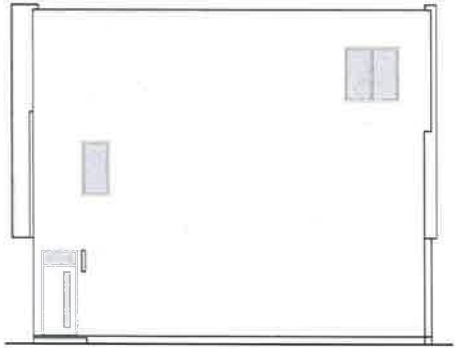
SHEET NUMBER

A-104A

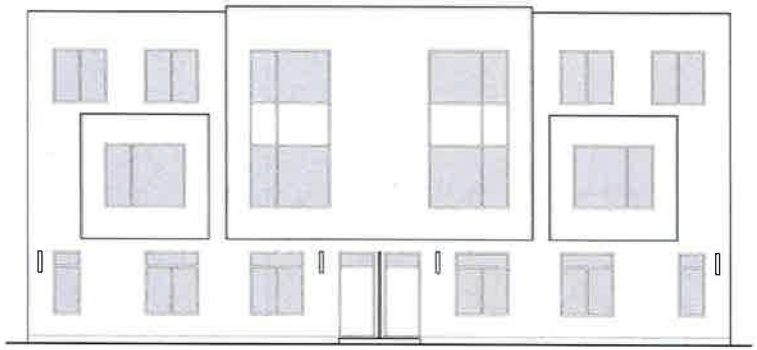
OF

REAR ELEVATION

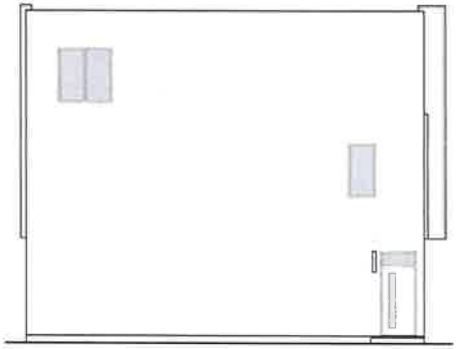
BUILDING 3



SIDE ELEVATION



FRONT ELEVATION



SIDE ELEVATION

DWELL DESIGN STUDIO

p. 250.558.7475
e. dwel@telus.net

email
Dwell Design Studio
8637 Camao Drive
Vernon, BC V1H 1N6

SITE NORTH

GENERAL CONDITIONS

Check and verify all critical details and dimensions prior to the start of construction and contact this office if any clarification is required. Written dimensions will always take precedence over scaled dimensions.

This drawing must be read in conjunction with all drawings & specs issued for this project contract. Contractor is responsible to notify designer about conflicting design instructions. Costs to rectify/redo work completed before designer/engineer can issue design revisions are the sole responsibility of the Contractor

DATE:	ISSUED FOR:

PROJECT TITLE:

Proposed Residential Development

1606 43 Avenue Vernon, BC

SHEET TITLE:

Elevations Bldg 3

BOXFORT HOMES

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Job No	2021 226
Date	Mar 17, 2022
Scale	3/16"=1'-0
Drawn	DC
Checked	DC

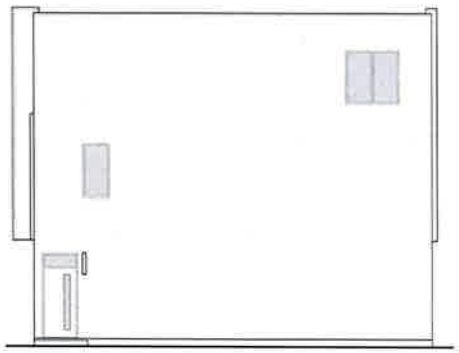
SHEET NUMBER

A-105

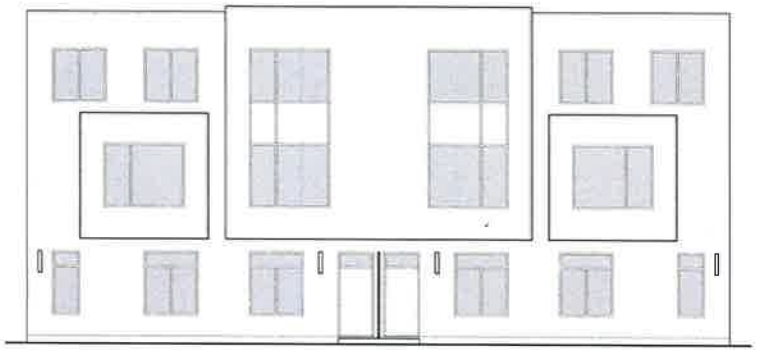
OF

REAR ELEVATION

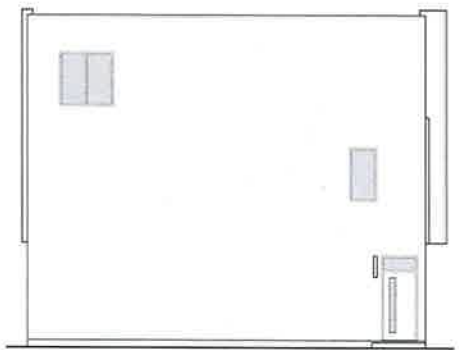
BUILDING 4



SIDE ELEVATION



FRONT ELEVATION



SIDE ELEVATION

DWELL DESIGN STUDIO

p 250 550 7479
e dwell@telus.net

email
Dwell Design Studio
6537 Camino Drive
Vernon, BC, V1H 1N8

SITE NORTH

GENERAL CONDITIONS

DATE:	ISSUED FOR:

PROJECT TITLE:

Proposed Residential Development

1909 43 Avenue
Vernon, BC

SHEET TITLE:

Elevations Bldg 4

BOXFORT HOMES

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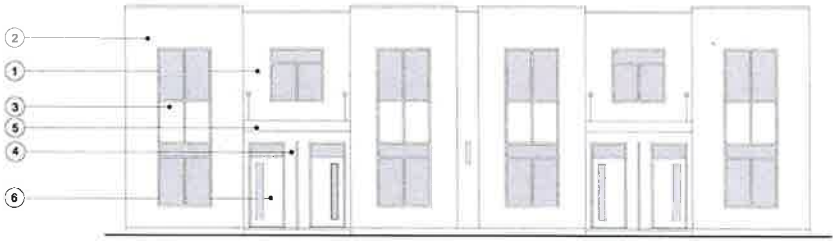
Job No	2021-276
Date	Mar 17, 2022
Scale	3/16"=1'-0"
Drawn	DC
Checked	DC

SHEET NUMBER

A-105A

OF



COLOUR SCHEME

1 HORIZONTAL SIDING
NATURAL WOOD
FINISH

3 FIBRE-CEMENT
PANELS/SMART TRIM
BLACK

5 PRIVACY SCREEN
METAL/GLASS (OBS)
CANOPY/LIGHTING
FLASHING
BLACK

2 STUCCO
WHITE

4 BRICK VENEER
CHICAGO STYLE

6 WINDOWS/ENTRY
DOOR/GARAGE DOOR
BLACK

DWELL
DESIGN STUDIO

p 250 550 7476
e dwell@telus.net

email
Dwell Design Studio
8637 Camino Drive
Vernon, BC, V1H 1N6

SITE NORTH

GENERAL CONDITIONS

Check and verify all various details and dimensions prior to the start of construction and report any error or any contradiction to drawings - written dimensions will always take precedence over scaled dimensions.

This drawing must be read in conjunction with all drawings & specs issued for this project (whole). Contractor is responsible to notify designer about conflicting design instructions. Costs to remediate such work completed before designer/engineer has issue design revisions are the sole responsibility of the Contractor.

DATE	ISSUED FOR

PROJECT TITLE

Proposed Residential Development

1909 43 Avenue
Vernon, BC

SHEET TITLE

Colours & Materials

BOXFORT HOMES

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Job No	2021-204
Date	Mar 17, 2022
Scale	NTS
Drawn	DC
Checked	DC

SHEET NUMBER

A-106

OF

VIEW FROM SOUTH WEST ON 43RD AVENUE LOOKING EAST

VIEW FROM 43RD AVENUE LOOKING NORTH

VIEW FROM SOUTH EAST ON 43RD AVENUE LOOKING WEST

BOXFORT HOMES

DWELL DESIGN STUDIO

VIEW FROM NORTH WEST AT REAR LOOKING EAST

VIEW FROM WEST LOOKING EAST - INTERNAL DRIVE AISLE

DWELL DESIGN STUDIO

p 250.550.7478
e dwell@telus.net

email:
Dwell Design Studio
6637 Carmac Drive
Vernon, BC, V1H 1N8

SITE NORTH

GENERAL CONDITIONS

Check and verify all critical details and dimensions prior to the start of construction and contact this office if any discrepancies may exist. Written dimensions will always take precedence over scaled dimensions.

This drawing must be read in conjunction with all drawings & specs issued for this project contract. Contractor is responsible to notify designer upon commencing design construction. Tolls or remodelled work were completed before design/engineer can issue design revisions, and the sole responsibility of the contractor.

DATE	ISSUED FOR

PROJECT TITLE

Proposed Residential Development

1808 43 Avenue Vernon, BC

SHEET TITLE

Renderings

BOXFORT HOMES

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Job No.	2021-228
Date	Mar 07, 2022
Scale	NTS
Drawn	DC
Checked	DC

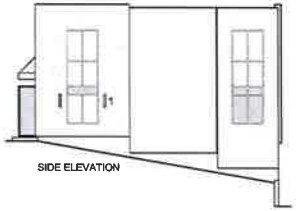
SHEET NUMBER

A-107

OF

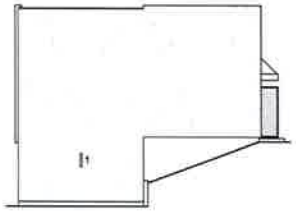
FRONT ELEVATION

BUILDING 1 & 2



SIDE ELEVATION

REAR ELEVATION



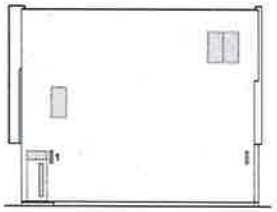
SIDE ELEVATION

1 WALL SCONCE

2 UNDER CANOPY ROPE LIGHTING

REAR ELEVATION

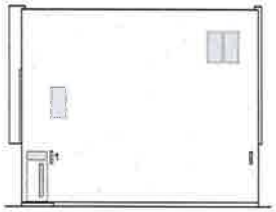
BUILDING 3



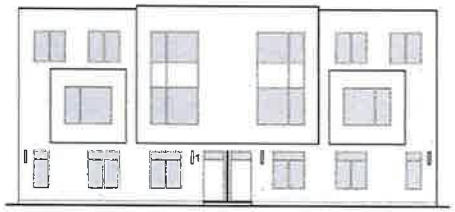
SIDE ELEVATION

REAR ELEVATION

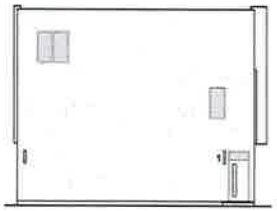
BUILDING 4



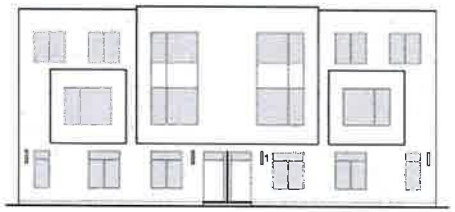
SIDE ELEVATION



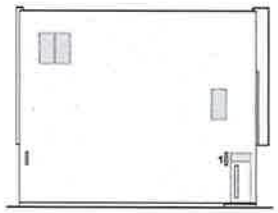
FRONT ELEVATION



SIDE ELEVATION



FRONT ELEVATION



SIDE ELEVATION

DWELL DESIGN STUDIO

p 250.550.7476
e dwell@telus.net

email
Dwell Design Studio
6637 Camino Drive
Vernon, BC, V1H 1N6

SITE NORTH:

GENERAL CONDITIONS:

Check and verify all dimensions and conditions prior to the start of construction and contact the office if any clarification is required. Written dimensions will always take precedence over scaled dimensions.

This drawing must be read in conjunction with all drawings & specifications for this project contract. Contractor is responsible to notify designer about conflicting design requirements. Costs to remediate such work completed before this determination can take place will be the responsibility of the contractor.

DATE	ISSUED FOR

PROJECT TITLE:

Proposed Residential Development

1609 43 Avenue Vernon, BC

SHEET TITLE:

Lighting Plan

BOXFORT HOMES

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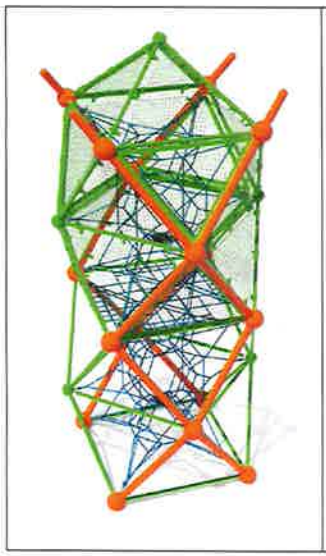
Job No.	2021-226
Date	Mar 17, 2022
Scale	NTS
Drawn	DC
Checked	DC

SHEET NUMBER

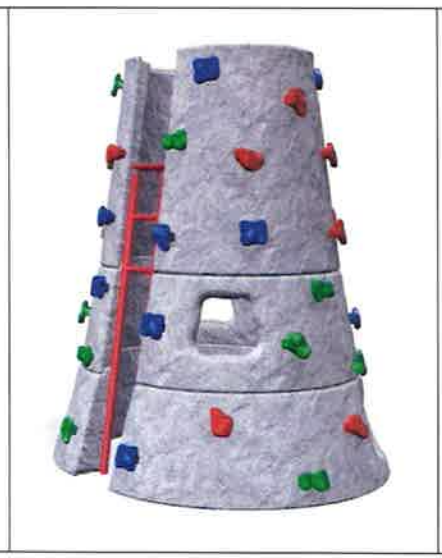
A-108

OF



Vista Twist Tower

Age 5 to 12 Years
Fall Zone 7.1m x 6.9m
Height 3.0m



Volcano Climber

Age 5 to 12 Years
Fall Zone 5.5m x 5.8m
Height 2.4m

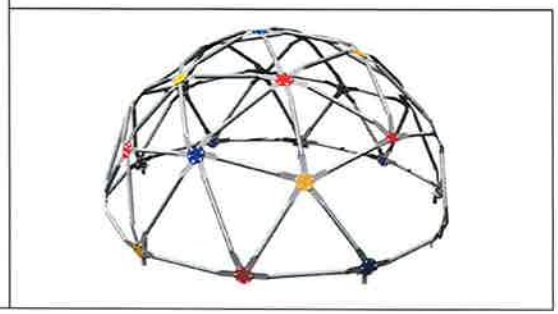
Rocket

Age 5 to 12 Years
Fall Zone 5.8m x 5.9m
Height 2.4m

FALL ZONE
63sm

9m

7m



Geodome Climber

Age 5 to 12 Years
Fall Zone 6.1m x 6.1m
Height 1.06m

OUTDOOR AMENITY PLAN SCALE: 3/32"=1'-0"
PLAYGROUND EQUIPMENT OPTIONS

Sheet Note:

Examples of playground equipment options are provided to illustrate the developer's intent. The actual product will be verified by the developer prior to purchase and installation.

DWELL DESIGN STUDIO

p. 250.550.7476
e. dwell@telus.net

email:
Dwell Design Studio
5537 Cameo Drive
Vernon, BC, V1H 1N5

SITE NORTH:

GENERAL CONDITIONS:

Check and verify all critical details and dimensions prior to the start of construction and contact this office if any clarification is required. Written dimensions will always take precedence over scaled dimensions.

This drawing must be read in conjunction with all drawings & specs issued for this project contract. Contractor is responsible to notify designer about conflicting design instructions. Costs to remediate such work completed before designer/engineer can issue design revisions are the sole responsibility of the Contractor.

DATE:	ISSUED FOR:

PROJECT TITLE:

Proposed Residential Development

1909 43 Avenue Vernon, BC

SHEET TITLE:

Playground Equipment

BOXFORT HOMES

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Job No:	2021-226
Date:	Mar 17, 2022
Scale:	NTS
Drawn:	DC
Checked:	DC

SHEET NUMBER:

A-109

OF

GEOPACIFIC
CONSULTANTS

P (250) 215 1206
geopacific.ca
1340 St. Paul Road
Kelowna, B.C. V1Y 2E1

1609 43 Avenue GP Ltd.
2121 Longridge Drive SW,
Calgary, AB
T3E 5N7

November 1st, 2022
File: 20776

Attention: Chris Pollen

Re: Geotechnical Comments on Site Preparation for Proposed Residential Development
1609 43rd Avenue, Vernon, B.C.

GeoPacific has been retained to comment on the geotechnical aspects for the construction of the proposed residential development for the above referenced address in regards to our Geotechnical Investigation Report issued on April 12th, 2022. Based on architectural drawings provided by Dwell Design Studio, dated March 17th, 2022, the proposed residential development includes 4 buildings, split into 16 three storey townhome units with parking on the lowest level, and a local access road. Based on the drawings, we anticipate wood framed construction above-grade and reinforced concrete construction for floor-slabs and footing elements. GeoPacific has completed a detailed drill based investigation and recommendation report dated April 12th, 2022.

We confirm, from a geotechnical standpoint, that the proposed development is feasible.

Based on drawings provided by Lawson Engineering Ltd. (Lawson), dated September 9th, 2022, we anticipate that re-grading of the property will be completed to accommodate the development. The existing layers containing deleterious soils must be stripped from the site prior to the placement of any new fills or the construction of any roads, utilities, buildings, and retaining walls. We further confirm that the onsite groundwater conditions are considered to be perched. Excavations will likely encounter groundwater seepage and can be handled using conventional sumps and sump pump techniques.

Prior to construction of foundations, utilities, grade supported slabs, and pavement structures, all vegetation, fills, topsoil, soils containing organics, and loose or otherwise disturbed materials should be removed to expose a subgrade of *silty sand, sandy silt, clayey sandy silt, sand and silt, sand, and gravelly silty sand (till)*. The stripping program at the site will require the removal of the organic silt layer between 1.5 m to 3 m below existing grade.

Following the stripping works, grade reinstatement will be required, we recommend the use of engineered fill. "Engineered Fill" is defined as clean sand to sand and gravel containing silt and clay less than 5% by weight, compacted in 300 mm loose lifts to a minimum of 95% Modified Proctor maximum dry density at a moisture content that is within 2% of optimum for compaction. During fill placement, benches should be cut into any sloping stripped subgrade surfaces to key the structural fill into the natural topography. Where the exposed subgrade surface slopes at greater than 20%, we recommend that the subgrade be benched, prior to placing the fill, to improve the structural integrity of the embankment. Benches should be a minimum horizontal distance of 1.0 metre before stepping to the next bench.

Stripped subgrades and engineered fill materials and compaction must be reviewed by the geotechnical engineer.

For further site specific geotechnical recommendations, our Geotechnical Investigation Report can be referenced.

We are pleased to assist you with this project and we trust this information is helpful and sufficient for your purposes at this time. However, please do not hesitate to call the undersigned if you should require any clarification or additional details.

For:
GeoPacific Consultants Ltd.

Reviewed By:

PROFESSIONAL
PROVINCE OF
R. AVENDANO GONZALEZ ESTRADA
45976
BRITISH COLUMBIA
ENGINEER

Hanneke Byl, B.A.Sc.
Engineer-In-Training

Roberto Avendano, B.Eng., P.Eng.,
Principal

Permit to Practice EGBC
1000782

NOV 0 1 2022

R5

9.6 R5 : Four-plex Housing Residential

9.6.1 Purpose

The purpose is to provide a **zone** for the **development** of a maximum of four ground oriented **dwelling** units in the form of **single detached**, **semi-detached**, **duplex**, **three-plex** or **four-plex housing** on urban services. The R5c sub-zoning district allows for **care centre, major** as an additional use. The R5h sub-zoning district allows for **home based business, major** as an additional use. *(Bylaw 5467)*

9.6.2 Primary Uses4

- **care centre, major** *(use is only permitted with the R5c sub-zoning district)*
- **duplex housing**
- **four-plex housing**
- **group home, major**
- **semi-detached housing**
- **single detached housing**
- **three-plex housing**
- **seniors housing**

9.6.3 Secondary Uses

- **boarding rooms**
- **care centres, minor**
- **home based businesses, minor**
- **home based businesses, major** (in single detached housing only) (use is only permitted with the R5h sub-zoning district)
- **secondary suites (in single detached housing only)**
- **seniors assisted housing**
- **seniors supportive housing**

9.6.4 Subdivision Regulations

- Minimum **lot width** is 20.0m, except it is 22.0m for a **corner lot**.
- Minimum **lot depth** is 30.0m.
- Minimum **lot width** for single detached housing is 14.0m, except it is 16.0m for a **corner lot**.
- Minimum **lot area** for single detached housing is 450m^2.
- Minimum **lot area** is 700m^2, except it is 800m^2 for a **corner lot**, or 10,000m^2 if not serviced by a **community sewer system**. *(Bylaw 5339)*

9.6.5 Party Wall Subdivision Regulations

Lot Type	Minimum Lot area		Minimum Lot Width	
	interior	corner	interior	corner
Semi-Detached Housing	350m^2	400m^2	10.0m	12.0m
Three-Plex Housing	235m^2	285m^2	7.0m	9.0m
Four-Plex Housing	175m^2	225m^2	7.0m	9.0m

9.6.6 Development Regulations

- Maximum **site coverage** is 40% and together with driveways, parking areas and **impermeable surfaces** shall not exceed 50%.

- Maximum **floor space ratio** is 0.6.
- Maximum **height** is the lesser of 10.0m or 2.5 **storeys**, except it is 4.5m for **secondary buildings** and **secondary structures**.
- Minimum **front yard** is 4.0m, except it is 6.0m for a garage or **carport** to the back of curb or sidewalk for a front entry garage, or it is 0.6m to the side of the garage and 2.6m to the front building façade for side-entry garage and driveway layouts.
- Minimum **side yard** is 2.0m for a 1 or 1.5 **storey** portion of a **building** or a **secondary building or structure** and 2.5m for a 2 or 2.5 **storey** portion of a **building**, except it is 4.0m from a **flanking street** unless there is a garage accessed from the **flanking street**, it is 4.0m or it is 2.6m to the building for a side-entry garage and driveway from a flanking street and at least 6.0m from the back of curb or sidewalk. Where there is no direct vehicular access to the **rear yard** or to an attached garage or **carport**, one **side yard** shall be at least 3.0m. The minimum **side yard** setback for shared interior **party walls** shall be 0.0m. The minimum **side yard** setback for **single detached housing** is 1.5m, except it is 4.0m from a **flanking street** unless there is a garage accessed from the **flanking street**, it is 4.0m or it is 2.6m to the building for a side-entry garage and driveway from a **flanking street** and at least 6.0m from the back of curb or sidewalk.
- Minimum **rear yard** is 6.0m for a 1 or 1.5 **storey** portion of a **building** and 7.5m for a 2 or 2.5 **storey** portion of a **building**, except it is 1.0m for **secondary buildings**.
- The maximum **height** of any vertical wall element facing a **front**, **flanking** or **rear yard** (including **walkout basements**) is the lesser of 6.5m or 2.5 **storeys**, above which the **building** must be **set back** at least 1.2m.
- Maximum **density** is 30 units per gross hectare (12 units/gross acre).
- Maximum four **dwelling** units located in a **building**, with each unit having a minimum width of 6.5m. *(Bylaw 5339)*

9.6.7 Other Regulations

- In order for bareland strata **developments** to be consistent with the character of the surrounding neighborhood, the strata plan shall be considered as one **site** for defining the overall use, **density** and **site coverage**.
- The above noted **subdivision** and **development** regulations shall be applied to each strata **lot** within the strata plan.
- A minimum area of $25m^2$ of **private open space** shall be provided per **dwelling**.
- Where **development** has access to a rear **lane**, vehicular access to the **development** is only permitted from the rear **lane**.
- For **seniors assisted housing, seniors housing and seniors supportive housing,** a safe drop-off area for patrons shall be provided on the **site.**
- For strata developments, common recreation buildings, facilities and amenities may be included in the strata plan. Recreational buildings shall be treated as **secondary buildings** for the purpose of determining the **height** and **setbacks** of the **building** as specified in each **zone**.
- For multi-unit residential housing, one **office** may be operated for the soul purpose of the management and operation of the multi-unit residential **development**.
- In addition to the regulations listed above, other regulations may apply. These include the general **development** regulations of Section 4 (secondary **development**, **yards**, projections into **yards**, lighting, agricultural setbacks, etc.); the specific use regulations of Section 5; the **landscaping** and fencing provisions of Section 6; and, the parking and loading regulations of Section 7.
- As per Section 4.10.2 - All **buildings** and **structures**, **excluding perimeter fencing (garden walls and fences)** on **lots abutting** City Roads as identified on Schedule "B" shall not be sited closer to the City Road than the setback as per the appropriate zone measured from the offset Rights of Way as illustrated on Schedule "B". *(Bylaw 5440)*

RH2

9.13 RH2 : Stacked Row Housing Residential

9.13.1 Purpose

The purpose is to provide a **zone** primarily for medium **density row housing** on urban services to front major **streets** and civic spaces.

9.13.2 Primary Uses

- **apartment housing**
- **care centres, major**
- **group home, major**
- **row housing**
- **seniors assisted housing**
- **seniors housing**
- **seniors supportive housing**
- **stacked row housing**

9.13.3 Secondary Uses

- **health services**
- **home based businesses, minor**
- **personal services**
- **real estate sales centres** (in apartment and stacked row housing only)
- **retail, convenience** *(Bylaw 5332)*

9.13.4 Subdivision Regulations

- Minimum **lot width** is 30.0m. For fee simple **row housing**, the minimum **lot width** is 7.5m for **interior lots** and 12.0m for **corner lots**.
- Minimum **lot area** is 1400m^2, or 10,000m^2 if not serviced by a **community sewer system**.

9.13.5 Party Wall Subdivision Regulations

Lot Type	Minimum Lot area		Minimum Lot width	
	interior	corner	interior	corner
Row Housing	135m^2	185m^2	6.5m	7.8m

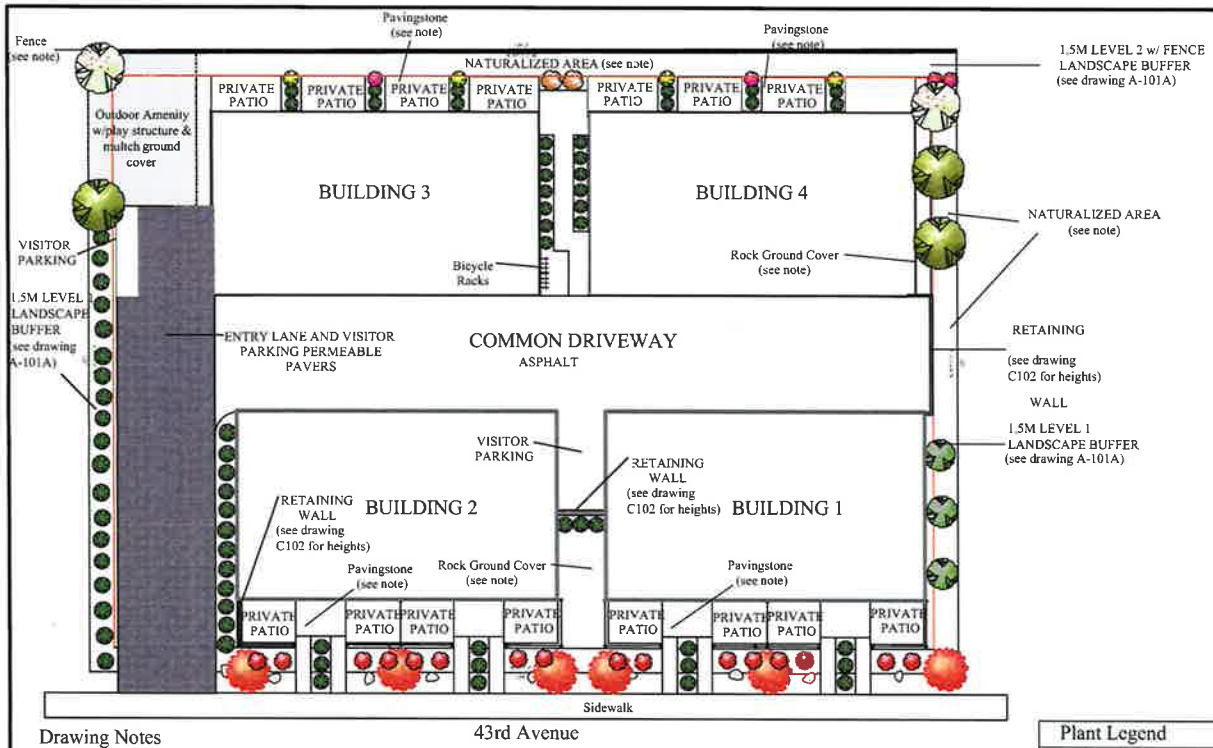
9.13.6 Development Regulations

- With a housing agreement pursuant to Section 4.9, the maximum **density** shall be 110.0 units per gross hectare (44.5 units/gross acre).
- Where **parking spaces** are provided completely beneath habitable space of a primary **building** or beneath useable common amenity areas, providing that in all cases the **parking spaces** are screened from view, the maximum **density** shall be 125.0 units per gross hectare (51 units/gross acre). Where all the required parking is not accommodated completely beneath the habitable space of a primary **building** or useable common amenity areas, the additional density permitted shall be determined through multiplying the additional 25.0 units per gross hectare (10 units/gross acre) by the percentage of parking proposed to be provided beneath habitable space of a primary **building** or useable common amenity areas.
- Maximum **site coverage** is 65% and together with driveways, parking areas and **impermeable surfaces** shall not exceed 75%. *(Bylaw 5332)*

- Maximum **height** is the lesser of 16.5m or 4.5 **storeys**, except it is 4.5m for **secondary buildings** and **secondary structures**.
- Minimum **front yard** is 6.0m, except it is 4.5m for any portion 2 **storeys** or less.
- Minimum **side yard** is 3.0m for a **building** not over 2.5 **storeys**, and 6.0m for portions of a **building** in excess of 2.5 **storeys**, and 6.0m from a **flanking street**. The minimum **side yard** is 0.0m for shared interior **party walls**.
- Minimum **rear yard** is 7.5m for a **building** not over 2.0 **storeys** and it is 9.0m for any part of a **building** over 2 **storeys**. It is 1.0m for **secondary buildings**.
- Maximum **density** is 100.0 units per gross hectare (40.5 units/gross acre).

9.13.7 Other Regulations

- **Convenience retail** services, **health services** and **personal services** are limited to a maximum floor area of 300m^2 total or 50% of the gross floor area of the ground storey of the primary building, whichever is the lesser, and only permitted when developed as an integral component of and within the primary **building**. These uses are not permitted above the ground **storey**. *(Bylaw 5332)*
- In order for bareland strata **development** to be consistent with the character of the surrounding neighborhood, the strata plan shall be considered as one **site** for defining the overall use, **density** and **site coverage**.
- The above noted **subdivision** and **development** regulations shall be applied to each strata **lot** within the strata plan.
- For multi-unit residential housing, one **office** may be operated for the sole purpose of the management and operation of the multi-unit residential **development**. *(Bylaw 5440)*
- Vehicular access to the **development** is only permitted through either a driveway shared by at least 3 units or a rear **lane**.
- A minimum area of 5,0m^2 of private open space shall be provided per **bachelor dwelling**, **congregate housing bedroom** or group home **bedroom**, 10.0m^2 of private open space shall be provided per 1 **bedroom dwelling**, and 15.0m^2 of private open space shall be provided per **dwelling** with more than 1 **bedroom**.
- No continuous **building frontage** shall exceed 45.0m for a 2 to 4 **storey building**. The **building** must be designed so as to be within one **storey** to neighbouring **development**.
- Parking shall not be constructed in the **front yard** of the property. Where the **development** has access to a rear **lane**, vehicular access to the **development** is only permitted from the rear **lane**.
- For **seniors assisted housing, seniors housing and seniors supportive housing,** a safe drop-off area for patrons shall be provided on the **site.**
- In addition to the regulations listed above, other regulations may apply. These include the general **development** regulations of Section 4 (secondary **development**, **yards**, projections into **yards**, lighting, agricultural setbacks, etc.); the specific use regulations of Section 5; the **landscaping** and fencing provisions of Section 6; and, the parking and loading regulations of Section 7. *(Bylaw 5339)*
- As per Section 4.10.2 - All **buildings** and **structures, excluding perimeter fencing (garden walls and fences)** on **lots abutting** City Roads as identified on Schedule "B" shall not be sited closer to the City Road than the setback as per the appropriate zone measured from the offset Rights of Way as illustrated on Schedule "B". *(Bylaw 5440)*



Scale: 1/25" = 1ft

Drawing Notes

ROCK GROUND COVER:
The contractor shall supply and place rock ground cover to those areas shown on the drawings. Product shall be 1"-3" in diameter for areas with 20% or less slope and 4"-6" for all areas 20-33% slope to stop erosion. Product to be verified by owner prior to purchase and installation. All Rock areas to have weed barrier fabric beneath them. See drawing C102 for grading details.

NATURALIZED AREA
Areas over 33% slope will be allowed to naturalize and enhanced with a wildflower seed mix compatible with native vegetation. The final seed mix will be as per a recommendation from an Environmental Management consultant and approved by the City of Vernon development authority prior to planting.

PLANTS:
All plant material to receive sufficient soil and install according to city standards.

EDGING:
The contractor shall supply and install 150mm depth heavy-duty edging to separate Rock areas.

IRRIGATION:
The contractor shall supply and place irrigation system. All work and products shall meet the Irrigation Association of B.C. standards and specifications. All planting areas are to be irrigated with an automatically timed drip irrigation system.

FENCE:
The contractor shall supply and install fence as shown in drawings. All Fence areas to be a 3 rail fence. Products to be verified by owner prior to purchase and installation.

PAVINGSTONE:
The contractor shall supply and install patios according to drawings. Products to be verified by owner prior to purchase and installation.

PRIVATE AMENITY SPACE:
See A-101B - Site Plan Open space for amenity space sizes.

Plant Legend

Symbol	Qty	Common Name	Botanical Name	Container
	4	Highbush Cranberry	Viburnum trilobum	#2 Cont.
	6	Autumn Blaze Maple	Acer freeman Sienica	2" cal.
	3	Columnar Norway Maple	Acer platanoides 'Columnare'	2" cal.
	72	Karl Foerster Feather Reed Grass	Calamagrostis acutiflora 'Karl Foerster'	#2 Cont.
	2	Kesselringi Dogwood	Cornus alba 'Kesselringi'	#5 Cont.
	16	Rosy Glow Barberry	Berberis thunbergii 'Rosy Glow'	#2 Cont.
	3	Swedish Columnar Aspen	Populus tremula 'Erecta'	2" cal.
	2	Chokecherry	Prunus virginiana	2@ cal.
	4	Wild Rose	Rosa acicularis	#2 Cont.

Creative edge landscaping Ltd.
8904 Orchard Ridge Drive
Coldstream, BC
V1B 1Z7

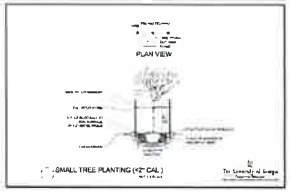
tel. (780) 581 5101
creativeedgelandscapingltd@gmail.com

General Notes:

1. Contractor to provide 1 year warranty on all plant material and workmanship

2. Owner to verify all products prior to purchase.

3. Check and verify all critical details prior to the start of construction and contact this office if any clarification is required. Contractor is responsible to notify owner about any conflicting design instructions. Costs to remediate such work completed before owner can issue revisions are the sole responsibility of the Contractor.



Boxfort Homes
1609 43rd Ave
Vernon BC

LANDSCAPE PLAN

Attachment 5

Medium Density Zoning Comparison Chart
ZON00385/DVP00569

Site Size	0.202											
Current Zoning	R5											
OCP	RMD (between 31-110 units/ha)											
By-law Review	Description	Density	Units	Bonus	Bonus Units	Site Coverage	Impermeable Surfaces	Height	Storeys	Front	Side	Rear
R5	Four-plex housing Residential	30	8	None	None	40%	50%	10	2.5	4	2.5	7.5
RM1	Row Housing residential	48	10	60	12	65%	85%	10	2.5	4	1.2	6
RM2	Multiple Housing Residential	60	12	75	15	50%	55%	10	2.5	4.5	1.2	7.5
RH1	Low-Rise Apartment Residential	1.5 FAR		1.75 FAR		65%	85%	16.5	4.5	4.5	4.5	9
RH2	Stacked Row Housing Residential	100	20	125	25	65%	75%	16.5	4.5	4.5/6 (over 2 storeys)	3/6 (over 2.5 storeys)	7.5/9 (over 2 storeys)
PROJECT		**79**	**16**			**45%**	**72%**	**10**	**3**	**4.5 (2 storey)**	**2.04/3.97 (variance)**	**3.71 (variance)**

Attachment 6

Attachment 7

CANYON WREN
CONSULTING INC.

Phone: 250.307.2038
Email: mark@canyonwren.ca

March 29, 2022

City of Vernon
3400 – 30 Street
Vernon, BC V1T 5E6

Via: Chris Pollen
Email: chris@boxfort.ca

RE: Environmental Assessment for 1609 43rd Avenue, Vernon, BC (PID: 017-995-388)

To Jack Shipton,

Canyon Wren Consulting Inc. was retained by Chris Pollen of 1609 43 Ave GP Ltd. (the Proponent), to conduct an environmental site assessment for the following development proposal. The development area consists of a single lot located at 1609 43rd Ave. The Proponent is proposing to rezone from R5 to RH2 and develop a 16 unit ground-oriented townhouse project. As part of the proposal, a DVP will be sought to allow for two setback variances. First, a side yard reduction along the East property line from 3.0/6.0 m to 2.01/3.97 m. Second, a rear yard reduction along the North property line from 9.0 to 3.71 m.

Canyon Wren's role was to complete a site investigation and prepare a letter identifying environmental impacts likely to arise from proposed development, along with appropriate mitigation's.

The proposed development is located within the Cities Neighbourhood District (MA 2) and therefore requires identification and review of the following features, as per the Cities Environmental Management Areas (EMA) Strategy.

Neighbourhood District – Management Area 2

1. Identification of natural habitats, habitat values and features on the subject property
2. Waterbody identification, and Riparian Areas Protection Regulation assessment if necessary
3. Tree identification, protection and inclusion on a site plan
4. Wildlife corridor identification and protection as appropriate (based on SEI polygon data and mapping)
5. Identification of stormwater drainage and percentage of impervious surfaces
6. Landscaping requirements i.e. irrigation demand, landscaping type

OBSERVATIONS AND ASSESSMENT

Site visits conducted on November 26th, 2021 and March 17th, 2022 revealed the following, which are described in the same order as the Management Area 2 requirements identified above:

- Based on existing Terrestrial Ecosystem Mapping (TEM) and Sensitive Ecosystem Inventory (SEI) mapping, the subject property is covered by a single EMA habitat polygon (Figures 1 and 2), which is rated as having moderate conservation value (CV). Those mapping products, were prepared at a 1:20,000 mapping scale. As such, that polygon is identified as consisting of 80% IDFxh1 exposed soil (ES), 10% IDFxh1 cattail marsh (CT) and 10% IDFxh1 bulrush marsh (BM, see Table 1 below). CV rankings in mapping products of this scale, are intended to be conservative in nature. The moderate value observed in this CV ranking is a function of the two most valuable habitat components of the identified polygon, the 20% of marsh habitat. The remaining 80% is exposed soil habitat of extremely low conservation value.

Table 1. Historically observed vegetation communities within the habitat polygon encompassing the subject property and several surrounding areas.

Biogeoclimatic Zone	Site Series	Common Name	Polygon %	Status	Habitat
IDFxh1	CT	Cattail Marsh	10	Blue listed	Typically occurs on level sites with deep, medium-textured soils. Sites are dominated by cattails with few other species.
IDFxh1	BM	Bulrush Marsh	10	Blue listed	Typically occurs on level sites with deep, fine-textured soils. Vegetation species diversity is unique but low.
IDFxh1	ES	Exposed Soil	80	NA	Areas of exposed soils and typically include recent disturbances.

- At the much finer spatial scale (1:250) of this assessment, it was observed that currently the entire subject property exists in a highly disturbed state. Site disturbance takes the form of a lawn and residence, along with what appears to be the recent creation of a large gravel parking pad with subsurface drainage leading moisture off site to the NE (Photos 1-6). An area of cattail is regenerating in the SW corner of the subject property, due to continued near-surface water flow (Photo 2). Given its extremely small size, poor condition and isolation, this area, along with the other habitats observed on site, currently have very low Conservation Value.

- A review of google earth imagery shows that in 2013 (Figure 1) approximately half the lot, with the exception of the residence, was vegetated with what appears to be a low lying wet area surrounded by dense riparian trees and shrubs. In discussions with the previous owner, he described it as a wet peat moss area with shrubs. He contends that installation by the City, of an elevated storm drain within the subject properties western boundary (visible in Fig 1 and Photo 2), has led to a blocking of subsurface water flow through the subject property, and resulted in the observed condition. In 2018, the Cities orthophotos show the active removal of vegetation (Figures 2 and 3) along with the start of gravel fill placement. Note the excavator positioned in the SW corner of the subject property.

  It appears the entire area within the EMA polygon in question, has undergone the slow and deliberate removal of wetland habitats and attempted drainage redirection. During the site investigation it was noted that a "Stop Work" order had be issued for the property to the North, after recent excavation appeared to have removed riparian shrub vegetation (Figure 2 vs Photos 6 and 7). Furthermore, the presence of a small man-made bermed wetland, located just north of the subject property in a covenanted green space (Figure 3), appears to be where much of the areas near-surface water is haphazardly being re-directed (Photo 8).

- Although surface water may show in the created sedge/cattail depression, especially after rain or spring melt events, this is not a Riparian Areas Protection Regulation (RAPR) feature as it does not connect by overland flow to a RAPR feature.

- Given the quantity of near and subsurface water on the site, it is anticipated, but not confirmed that amphibian breeding may occur in the man-made bermed wetland immediately north of the subject property.

- Aside from lawn, the only vegetation present on the subject property are 2 cottonwood trees adjacent to the property line in the NE corner of the property (Photo 4), a non-native chestnut tree with 2 stems, located on the street side of the existing residence, and the sedges and cattails that are beginning to colonize the depression in the SW corner of the property, from where material was formerly removed (Photo 2). None of the trees on the subject property or any observed within the vicinity of the subject property, contain cavities or stick-nests.

- A regional wildlife corridor is located approximately 500 m to the north of the proposed development. Given the poor CV of the subject property, connectivity to this area is not considered critical.

- The total area of the subject property is 2025 m^2. Given the current development layout, the project will result in an area of approximately 1402 m^2 or 69.2 percent, of impervious surface as a result of proposed driveway, parking and residences (Figure 3). Stormwater will be directed into storm-drains.

RECOMMENDATIONS

As described in the observations and assessment section above, the proposed development site is largely disturbed with native vegetation being limited to two cottonwoods located along the NW property line. As such, impacts to wildlife habitat values and rare or sensitive plant communities will be low. To ensure that impacts to the environment from the proposed development are minimized, and do not extend beyond the existing subject property, the following mitigation measures will be adhered to:

- An environmental monitor will be retained by the Proponent, to ensure that the recommendations identified within this report are fulfilled. Site inspection frequency will be timed to key construction activities, relevant wildlife timing windows and based on weather events (e.g. after periods of intense rainfall). The monitor has the authority to halt construction activities if impacts to sensitive species, habitat features or habitats are likely to occur.

- Prior to site development, the Proponent will conduct the clearing of necessary ornamental and native trees between August 16 and March 15, to discourage nesting of migratory birds, by removing suitable habitat.

  Active migratory bird nests are fully protected under the B.C. Wildlife Act and the federal Migratory Birds Convention Act; it is an offence to destroy nests occupied by a bird, its eggs or it's young. Vegetation disturbance or removal activities during this nesting period will require an intensive series of per-construction nesting bird surveys by a qualified wildlife biologist.

- Prior to site development, amphibian breeding or use of available habitats immediately north of the subject property should be confirmed. Should Western toads (Anaxyrus boreas) or Great Basin spadefoots (Spea intermontana) be observed, an amphibian management plan should be created. The plan would address issues such as appropriate works timing restrictions, site isolation, salvage / removal, and required permitting, as necessary.

- As identified earlier, the subject property and entire EMA polygon, exhibit substantial near and sub-surface water movement. This has historically manifest as small patches of wetland habitats. These wetlands have experienced what appears to be deliberate removal. It is recommended that as land manager, the City take responsibility to ensure that the flow and movement of near-surface water through this property and adjacent ones occurs in a coordinated fashion. It appears a triangular portion of the property to the north has already been covenanted for this purpose. Its current design and function however, appear lacking. Perhaps the existing bermed wetland located within that covenanted triangle could be redesigned, such that it becomes more capable of: accommodating flow from surrounding developments, acting as storm-water retention, supporting trees that contribute to climate resilience and creating diverse permanent wetland habitat for amphibians, birds and wildlife. Provided the Proponent of this project is given suitable design specifications, they could ensure near-surface flow through their site contributes to these off-site goals.

- Given the volume of near-surface water moving through the site, the Proponent will take the following precautions during construction to ensure that water is not contaminated:

  - Ensure equipment and machinery is in good operating condition, clean (power washed off-site) and free of leaks, excess oil and grease.

  - All hydraulic machinery entering the property will be equipped with environmentally sensitive hydraulic fluids that are non-toxic to aquatic life and that are readily or inherently biodegradable (e.g. Chevron Clarity AW, Enviro-Plus 46 AW, etc).

  - Equipment refuelling or servicing will be conducted off-site or over an approved drip pan.

- Spill containment kits will be readily accessible on-site in the event of a release of a deleterious substance to the environment and on-site staff will be trained in their use.
- Contractors will immediately report any spill of a substance that is toxic, polluting, or deleterious to aquatic life of report-able quantities to the Provincial Emergency Program 24-hour phone line at 1-800-663-3456

- Weeds and invasive plant species are not particularly abundant within the subject property, as little vegetation exists. However, throughout construction the Proponent will:
  - Ensure equipment and machinery is clean and power washed off-site prior to site entry
  - Implement the Environmental Monitors treatment recommendations as observations of invasive species are noted.
- Upon construction completion, it is recommended that the rear and side-yard setbacks be landscaped with primarily native trees and shrubs. This along with weed and invasive species management will help enhance the diversity and integrity of the transition between the subject property and the existing bermed wetland to the north. Suitable trees and shrubs include, but are not limited to the following: aspen, cottonwood, birch, hawthorn, pin cherry, choke cherry, dogwood, oceanspray, wildrose, highbush-cranberry, black twinberry and ninebark. A proposed landscape plan has been created and is included in Appendix I.
- All patios and sidewalks will be constructed of semi-permeable paving stones, to limit the amount of impervious surface to the greatest extent possible.
- A post-development report, outlining the degree of compliance with the above mitigation's and reviewing the success of migrations implemented during construction, will be produced and submitted to the City.

CONCLUSION

In summary, the subject property has experienced significant historical site disturbance, resulting in its low Conservation Value. The proposed development will make maximal use of this disturbance. With the identified mitigation's of; implementing wildlife timing windows, surveying and managing for at-risk amphibians, coordinating management of near-surface water movement thorough surrounding properties, implementing precautions to minimize potential contamination of near-surface ground water, directing habitat enhancement within the identified green space and native tree/shrub vegetation adjacent to its transition, the proposed development will minimize potential impacts to the greatest extent possible. Please contact the undersigned if you have any questions or to discuss this in further detail.

Sincerely,

Mark Piorecky, M.Sc., R.P.Bio.
Senior Wildlife Biologist
Canyon Wren Consulting Inc.

Figure 1. Subject Property in relation to surrounding land-use and wetland habitats in 2013.

Figure 2. Subject Property in relation to surrounding land-use and wetland habitats in 2018.

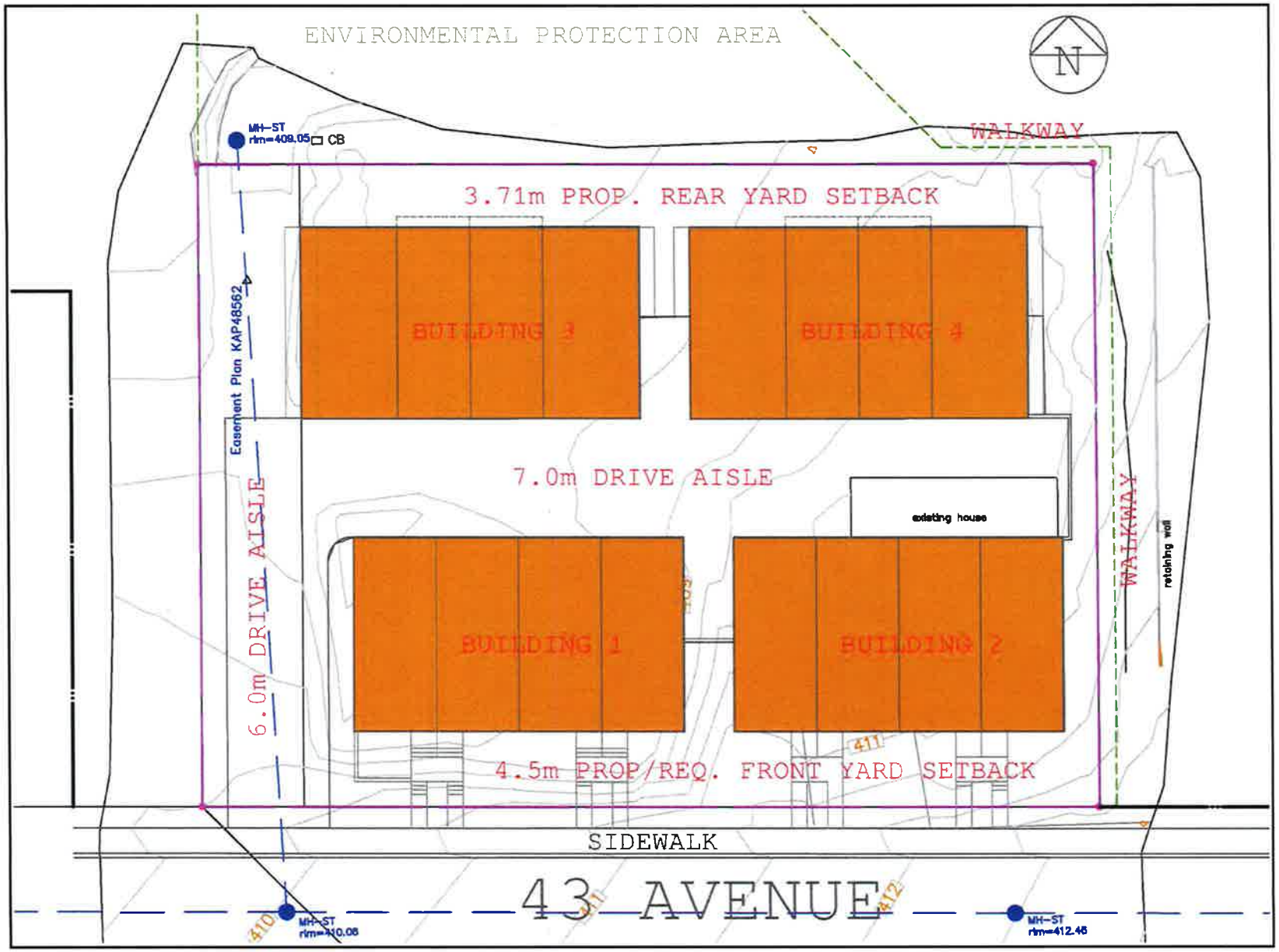


Figure 3. Subject Property proposed development plan in relation to property boundaries, contours and existing residence.

Photo 1. Wide angle view from the centre of subject property standing on the N property line (looking S) – Nov 26, 2021.

Photo 2. View of subject property from SW corner, berm containing City installed storm drain along west property boundary (small trailer parked on north end) and limiting water movement through the subject property, damp depression with cattails located right of centre and chestnut tree beyond (looking NE) – Mar 17, 2022.

Photo 3. View of subject property from SW corner, existing driveway, residence and lawn (facing NW) – Mar 17, 2022.

Photo 4. Standing near NE corner of property looking SW. Shed positioned very near N property boundary – Nov 26, 2021.

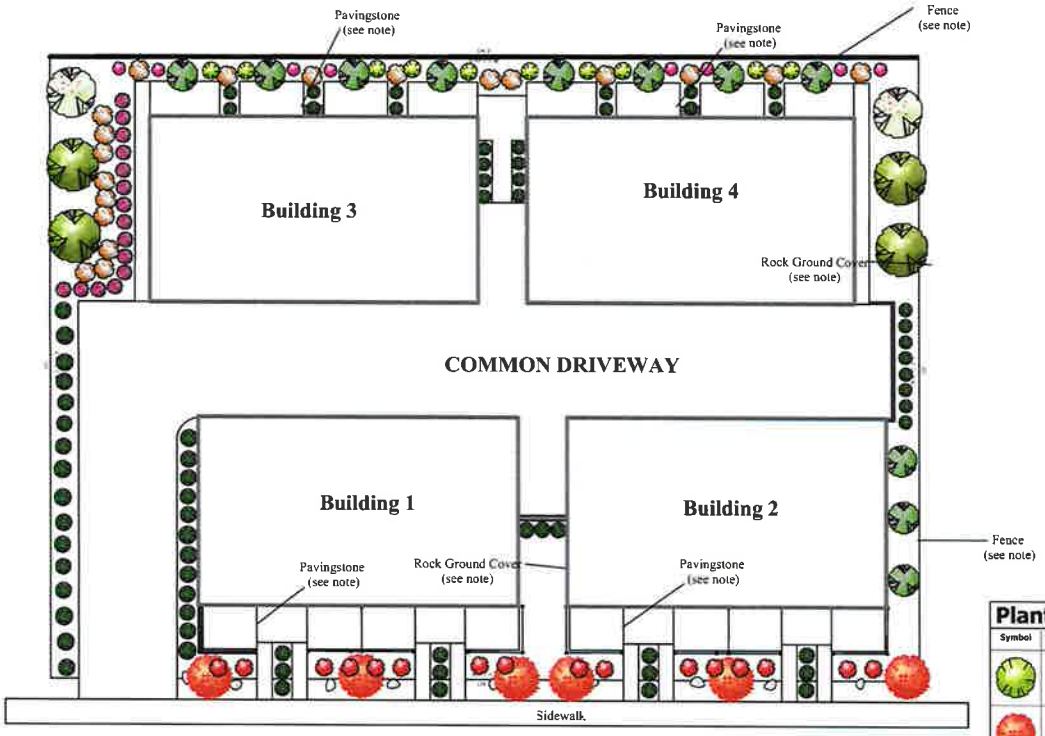
Photo 5. View of subsurface site drainage in neighbouring property (facing S) – Nov 26, 2021.

Photo 6. View of disturbed wetland area into which water temporarily drains on the property to the NE (facing SE) – Nov 26, 2021.

Photo 7. Recently disturbed wetland area at the far N end of the property to the N (facing N) – Nov 26, 2021.

Photo 8. Bermed wetland area immediately north of subject property, into which it appears water is being directed (facing NW) – Mar 17, 2022.

APPENDIX I. Proposed Landscape Plan



43 AVENUE

N

Scale: 1/25" = 1ft

DRAWING NOTES

ROCK GROUND COVER:
The contractor shall supply and place rock ground cover to those areas shown on the drawings. Product shall be 1"-3" in diameter for areas with 20% or less slope and 4"-6" for all areas greater then 20% to stop erosion. Product to be verified by owner prior to purchase and installation. All Rock areas to have weed barrier fabric beneath them.

PLANTS:
All plant material to receive sufficient soil and install according to city standards.

EDGING:
The contractor shall supply and install 150mm depth heavy-duty edging to separate Rock areas.

IRRIGATION:
The contractor shall supply and place irrigation system. All work and products shall meet the Irrigation Association of B.C. standards and specifications. All planting areas are to be irrigated with an automatically timed drip irrigation system.

FENCE:
The contractor shall supply and install fence as shown in drawings. All Fence areas to be a 3 rail fence. Products to be verified by owner prior to purchase and installation.

PAVINGSTONE:
The contractor shall supply and install patios according to drawings. Products to be verified by owner prior to purchase and installation.

Plant Legend

Symbol	Qty	Common Name	Botanical Name	Container
	10	Highbush Cranberry	Viburnum trilobum	#2 Cont.
	6	Autumn Blaze Maple	Acer freeman Sienica	2" cal.
	4	Columnar Norway Maple	Acer platanoides 'Columnare'	2" cal.
	15	Hidcote English Lavender	Lavandula angustifolia 'Hidcote'	#1 Cont.
	71	Karl Foerster Feather Reed Grass	Calamagrostis acutiflora 'Karl Foerster'	#2 Cont.
	19	Kesselringi Dogwood	Cornus alba 'Kesselringi'	#5 Cont.
	16	Rosy Glow Barberry	Berberis thunbergii 'Rosy Glow'	#2 Cont.
	11	Swedish Columnar Aspen	Populus tremula 'Erecta'	2" cal.
	2	Chokecherry	Prunus virginiana	2@ cal.
	8	Wild Rose	Rosa acicularis	#2 Cont.

Creative edge landscaping Ltd

8904 ORCHARD RIDGE DRIVE
COLDSTREAM, BC
V1B 1Z7

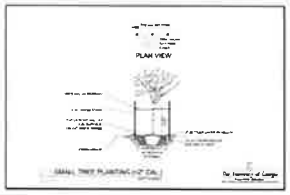
TEL. (780)581 5101
creativeedgelandscapingltd@gmail.com

General Notes:

1. Contractor to provide 1 year warranty on all plant material and workmanship

2. Owner to verify all products prior to purchase.

3. Check and verify all critical details prior to the start of construction and contact this office if any clarification is required. Contractor is responsible to notify owner about any conflicting design instructions. Costs to remediate such work completed before owner can issue revisions are the sole responsibility of the Contractor.



CHRIS POLLEN
1609 43rd AVENUE
VERNON, BC

LANDSCAPE PLAN

Attachment 9

GEOPACIFIC
CONSULTANTS

P (250) 215 1206
geopacific.ca
1340 St. Paul Road
Kelowna, B.C. V1Y 2E1

1609 43 Avenue GP Ltd.
2121 Longridge Drive SW,
Calgary, AB
T3E 5N7

November 1st, 2022
File: 20776

Attention: Chris Pollen

Re: Geotechnical Comments on Site Preparation for Proposed Residential Development 1609 43rd Avenue, Vernon, B.C.

GeoPacific has been retained to comment on the geotechnical aspects for the construction of the proposed residential development for the above referenced address in regards to our Geotechnical Investigation Report issued on April 12th, 2022. Based on architectural drawings provided by Dwell Design Studio, dated March 17th, 2022, the proposed residential development includes 4 buildings, split into 16 three storey townhome units with parking on the lowest level, and a local access road. Based on the drawings, we anticipate wood framed construction above-grade and reinforced concrete construction for floor-slabs and footing elements. GeoPacific has completed a detailed drill based investigation and recommendation report dated April 12th, 2022.

We confirm, from a geotechnical standpoint, that the proposed development is feasible.

Based on drawings provided by Lawson Engineering Ltd. (Lawson), dated September 9th, 2022, we anticipate that re-grading of the property will be completed to accommodate the development. The existing layers containing deleterious soils must be stripped from the site prior to the placement of any new fills or the construction of any roads, utilities, buildings, and retaining walls. We further confirm that the onsite groundwater conditions are considered to be perched. Excavations will likely encounter groundwater seepage and can be handled using conventional sumps and sump pump techniques.

Prior to construction of foundations, utilities, grade supported slabs, and pavement structures, all vegetation, fills, topsoil, soils containing organics, and loose or otherwise disturbed materials should be removed to expose a subgrade of *silty sand, sandy silt, clayey sandy silt, sand and silt, sand, and gravelly silty sand (till)*. The stripping program at the site will require the removal of the organic silt layer between 1.5 m to 3 m below existing grade.

Following the stripping works, grade reinstatement will be required, we recommend the use of engineered fill. "Engineered Fill" is defined as clean sand to sand and gravel containing silt and clay less than 5% by weight, compacted in 300 mm loose lifts to a minimum of 95% Modified Proctor maximum dry density at a moisture content that is within 2% of optimum for compaction. During fill placement, benches should be cut into any sloping stripped subgrade surfaces to key the structural fill into the natural topography. Where the exposed subgrade surface slopes at greater than 20%, we recommend that the subgrade be benched, prior to placing the fill, to improve the structural integrity of the embankment. Benches should be a minimum horizontal distance of 1.0 metre before stepping to the next bench.

Stripped subgrades and engineered fill materials and compaction must be reviewed by the geotechnical engineer.

For further site specific geotechnical recommendations, our Geotechnical Investigation Report can be referenced.

We are pleased to assist you with this project and we trust this information is helpful and sufficient for your purposes at this time. However, please do not hesitate to call the undersigned if you should require any clarification or additional details.

For:
GeoPacific Consultants Ltd.

Reviewed By:

PROFESSIONAL
PROVINCE OF
R. AVENDANO GONZALEZ ESTRADA
45979
BRITISH COLUMBIA
ENGINEER

Hanneke Byl, B.A.Sc.
Engineer-In-Training

Roberto Avendano, B.Eng., P.Eng.,
Principal

Permit to Practice EGBC
1000782

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