

Date: January 25, 2018

To: Advisory Design Review Commission

From: Lisa Pedrini, Senior Planner

Subject: Major Development Permit No. 012 – Orion (Radius 2)

The Village has received a Development Permit application from Rod Nadeau on behalf of BC1065774 (Vidorra Developments Ltd.) to develop a multi-family residential apartment building. The subject property is Lot 4, DL 203, LLD, Plan KAP72731, and is located at 7350 Crabapple Court. The property is designated as a Development Permit Area for Form and Character in the Village's OCP under DP Area No. 6 – Multi-family and/or Commercial Development. The purpose of this report is to assist the Advisory Design Review Commission in its consideration of the application

BACKGROUND

Lot 4 is a previously serviced lot which has been regraded with engineered fill. The subject property is accessed off Crabapple Court cul de sac, and has undeveloped lots on the north and west side (Lot 3 & Lot 5). The Arn Canal Dyke Reserve sits to the east of the proposed Orion Development with Portage Road to the south. There is existing commercial and residential development nearby.



AREA CONTEXT PLAN



A Project Information Sign has been placed on the site as per Schedule G of the Village's *Development Procedures Bylaw No. 725, 2013*.



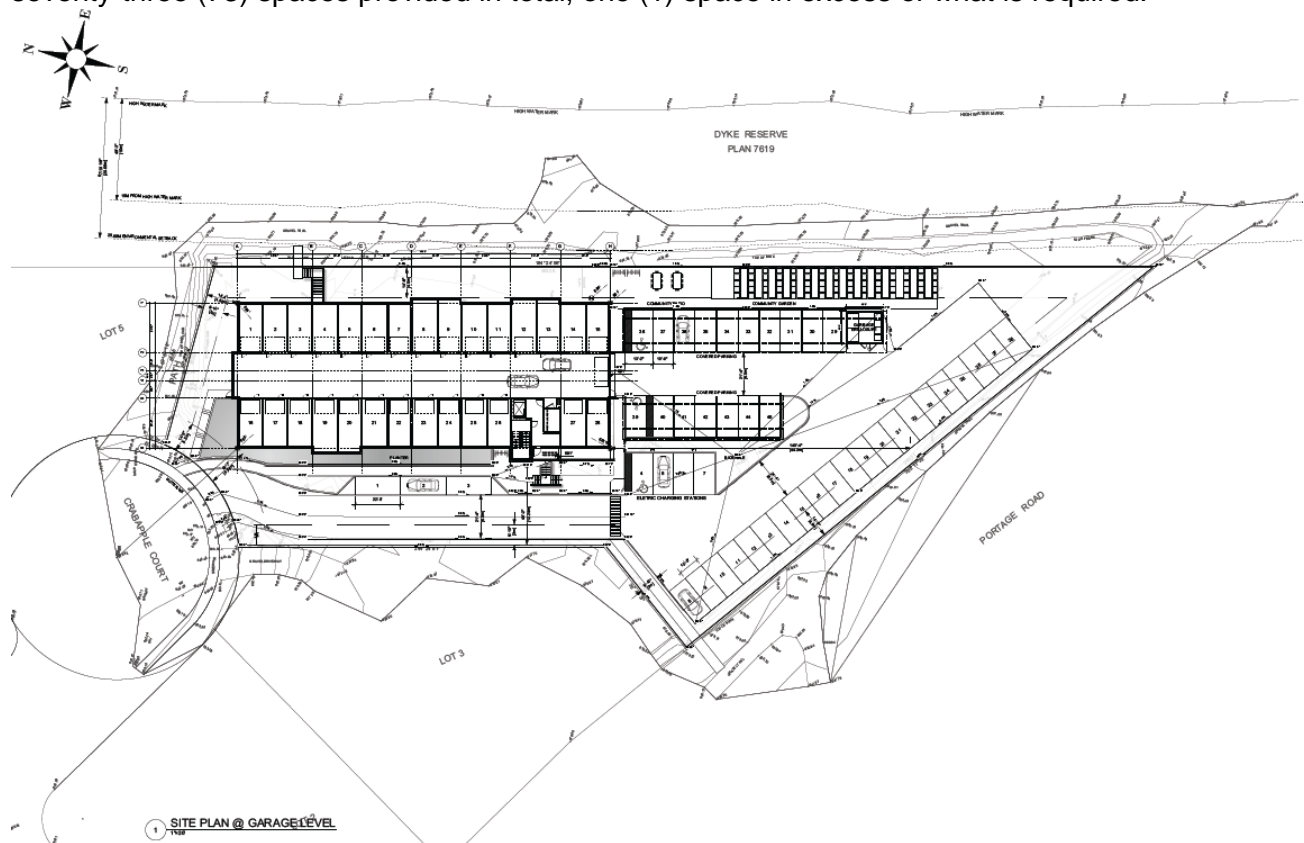
BRIEF DESCRIPTION OF THE PROPOSAL

As illustrated in **Appendix A**, the proposal is to develop a four (4) storey multi-family residential apartment building containing three (3) stories of residential use founded on a flood resistant concrete parking garage. The building will contain forty-five (45) units and the building area will be 13,064 square feet, slightly larger than the Radius development, which has a building area of 12,934 square feet square feet.



There will be fifteen (15) residential units per floor, consisting of a combination of one bedroom, one plus den, two bedrooms, and two plus den apartments. The three habitable floors are above the local flood plain. The parking garage is partially below grade due to the natural slope of the lot and the height above flood plain required for the main floor. Because of this, the applicants are seeking a variance to maximum building height, due to the natural grade being lower than the flood plain. The intention is to berm and landscape up against the garage wall to lower the building's apparent height, especially at the cul de sac end. Extensive fill, landscaping and green space around the building will accentuate the at grade aspects of the lowest habitable floor to afford privacy. The Landscape Plan is attached as **Appendix B**.

The parking garage will offer twenty-eight (28) private (enclosed) garage spaces situated underground, which will be available on a user pay basis. The remainder of the parking spaces is indicated as surface parking, seventeen (17) of which are covered by carports. There will be seventy-three (73) spaces provided in total, one (1) space in excess of what is required.



The front entry to the residential development is facing Crabapple Court, with vehicular access to the site from Crabapple Court with the driveway sloping gradually down the length of the building to the visitor parking, surface and carport parking at the south end of the lot. Like Radius, there will be an internal stairwell located at the front, with large exterior windows to maximize daylight and views. An elevator and an entry ramp provide accessibility to all levels. The architectural style of the building is mountain contemporary design. The building envelope is simple rectangular shape, with articulated bump outs and cantilevered balconies to add interest and privacy. There will be balconies for all units with aluminum railings and glass panels.

The building is placed on the site strategically to maximize green space and parking. The exterior skin will be durable rain screened stucco in three different colours. The colour scheme will be evident on the colour board that will be presented at the ADRC meeting. Additional renderings demonstrating the siting are attached as **Appendix C**.

The building will be built to strict feature sustainability standards, as further described in **Appendix D**, featuring rooftop solar panels, airtight double wall construction, high performance, energy efficient hot water, air sourced heat pump/air conditioning units and passive house standard windows. The final product will be close to zero net energy use building.

COMPLIANCE WITH ZONING BYLAW

The subject property is zoned Portage Road Commercial (C-3). The following is an assessment of the proposal in the context of the Zoning Bylaw requirements:

- a) An Apartment is a **permitted land use** in the C-3 zone, as per Zoning Amendment Bylaw No. 642, 2010. Apartments in the C-3 Zone must have a minimum lot size of 900 m² and a minimum lot width of 25 m.
- b) The building does not comply with the 10.5 meter **maximum height** restriction based upon a calculation of average finished grade. As a result, the applicants have applied for a one (1) meter variance.
- c) The building would comply with the front, rear, north interior and south interior lot line **setback** requirements.
- d) The building covers 24.6% of the lot and therefore would comply with the 40% **maximum lot coverage** requirement.
- e) Based upon the requirement of 1.25 off-street parking spaces per each one (1) bedroom “townhouse” unit, 1.75 parking spaces per each two (2) bedroom “townhouse” unit, and 0.25 parking space per “townhouse” unit for visitors, seventy-seven (71.5) **residential parking spaces** would be required; seventy-three (73) have been provided.

COMPLIANCE WITH DEVELOPMENT PERMIT GUIDELINES

The subject property is situated within Development Permit Area No. 6 – Multi-Family and/or Commercial Development. The guidelines address such issues as siting, building form, open spaces, circulation & parking and streetscape improvements & landscaping. The guidelines can be found in the Village’s Official Community Plan, Bylaw 654, 2011, Section 7.0 – General Form and Character Guidelines (p. 44) and Section 7.4.4 – DP Area # 6 (p. 49) by following this link: <https://www.pemberton.ca/public/download/documents/36999>

The Design Review Committee shall review the proposal against the guidelines, and provide comments on compliance with the DPA # 6 guidelines.

COMPLIANCE WITH SIGN BYLAW

The Sign Bylaw establishes that **fascia signs** not have an area greater than 2 square meters, and that they not project further then 3 cm beyond the front face of the building. The applicant has not submitted its Comprehensive Building Sign Plan yet.

Attachments:

- A. Architectural Drawings*
- B. Landscape Plan*
- C. Additional Renderings*
- D. Sustainability Features*

A handwritten signature in cursive script that reads "Lisa Pedrini". The signature is written in dark ink on a light background.

Lisa Pedrini, Senior Planner

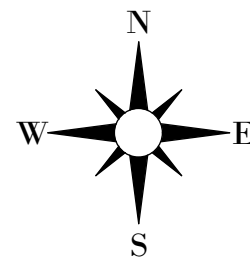
cc. Tim Harris, Manager of Operations and Development Services

Zoning Regulations Under Current Bylaw	Off Street Parking Required Per Unit	No. Of Units	Total Number Of Spaces Required
One Bedroom	1.25	6	7.5
One Bedroom + Den	1.25	31	38.75
Two Bedroom + Den	1.75	8	14
Visitor Parking	0.25	45	11.25
		Total	71.5
Total Parking Required Is 72 Spaces			

Unit List 45 Units					
Unit Number	Unit Type	Bedrooms	Dens	Bathrooms	Gross Unit Area Sq. Ft.
101	TYPE A	1	1	1	780
102	TYPE A	1	1	1	780
103	TYPE A	1	1	1	780
104	TYPE B	1	1	1	840
105	TYPE E	2	1	1	942
106	TYPE F	1	1	1	654
107	TYPE E	2	1	1	942
108	TYPE G	1		1	543
109	TYPE A	1	1	1	780
110	TYPE B	1	1	1	840
111	TYPE A	1	1	1	780
112	TYPE B	1	1	1	840
113	TYPE C	1	1	1	637
114	TYPE D	1		1	445
115	TYPE C	1	1	1	633
201	TYPE A	1	1	1	780
202	TYPE B	1	1	1	840
203	TYPE A	1	1	1	780
204	TYPE B	1	1	1	840
205	TYPE E	2	1	1	942
206	TYPE F	1	1	1	654
207	TYPE E	2	1	1	942
208	TYPE H	1		1	713
209	TYPE A	1	1	1	780
210	TYPE B	1	1	1	840
211	TYPE A	1	1	1	780
212	TYPE B	1	1	1	840
213	TYPE C	1	1	1	637
214	TYPE D	1		1	443
215	TYPE I	2	1	1	872
301	TYPE A	1	1	1	780
302	TYPE B	1	1	1	840
303	TYPE A	1	1	1	780
304	TYPE B	1	1	1	840
305	TYPE E	2	1	1	942
306	TYPE F	1	1	1	654
307	TYPE E	2	1	1	942
308	TYPE H	1	1	1	713
309	TYPE A	1	1	1	780
310	TYPE B	1	1	1	840
311	TYPE A	1	1	1	780
312	TYPE B	1	1	1	839
313	TYPE C	1	1	1	637
314	TYPE D	1		1	445
315	TYPE I	2	1	1	872



No.	Date	Issue Notes
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REGISTERED OWNER:
Vidorra Developments Ltd.
Rod Nadeau
#15-1005 Alpha Lake Road
Whistler B.C. V0N 1B1
tel:604.932.3807 ext 226
fax:604.932.3804

Structural:
Chalten Engineering Ltd.
Sebastián Guerrero P.Eng, M.Eng
PO Box 1527
Whistler B.C. V0N 1B0
tel:604.902.1404
email:chaltenengineering@shaw.ca

Doug Bush Survey Services
Douglas J. Bush
Unit 18, 1370 Alpha Lake Road
Whistler, B.C. VON 1B1
tel:932.3314 fax:932.3030
email: dougb@dbss.ca

RF Binnie & Associates
Rob Dos Santos
tel:604.892.8222 mobile: 778.266.0029
email: RDosSantos@binnie.com

Evolution Building Science Ltd.
Geoff Triggs
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email:ebsl@shaw.ca

Richard Kadulski Architect.
Richard Kadulski
Suite 204-1037 Broadway
Vancouver B.C. V6H 1E3
tel:604.689.1841
email:kadulski@direct.ca

SRC Engineering Consult:
 Bill Khangura
 205-4180 Lougheed Hwy.
 Burnaby B.C. V5C 6A7
 tel:604.268.9091
 email:bill@src-eng.com

REFERENCED DOCUMENT :
BRITISH COLUMBIA BUILDING CODE 2012 - PART 3

Building Description
4 Storey Building - Parking Garage Below 3 Storey Residential

Building Classification
3.2.2.50 Group "C" Up To 6 Storeys, Sprinklered
Building Area is less than 1,800 m²
Combustable Construction Permitted
Floor Assemblies Shall Be 1 Hour Fire Rated
Loadbearing Walls And Columns Not Less Than 1 Hour Fire Rating
Parkade Floor Assemblies And Walls To Be 1.5 Hour Fire Rated

ZONING		C3	
	Permitted/Required	Proposed	
Building Height	34.4 ft / 10.5m	37'8" / 11.47m	
Building Setbacks			
North Interior Lot Line	3.0		4.68m
South Lot Line	4.5m		44.3m
East Lot Line	4.5m		4.5m
West Interior Lot Line	3.0m		12.73m
Parking			
Handicap Surface	3		3
Surface			42
Parking Garage			28
Total Parking			73
Lot Area			
Building Area			53,121 sq.ft.
Lot Coverage	40%		13,064 sq.ft.
Gross Building Area			24.60%
FSR			51,962 sq.ft.
			0.98

CIVIC ADDRESS:
7350 Crabapple Court
Pemberton B.C.

Lot 4, D.L. 203, Lillooet District, Plan KAP72731

A-000	General Data
A-001	Images & Context Photos
A-101	Site Plan
A-103	Survey Plan
A-200	Garage Plan
A-201	First Floor Plan
A-202	Second Floor Plan
A-203	Third Floor Plan
A-204	Roof Plan
A-400	West & North Elevations
A-401	East & South Elevations
A-500	Building Sections

L1	Landscape Plan
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Whistler, BC, V0N 1B1
T: 604-902-0702
dmaguire7777@gmail.com
www.dmachitect.ca

Project Title:

Radius 2
7350 Crabapple Court
Pemberton B.C.

Sheet Title:

General Data

Date: Nov 15-17	Scale: As Noted
Partner in Charge Dennis Maguire	Sheet Number: A-000
Drawn by: Tom Kennedy	
Reviewed by:	
Project ID: --	



RENDER 1 - FROM PARKING LOT FACING NORTH TO CRABAPPLE CT.



RENDER 2 - FROM DRIVEWAY FACING SOUTH TO FRONT ENTRY



RENDER 3 - FROM PARKING LOT FACING NORTH TO FRONT ENTRY



RENDER 4 - SOUTHEAST CORNER OF BUILDING



RENDER 5 - NORTHEAST CORNER OF BUILDING



RENDER 6 - NORTHWEST CORNER OF BUILDING



IMAGE 1 - END OF ARBUTUS FACING NORTH



IMAGE 5 - FACING INTO CRABAPPLE CT. FROM ARBUTUS

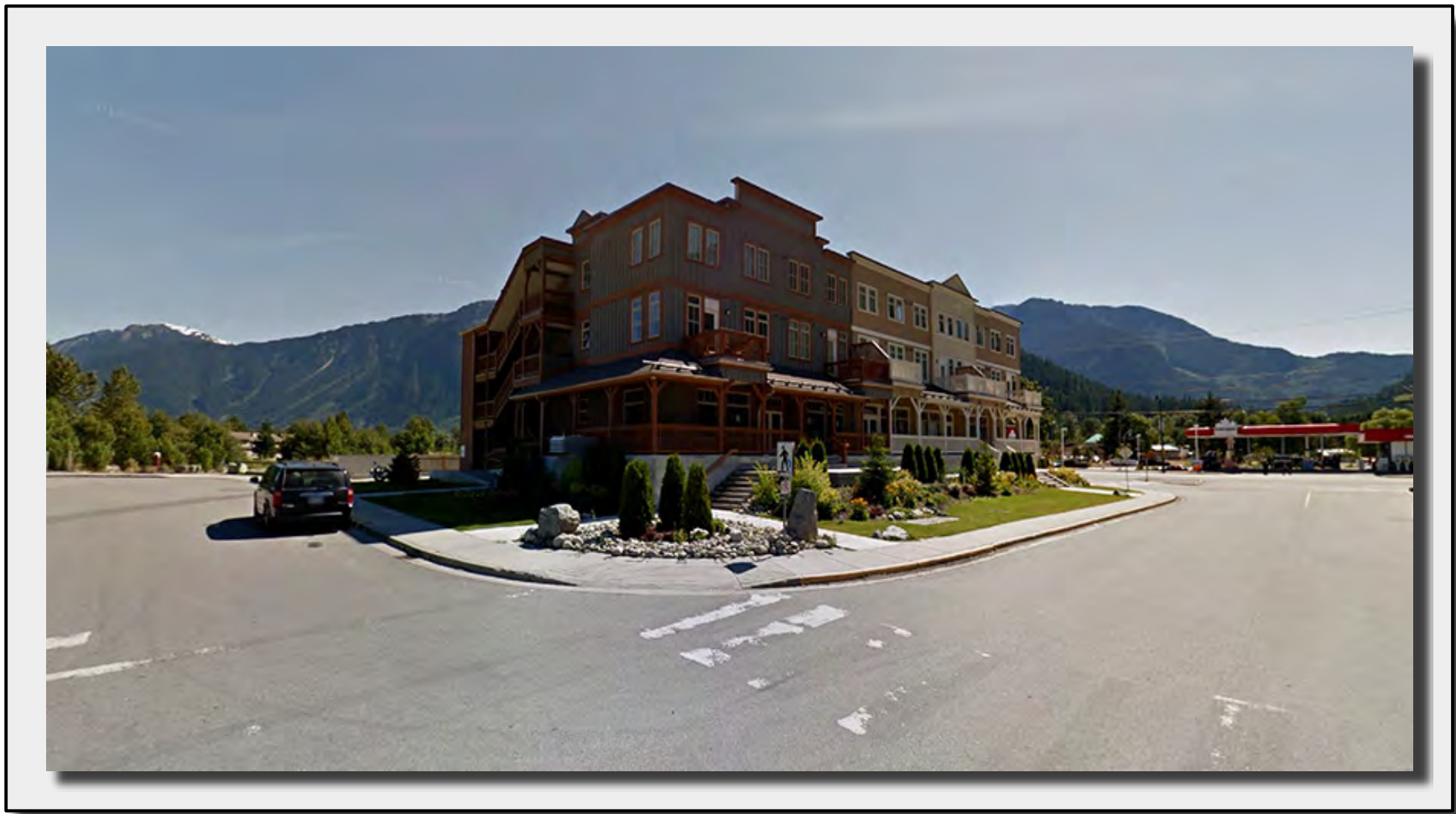


IMAGE 6 - FACING EAST TO CORNER OF ARBUTUS AND CRABAPPLE

No.	Date	Appr	Revision Notes

No.	Date	Issue Notes

DENNIS
MAGUIRE

ARCHITECT

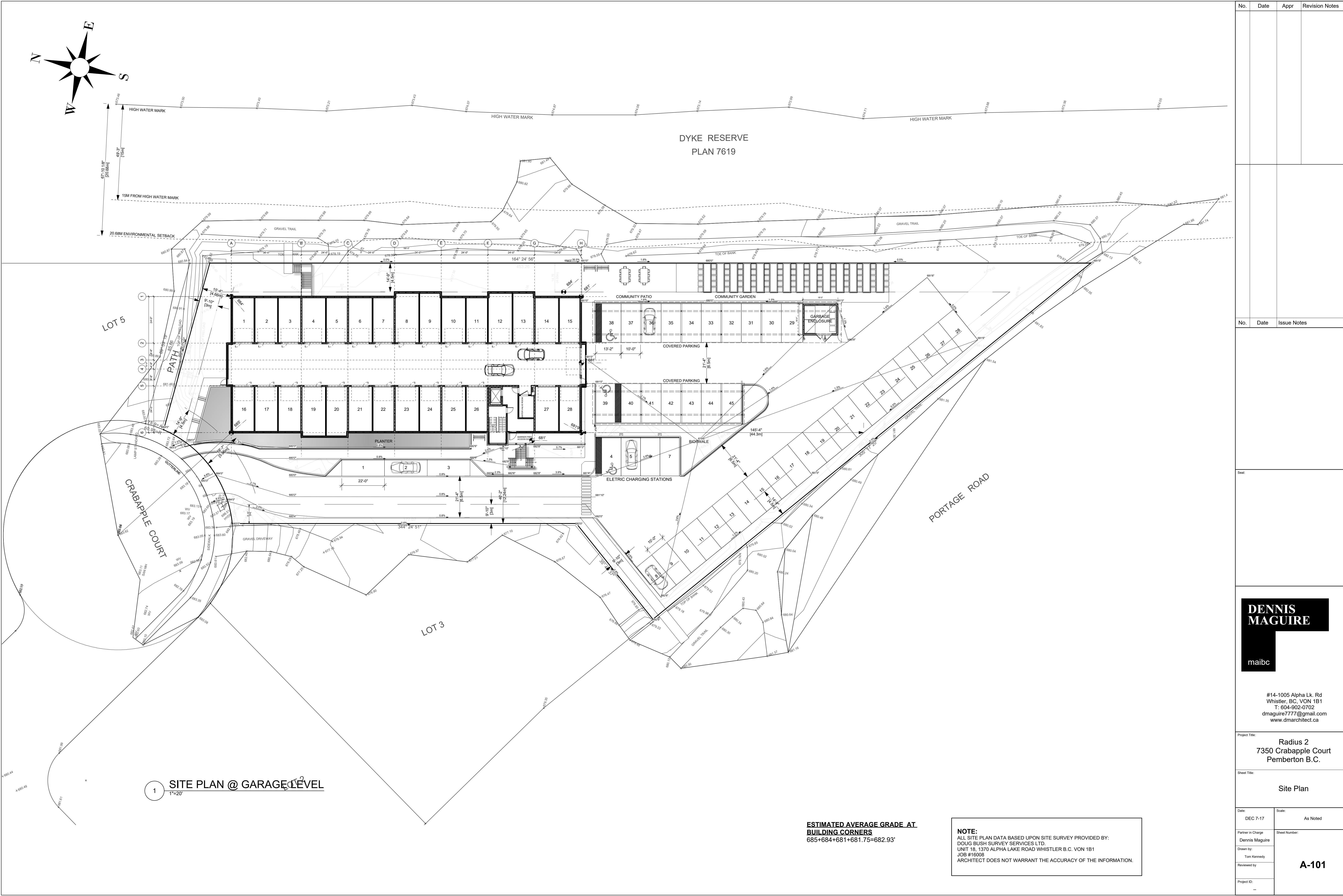
maibc

#14-1005 Alpha Lk. Rd
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Project Title:
Radius 2
7350 Crabapple Court
Pemberton B.C.

Sheet Title:
Images & Context Photos

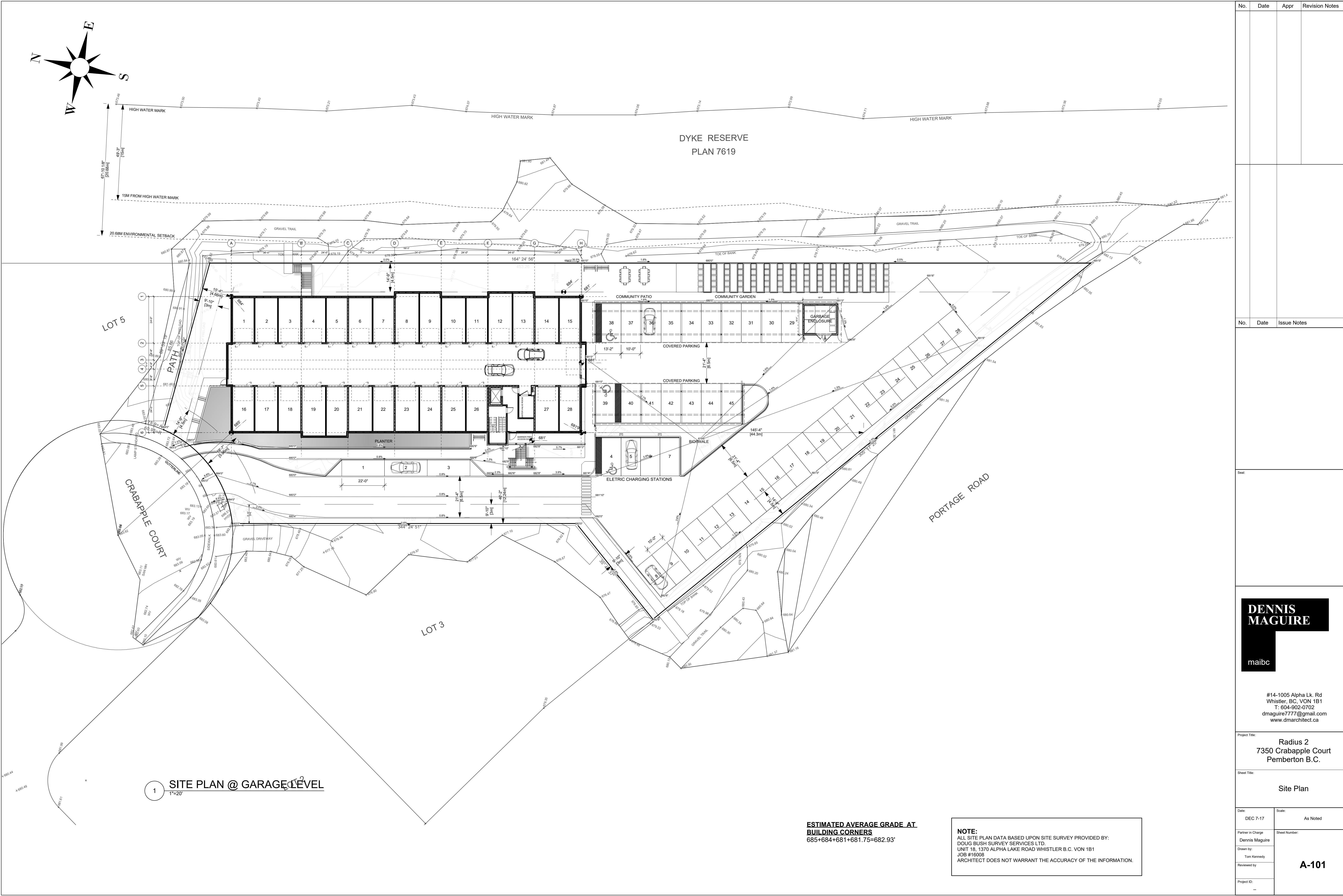
Date: Nov 15-17	Scale: As Noted
Partner in Charge: Dennis Maguire	Sheet Number: A-001
Drawn by: Tom Kennedy	
Reviewed by:	
Project ID:	



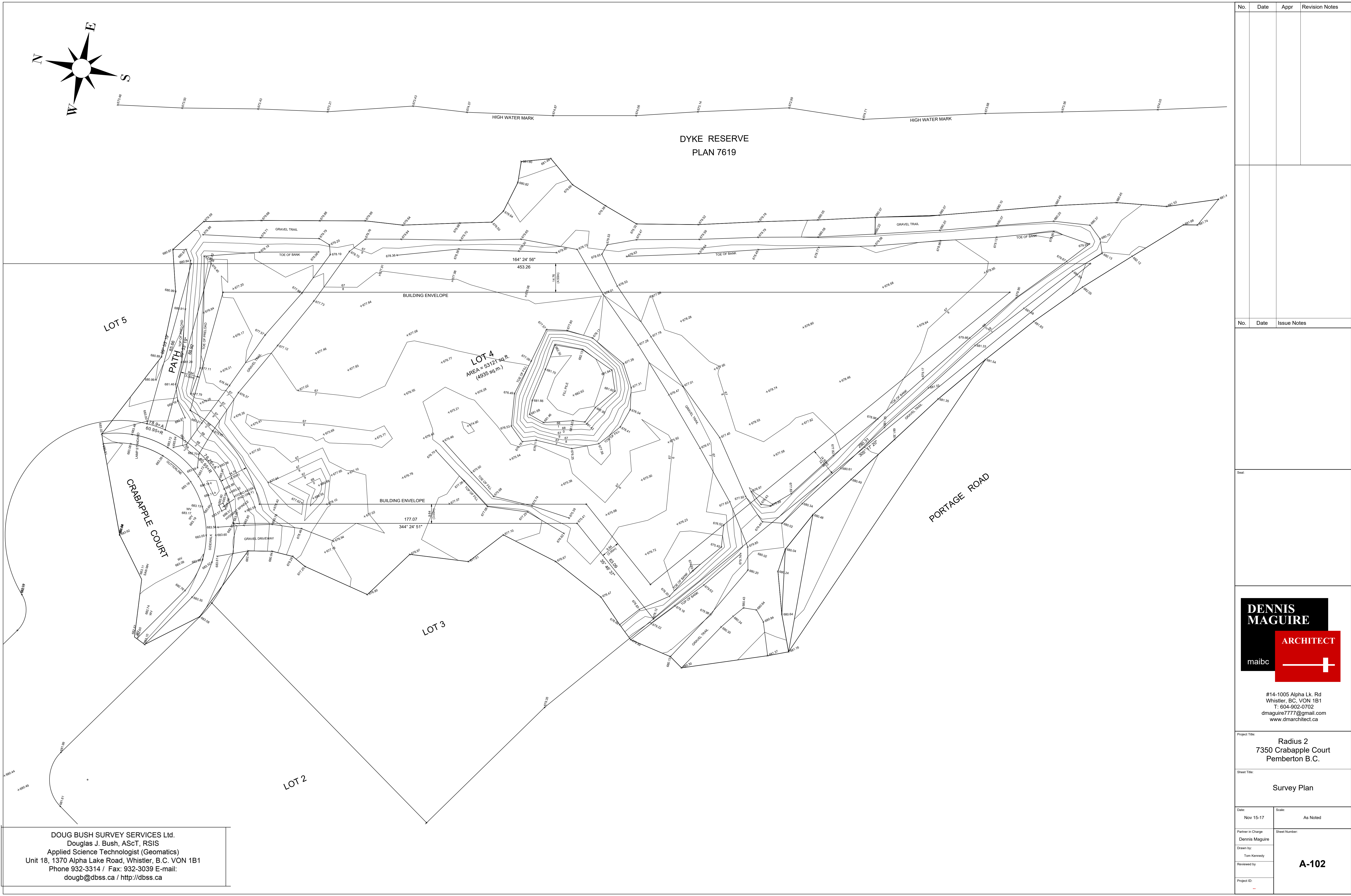
ESTIMATED AVERAGE GRADE AT BUILDING CORNERS
685+684+681+681.75=682.93'

NOTE:
ALL SITE PLAN DATA BASED UPON SITE SURVEY PROVIDED BY:
DOUG BUSH SURVEY SERVICES LTD.
UNIT 18, 1370 ALPHA LAKE ROAD WHISTLER B.C. V0N 1B1
JOB #16008
ARCHITECT DOES NOT WARRANT THE ACCURACY OF THE INFORMATION.

No.	Date	Appr	Revision Notes



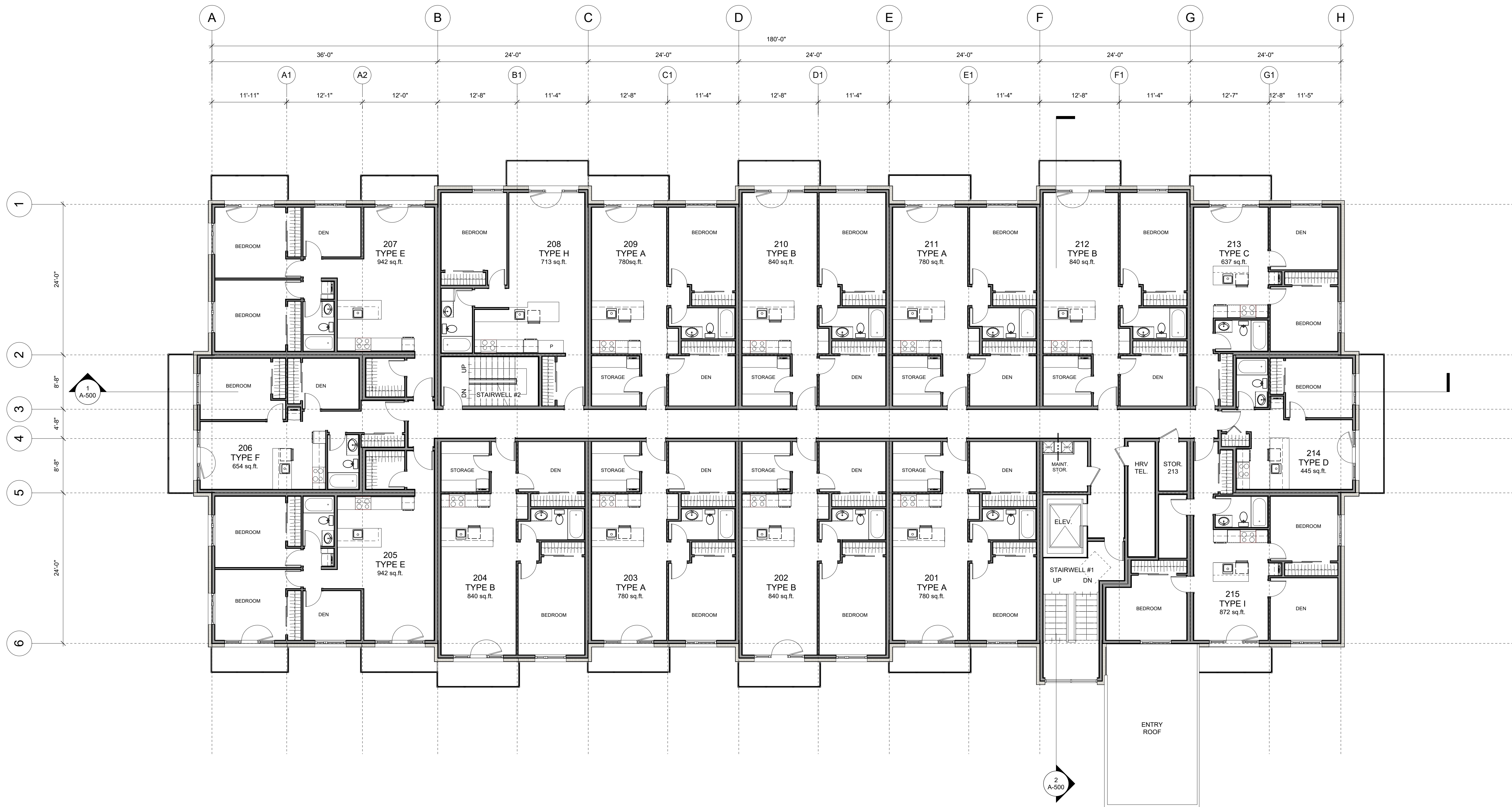
No.	Date	Appr	Revision Notes





Project ID: --

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1 SECOND FLOOR PLAN
1/8" = 1'-0"

No.	Date	Appr	Revision Notes



**DENNIS
MAGUIRE**

maibc

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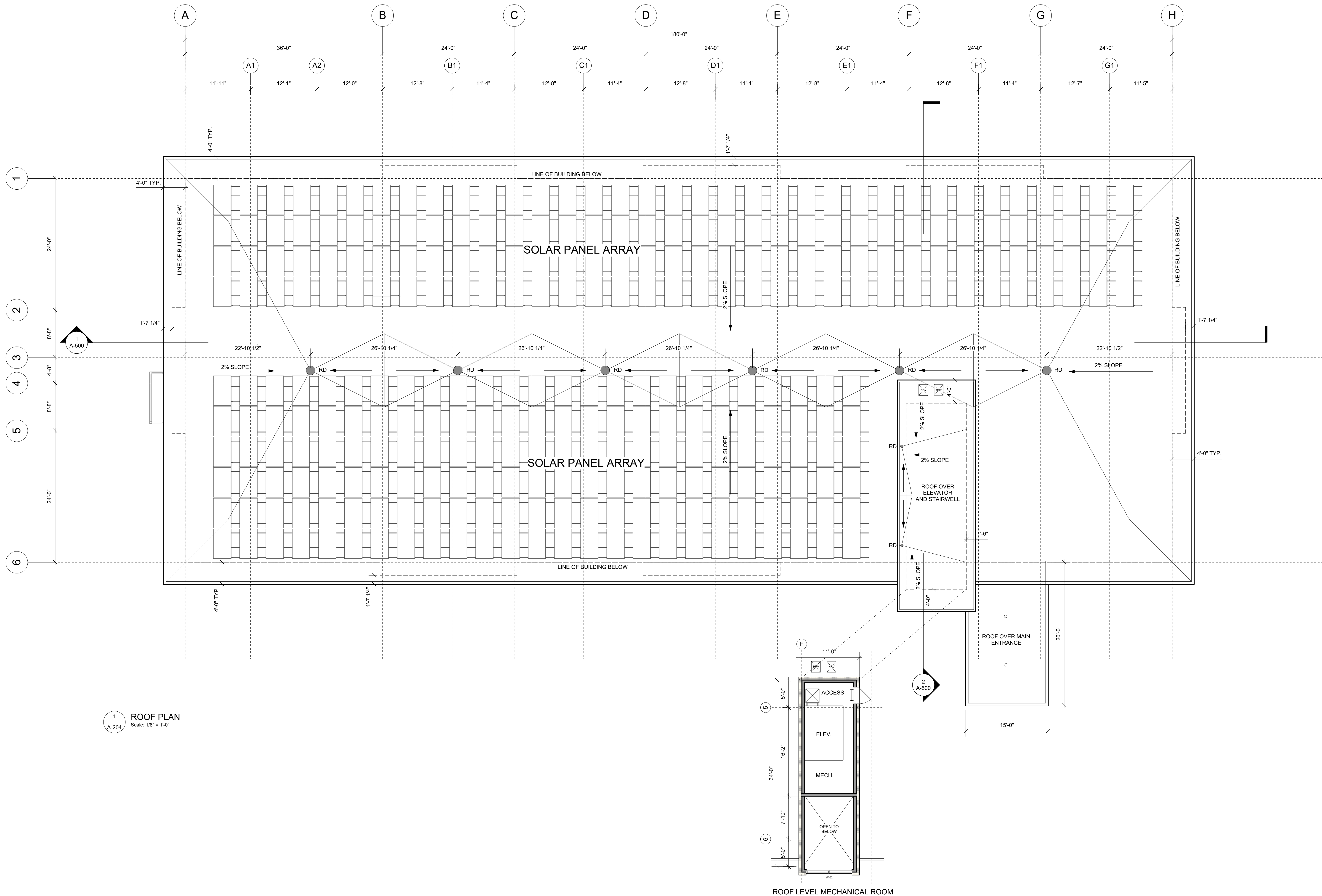
Project Title:

Radius 2
7350 Crabapple Court
Pemberton B.C.

Sheet Title:

Third Floor Plan

Date:	Nov 15-17	Scale:	As Noted
Partner in Charge	Dennis Maguire	Sheet Number:	A-203
Drawn by:	Tom Kennedy		
Reviewed by			
Project ID:			

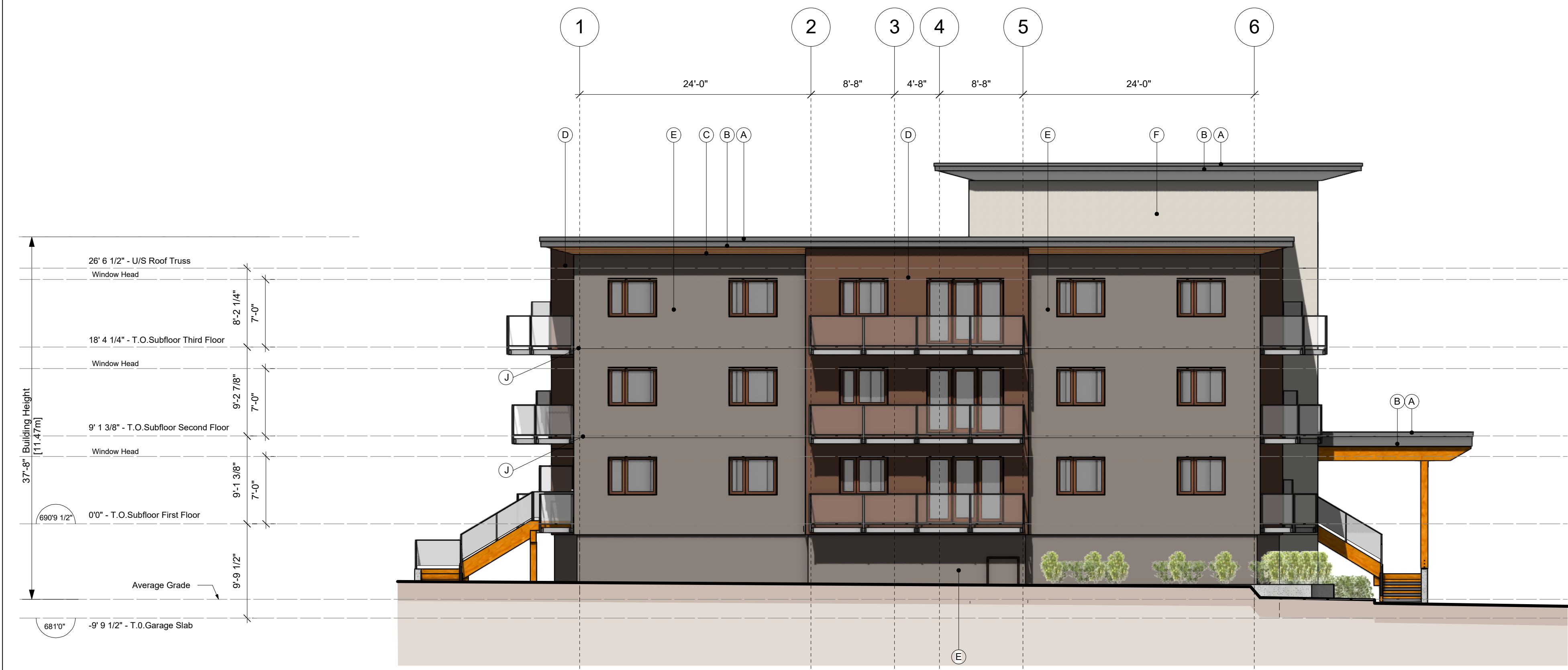


1 ROOF PLAN
A-204 Scale: 1/8" = 1'-0"

No.	Date	Appr	Revision Notes



1 WEST - FRONT ELEVATION
1/8" = 1'-0"



2 NORTH - SIDE ELEVATION
1/8" = 1'-0"

NAFS
All Windows and Doors & Skylights
Must Meet NAFS Canadian Supplement Requirements
Province: British Columbia
Location: Pemberton
Building Height : 10m or below
Terrain : Open
Class : Multi-Residential

Minimum performance grade (PG) = 25 Open-PG35 (based on 10m height)
Minimum positive design pressure = 1200 PA
Minimum negative design pressure = 1200 PA
Minimum water penetration test pressure = 260 PA
Minimum Canadian air infiltration/exfiltration = A2

- MATERIAL LEGEND:**
- A - PREFINISHED METAL CAP FLASHING
 - B - PREFINISHED METAL FASCIA PANEL
 - C - WOOD GRAIN METAL SOFFIT PANEL
 - D - STUCCO COLOUR #1 - BUMP OUTS
 - E - STUCCO COLOUR #2 - MAIN BODY
 - F - STUCCO COLOUR #3 - STAIR TOWER
 - G - STOREFRONT WINDOW SYSTEM
 - H - C.I.P. CONCRETE
 - J - PREFINISHED METAL THROUGH WALL FLASHING

No.	Date	Appr	Revision Notes

[illegible]

1 WEST - FRONT ELEVATION
1/8" = 1'-0"

NAFS
All Windows and Doors & Skylights
Must Meet NAFS Canadian Supplement Requirements
Province: British Columbia
Location: Pemberton
Building Height : 10m or below
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Minimum performance grade (PG) = 25 Open-PG35 (based on 10m height)
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Minimum negative design pressure = 1200 PA
Minimum water penetration test pressure = 260 PA
Minimum Canadian air infiltration/exfiltration = A2

MATERIAL LEGEND:

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- D - STUCCO COLOUR #1 _____ - BUMP OUTS
- E - STUCCO COLOUR #2 _____ - MAIN BODY
- F - STUCCO COLOUR #3 _____ - STAIR TOWER
- G - STOREFRONT WINDOW SYSTEM
- H - C.I.P. CONCRETE
- J - PREFINISHED METAL THROUGH WALL FLASHING



2 NORTH - SIDE ELEVATION
1/8" = 1'-0"



**DENNIS
MAGUIRE**

maibc

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— + —

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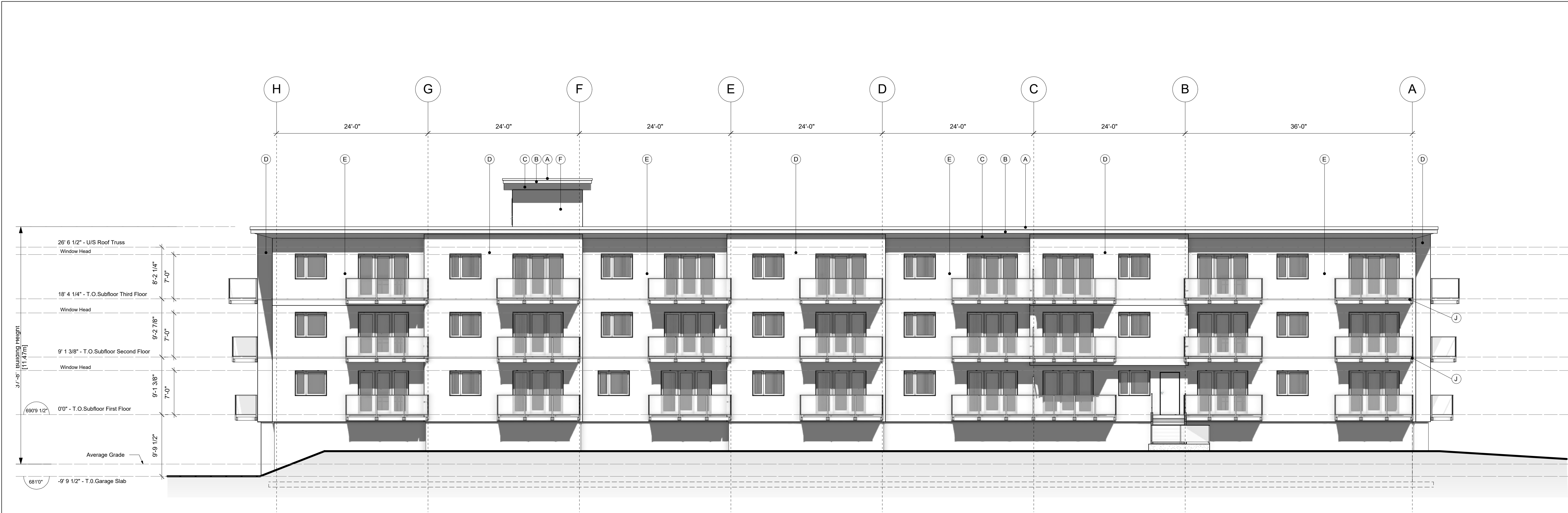
Project Title:

Radius 2
7350 Crabapple Court
Pemberton B.C.

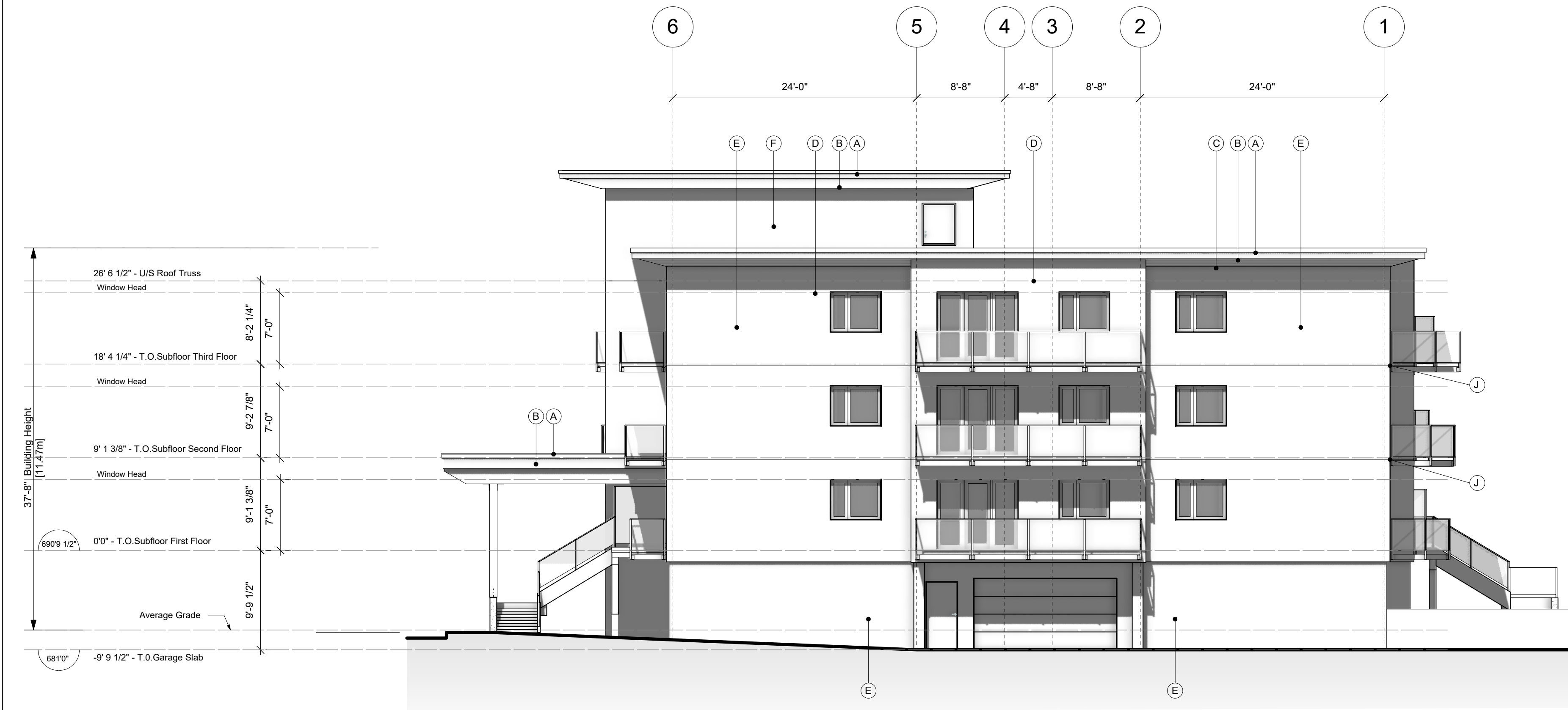
Sheet Title:

West & North Elevations

Date: Nov 15-17	Scale: As Noted
Partner in Charge Dennis Maguire	Sheet Number:
Drawn by: Tom Kennedy	A-400
Reviewed by	
Project ID: --	



1 EAST - REAR ELEVATION
1/8" = 1'-0"



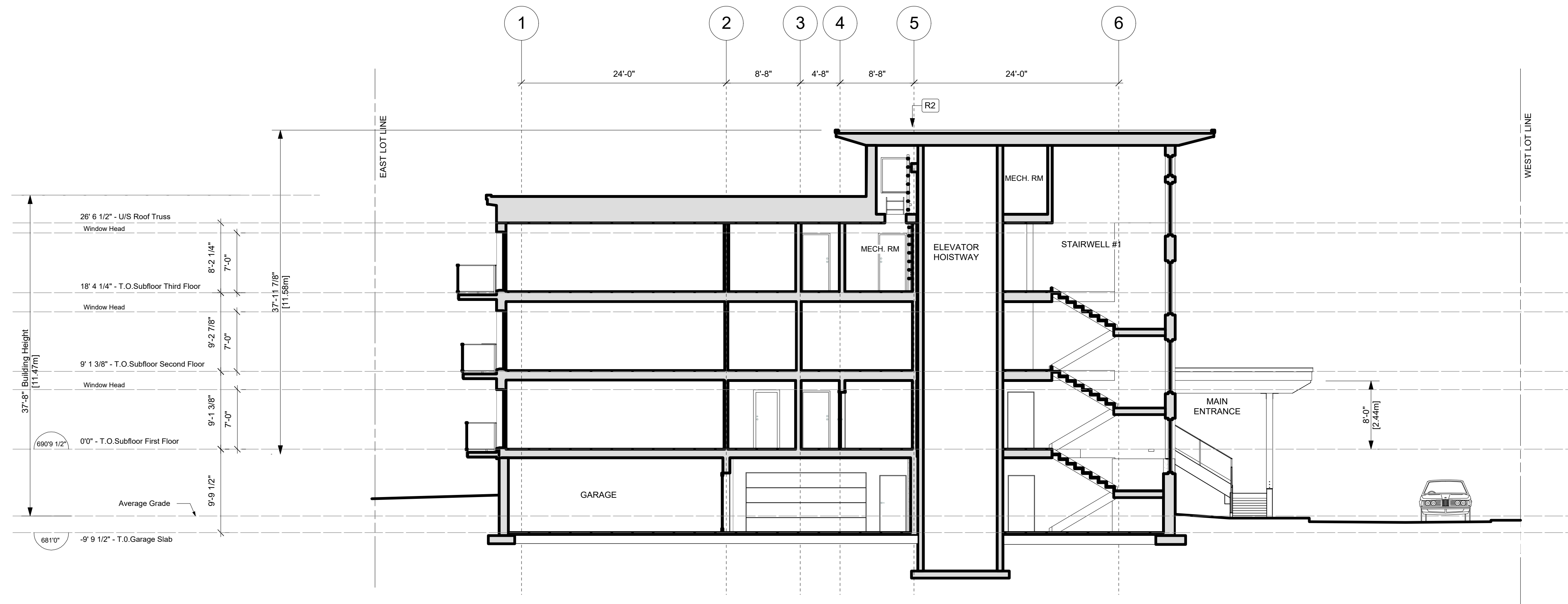
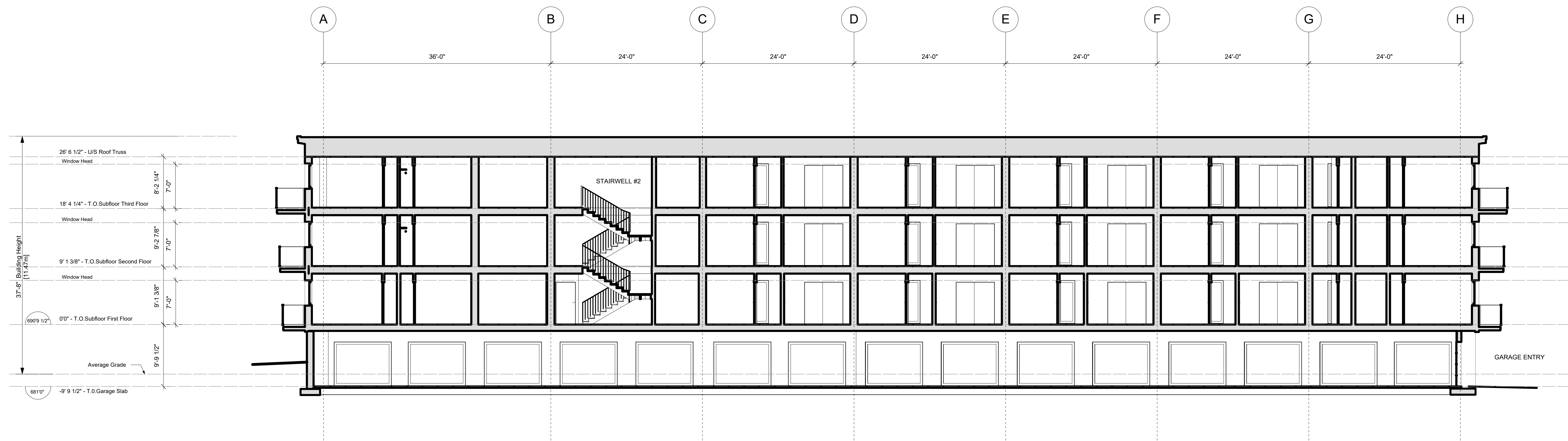
3 SOUTH - SIDE ELEVATION
1/8" = 1'-0"

NAFS
All Windows and Doors & Skylights
Must Meet NAFS Canadian Supplement Requirements
Province: British Columbia
Location: Pemberton
Building Height : 10m or below
Terrain : Open
Class : Multi-Residential

Minimum performance grade (PG) = 25 Open-PG35 (based on 10m height)
Minimum positive design pressure = 1200 PA
Minimum negative design pressure = 1200 PA
Minimum water penetration test pressure = 260 PA
Minimum Canadian air infiltration/exfiltration = A2

- MATERIAL LEGEND:**
- A - PREFINISHED METAL CAP FLASHING
 - B - PREFINISHED METAL FASCIA PANEL
 - C - WOOD GRAIN METAL SOFFIT PANEL
 - D - STUCCO COLOUR #1 - BUMP OUTS
 - E - STUCCO COLOUR #2 - MAIN BODY
 - F - STUCCO COLOUR #3 - STAIR TOWER
 - G - STOREFRONT WINDOW SYSTEM
 - H - C.I.P. CONCRETE
 - J - PREFINISHED METAL THROUGH WALL FLASHING

No.	Date	Appr	Revision Notes

[illegible]

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Radius 2

7350 Crabapple Court

Green



Building Initiatives

Radius 2 is designed to far exceed the BC Building Code. The many areas we have achieved this are listed below.

Walls;	Code would be R22 Batt 2x6 walls. Radius R42 Double wall with 6" of out insulation to reduce thermal bridging in the building envelope. An exterior vapour open liquid applied air/water barrier under the rain screened out insulation, R22 batt insulation in the stud walls, vapour barrier paint on the inside drywall. This wall make up allows the inside of the wall to dry to the inside and the outside portion of the wall to dry to the out side.
Airtight;	No Code Requirement. Average new BC Home 4.5 Air Changes per Hour. Radius 2, 0.6 air changes per hour.

Ventilation;	Code with intermittent ventilation bathroom fans with no heat recovery. Radius 2 ERV with 85% heat recovery designed at 20CFM per bedroom and living room. The ERV will be run on a continuous basis for a healthy home ventilation rate. An ERV is used instead of an HRV to prevent too low a humidity in the air during the winter months. A Higher than usual ventilation rate has been designed for a healthier home and to prevent drying the air too much through ventilation the ERV was selected.
Hot Water;	Code is an Electric tank or a mid efficient gas hot water. Radius will use a high performance SunPump that will produce water at about a 500% efficiency for the power it consumes. This is made in BC with locally developed technology.
Heat;	Code has many options with a minimum efficiency of about 80%. Radius 2 will use the sun for free and an air sourced heat pump at 250% efficiency for primary heat with small baseboard heaters with digital thermostats as backup heat for only the coldest days of the year. Anticipated savings of 85% on space heating above code performance.
Windows;	The windows will meet the Passive House standard of .8 U value. This is roughly 3 times better than code approved windows. Windows are the largest source of heat loss, well insulated windows can contribute significantly to the comfort of a home.
Lights;	All lights will be energy saving LED bulbs. The windows are larger than most buildings to allow more natural light in the units. Exterior lighting and the parkade will be on motion sensors so tat they do not run all day and night when not needed.
Materials;	All materials will be sourced first locally, then from BC, then from Canada. We have great building materials and technology in BC and Canada to build the best homes in the world. We need to take advantage of what we have at home.
Cooling;	No code requirement. Radius will have an energy efficient air sourced heat pump AC unit supplying the ventilation air with cooling in the hot days of summer. There will be a flush mode where during the cooler nights the ventilation will supply cool air with no additional cooling or energy added.
Roof;	Radius will use roughly double the insulation of a code building. The roof will be a white TPO, (thermoplastic membrane) membrane to reflect heat in the cooling months to reduce the cooling required and not overheat the attic.
Garden;	Radius will have a community garden for those gardeners who want to grow some food or flowers.
Storm drainage;	Radius will employ a Bio Swale pond to infiltrate most of the storm water into the ground on the site. Only the major storm events will see water going to the storm system.
Foundation;	Radius will use ICF walls for an energy efficient wall system in the parkade.
Durability;	Radius will use durable finishes like stucco and metal and vinyl windows for the exterior finishes to reduce the amount of maintenance required to keep the building looking

great. This will save energy in the future from not having to use resources for maintenance.

Solar; Radius will take advantage of the sun in 3 ways. The passive solar gains to heat the building, the SunPump solar water heating and the photovoltaic solar panels to generate renewable electricity on site.

Location; Radius' location is one of it's most sustainable features. By being within walking distance of many services including schools, coffee shops, Recreational center and gym, parks and trails people living at Radius 2 will not be car dependent. Their overall energy footprint will be much less than anyone living away from the center of town.

