

# 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 outsulation to reduce thermal bridging in the building envelope. An exterior vapour open liquid applied air/water barrier under the rain screened outsulation, 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 that 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

Unit Count Summary				
Unit Type	Description	Qty	Bedrooms Per Unit	Total Bedrooms
A	1 Bedroom + Den	13	1	13
B	1 Bedroom + Den	11	1	11
C	1 Bedroom + Den	4	1	4
D	1 Bedroom	3	1	3
E	2 Bedroom + Den	6	2	12
F	1 Bedroom + Den	3	1	3
G	1 Bedroom	1	1	1
H	1 Bedroom	2	1	2
I	2 Bedroom + Den	2	2	4
<b>Total Units</b>		<b>45</b>		<b>53</b>
Occupant Load				
2 Persons Per Bedroom = 53 x 2 = 106				

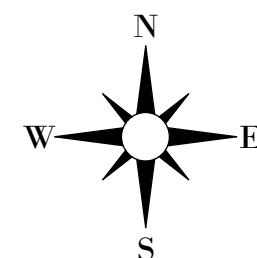
Zoning Regulations Under Current Bylaw	Off Street Parking Required Per Unit	No. Of Units	Total Number Of Spaces Required
One Bedroom	1.25	6	7.5
One Bedroom + Den	1.25	31	38.75
Two Bedroom + Den	1.75	8	14
Visitor Parking	0.25	45	11.25
		<b>Total</b>	<b>71.5</b>
<b>Total Parking Required Is 72 Spaces</b>			

OVERALL BUILDING AREA	
FLOOR LEVEL	GROSS AREA Sq. ft.
Garage Level	12,660
First Floor	12,893
Second Floor	13,064
Third Floor	13,064
<b>TOTAL</b>	<b>51,681</b>

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



AREA CONTEXT PLAN



**CONTACT INFORMATION**

**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.  
 Sebastian Guerrero P.Eng, M.Eng  
 P.O. Box 1527  
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 tel:604.902.1404  
 email:chaltenengineering@shaw.ca

**SURVEYOR:**  
 Doug Bush Survey Services  
 Douglas J. Bush  
 Unit 18, 1370 Alpha Lake Road  
 Whistler, B.C. V0N 1B1  
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**CIVIL:**  
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 Rob Dos Santos  
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**BUILDING CODE CONSULTANT:**  
 Evolution Building Science Ltd.  
 Geoff Triggs  
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 email:ebst@shaw.ca

**BUILDING ENVELOPE:**  
 Richard Kadulski Architect.  
 Richard Kadulski  
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 tel:604.689.1841  
 email:kadulski@direct.ca

**ELECTRICAL/MECHANICAL:**  
 SRC Engineering Consultants Ltd.  
 Bill Khangura  
 205-4180 Lougheed Hwy.  
 Burnaby B.C. V5C 6A7  
 tel:604.268.9091  
 email:bill@src-eng.com

**BUILDING CODE SUMMARY**

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 m<sup>2</sup>  
 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

**PEMBERTON BYLAW SUMMARY**

ZONING	C3		
<b>Building Height</b>	Permitted/Required	34.4 ft / 10.5m	Proposed 37'8" / 11.47m
<b>Building Setbacks</b>			
North Interior Lot Line	3.0		4.66m
South Lot Line	4.5m		44.3m
East Lot Line	4.5m		4.5m
West Interior Lot Line	3.0m		12.73m
<b>Parking</b>			
Handicap Surface	3		3
Surface			42
Parking Garage			28
<b>Total Parking</b>			<b>73</b>
<b>Lot Area</b>			53,121 sq.ft.
<b>Building Area</b>			13,064 sq.ft.
<b>Lot Coverage</b>	40%		24.60%
<b>Gross Building Area</b>			51,962 sq.ft.
<b>FSR</b>			0.98

**PROJECT DESCRIPTION**

**CIVIC ADDRESS:**  
 7350 Crabapple Court  
 Pemberton B.C.

**LEGAL DESCRIPTION:**  
 Lot 4, D.L. 203, Lillooet District, Plan KAP72731

**LIST OF DRAWINGS**

- ARCHITECTURAL**
- 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
- LANDSCAPE**
- L1 Landscape Plan

No.	Date	Appr	Revision Notes
No.	Date	Issue Notes	
#14-1005 Alpha Lk. Rd Whistler, BC. V0N 1B1 T: 604-902-0702 dmaguire7777@gmail.com www.dmaguirearchitect.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:	<b>A-000</b>
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

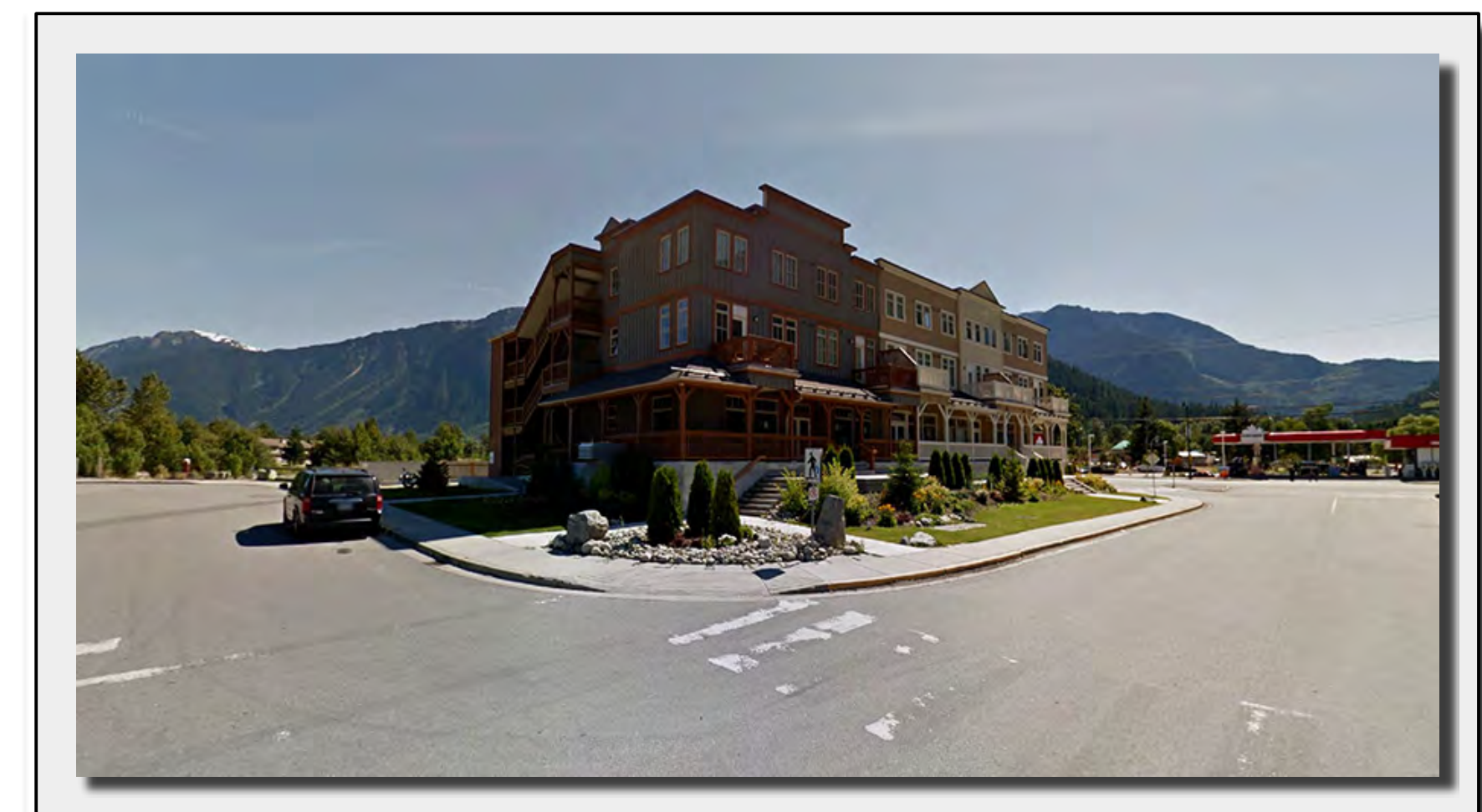


IMAGE 6 - FACING EAST TO CORNER OF ARBUTUS AND CRABAPPLE

No.	Date	Appr	Revision Notes

No.	Date	Issue Notes

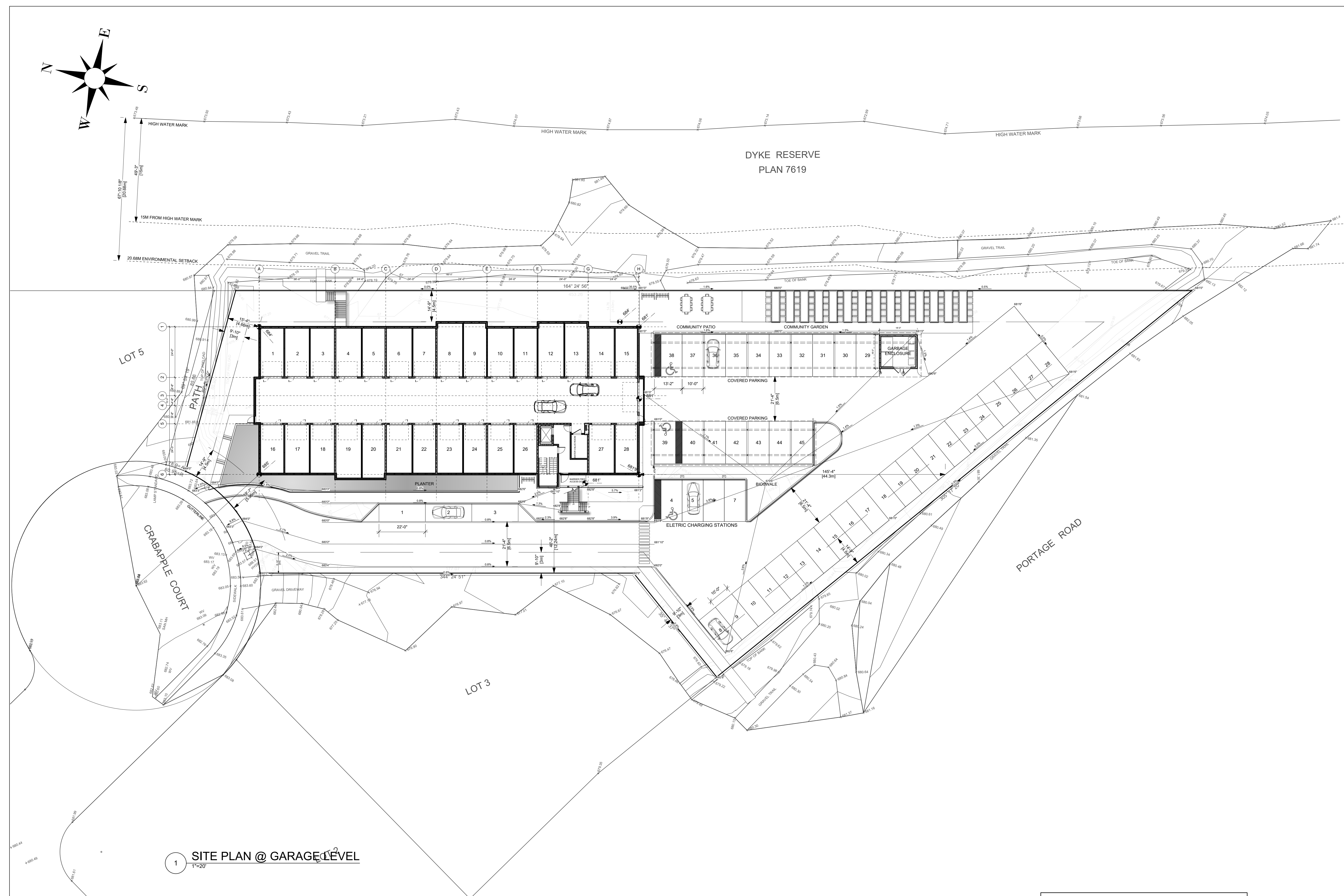
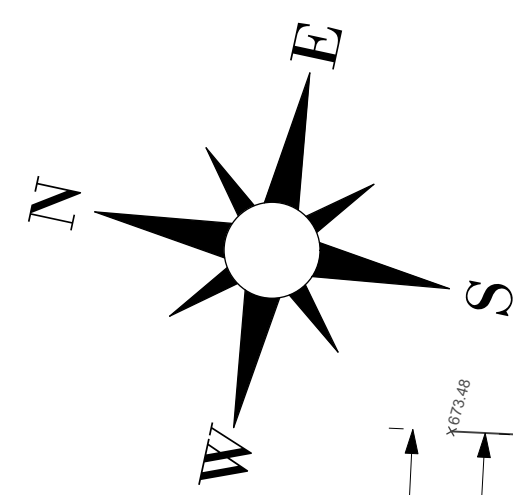
**DENNIS MAGUIRE**  
ARCHITECT  
maibc

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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: <b>A-001</b>
Drawn by: Tom Kennedy	
Reviewed by:	
Project ID:	

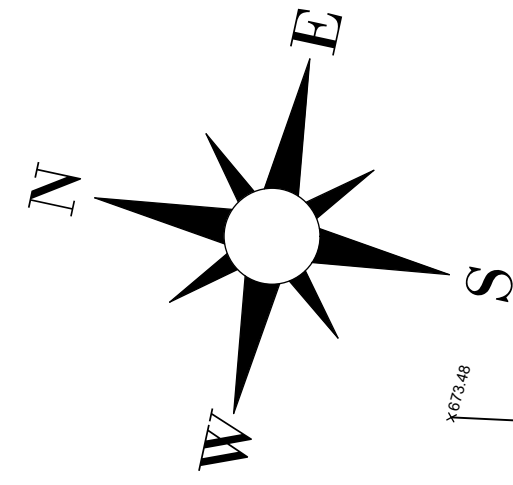


1 SITE PLAN @ GARAGE LEVEL  
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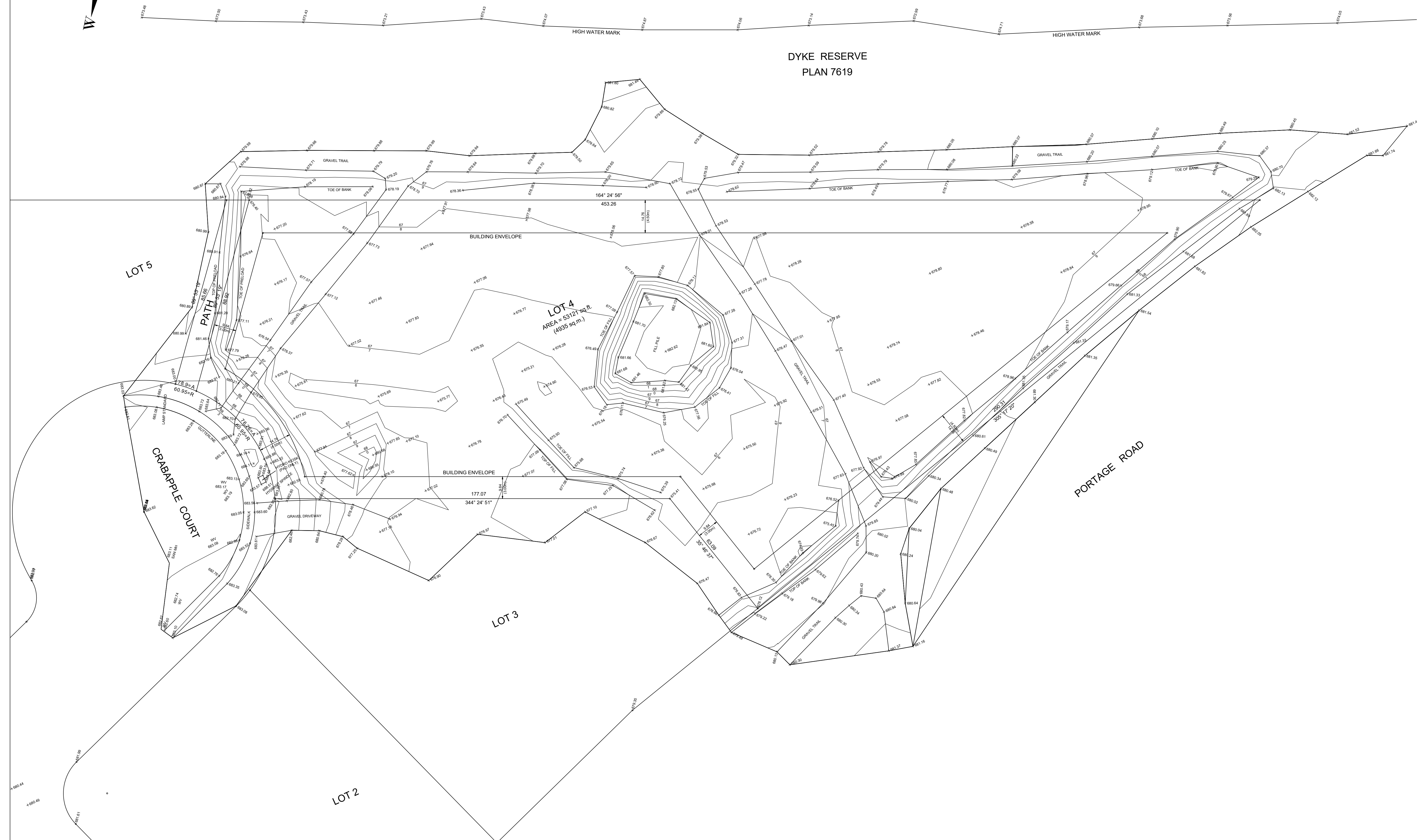
**ESTIMATED AVERAGE GRADE AT BUILDING CORNERS**  
685+684+681+681.75=682.93'

**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. VON 1B1  
JOB #16008  
ARCHITECT DOES NOT WARRANT THE ACCURACY OF THE INFORMATION.

No.	Date	Appr	Revision Notes
No.	Date	Issue Notes	
<p><b>DENNIS MAGUIRE</b></p> <p>maibc</p> <p>#14-1005 Alpha Lk. Rd Whistler, BC, VON 1B1 T: 604-902-0702 dmaguire7777@gmail.com www.dmachitect.ca</p>			
<p>Project Title: <b>Radius 2 7350 Crabapple Court Pemberton B.C.</b></p>			
<p>Sheet Title: <b>Site Plan</b></p>			
Date:	DEC 7-17	Scale:	As Noted
Partner in Charge:	Dennis Maguire	Sheet Number:	<b>A-101</b>
Drawn by:	Tom Kennedy	Reviewed by:	
Project ID:			

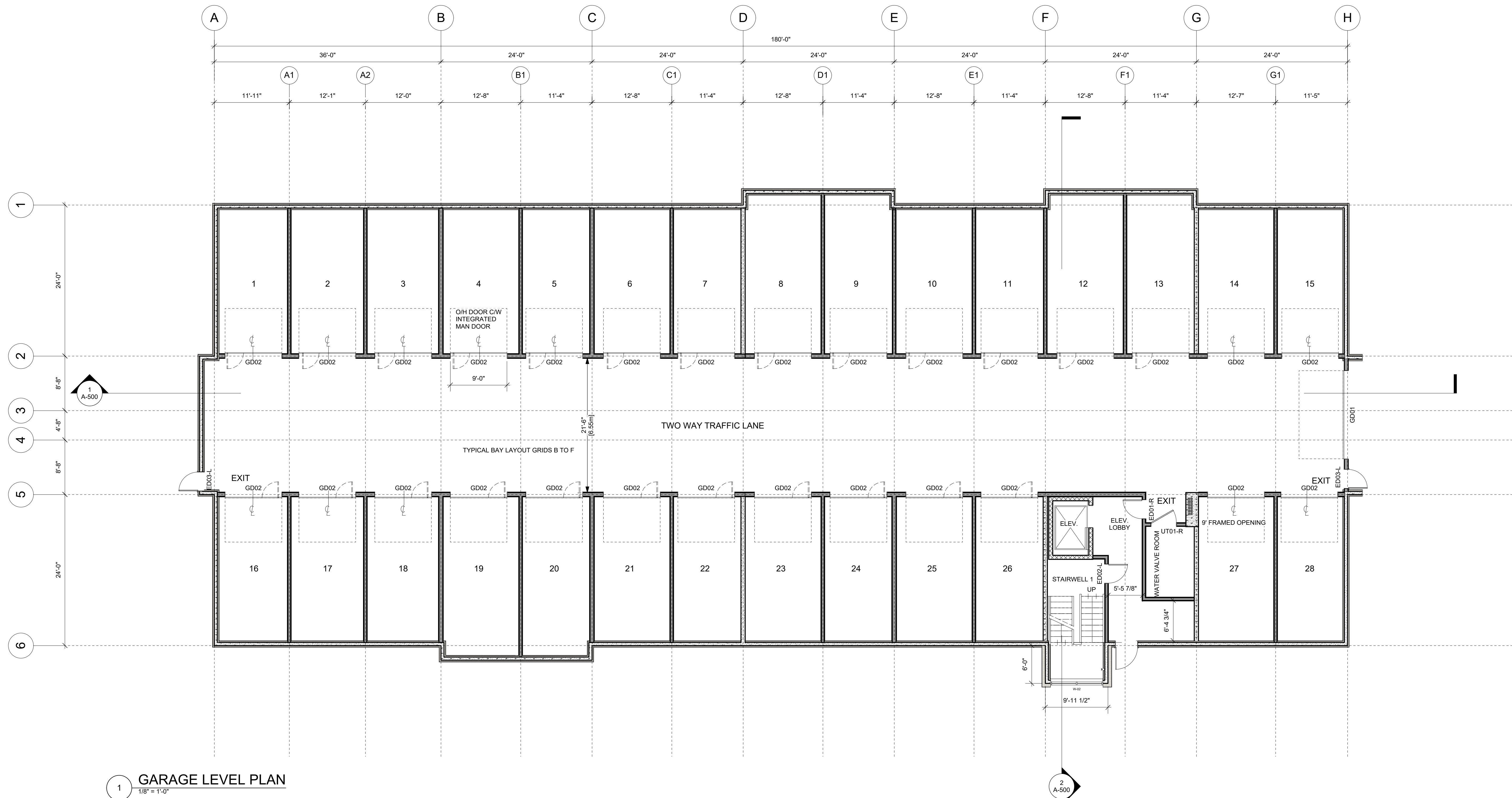


DYKE RESERVE  
PLAN 7619

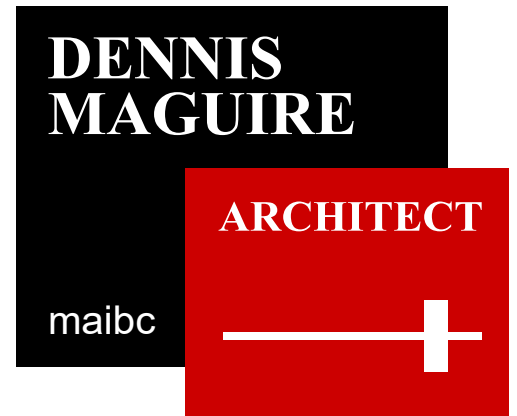


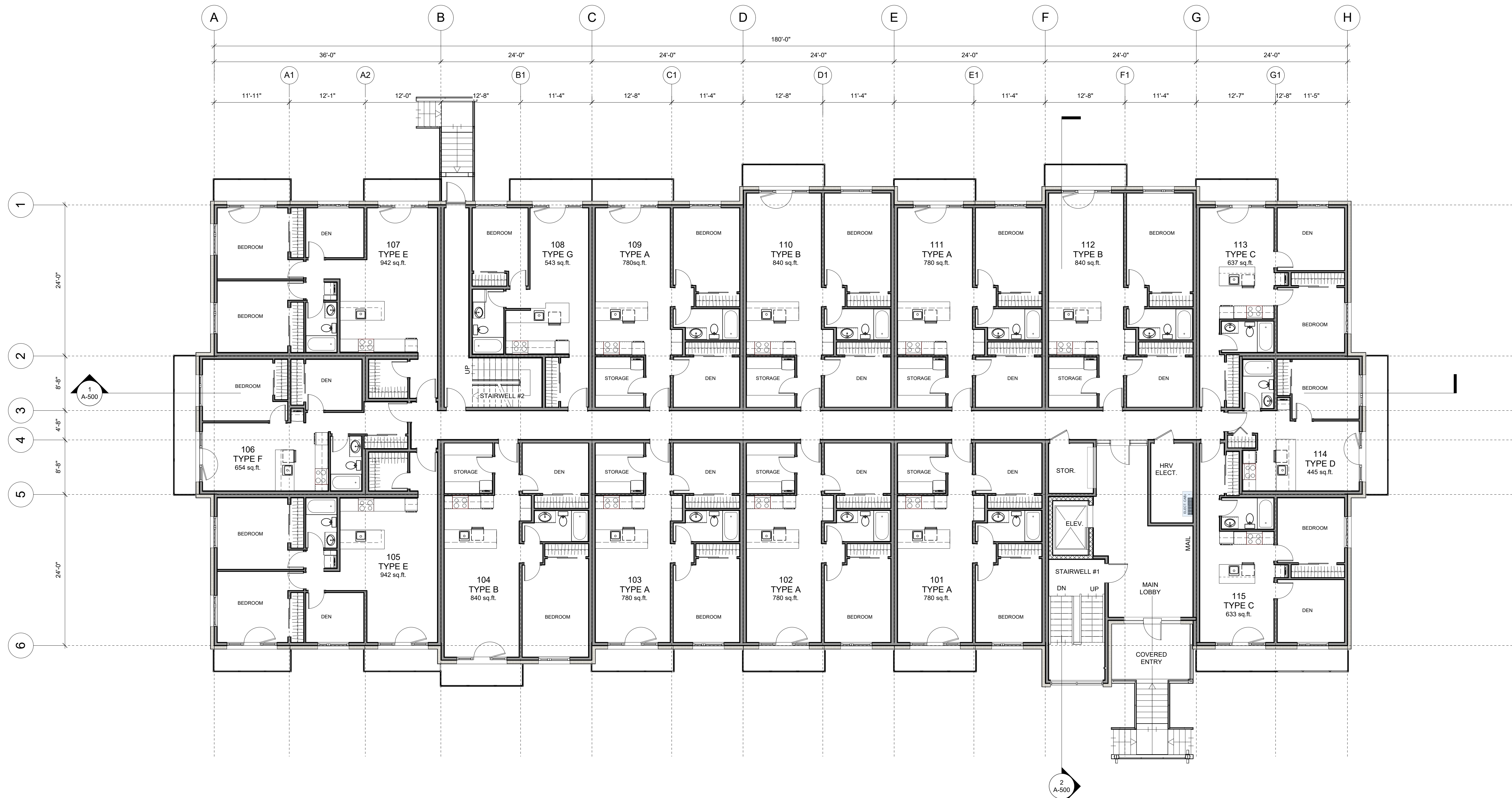
DOUG BUSH SURVEY SERVICES Ltd.  
Douglas J. Bush, ASct, RSIS  
Applied Science Technologist (Geomatics)  
Unit 18, 1370 Alpha Lake Road, Whistler, B.C. VON 1B1  
Phone 932-3314 / Fax: 932-3039 E-mail:  
doug@dbss.ca / http://dbss.ca

No.	Date	Appr	Revision Notes
No.	Date	Issue Notes	
<p>#14-1005 Alpha Lk. Rd Whistler, BC. VON 1B1 T: 604-902-0702 dmaguire7777@gmail.com www.dmachitect.ca</p>			
<p>Project Title: <b>Radius 2 7350 Crabapple Court Pemberton B.C.</b></p>			
<p>Sheet Title: <b>Survey Plan</b></p>			
Date:	Nov 15-17	Scale:	As Noted
Partner in Charge:	Dennis Maguire	Sheet Number:	<b>A-102</b>
Drawn by:	Tom Kennedy		
Reviewed by:			
Project ID:			

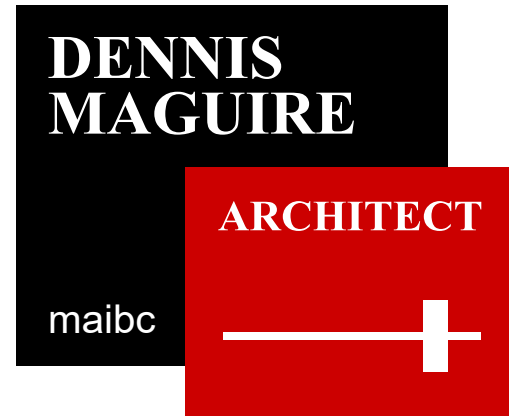


1 GARAGE LEVEL PLAN  
1/8" = 1'-0"

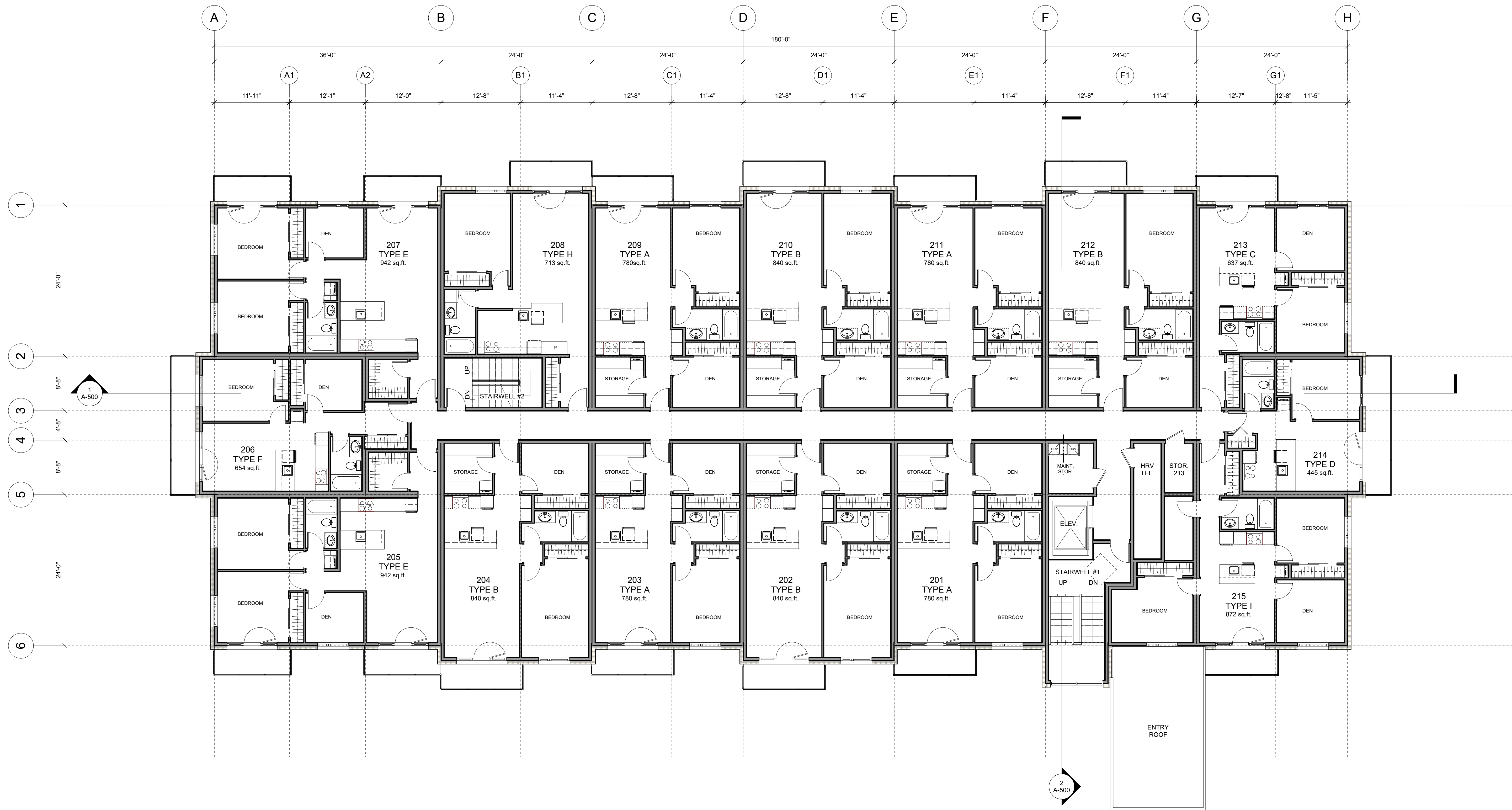
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No.	Date	Issue Notes	
			
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Project Title: <b>Radius 2</b> <b>7350 Crabapple Court</b> <b>Pemberton B.C.</b>			
Sheet Title: <b>Garage Plan</b>			
Date:	Nov 15-17	Scale:	As Noted
Partner in Charge:	Dennis Maguire	Sheet Number:	<b>A-200</b>
Drawn by:	Tom Kennedy		
Reviewed by:			
Project ID:			



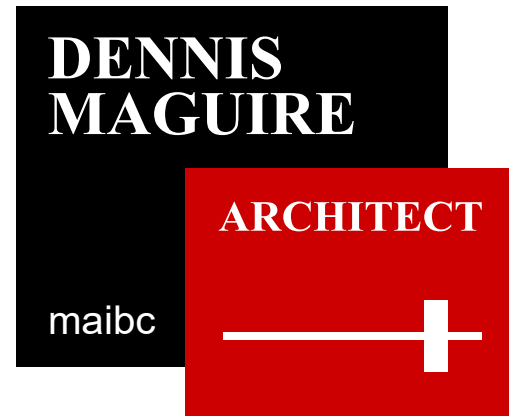
**1 FIRST FLOOR PLAN**  
1/8" = 1'-0"

No.	Date	Appr	Revision Notes
No.	Date	Issue Notes	
Seal:			
			
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Project Title:			
<b>Radius 2</b> <b>7350 Crabapple Court</b> <b>Pemberton B.C.</b>			
Sheet Title:			
<b>First Floor Plan</b>			
Date:	Nov 15-17	Scale:	As Noted
Partner in Charge:	Dennis Maguire	Sheet Number:	<b>A-201</b>
Drawn by:	Tom Kennedy		
Reviewed by:			
Project ID:			





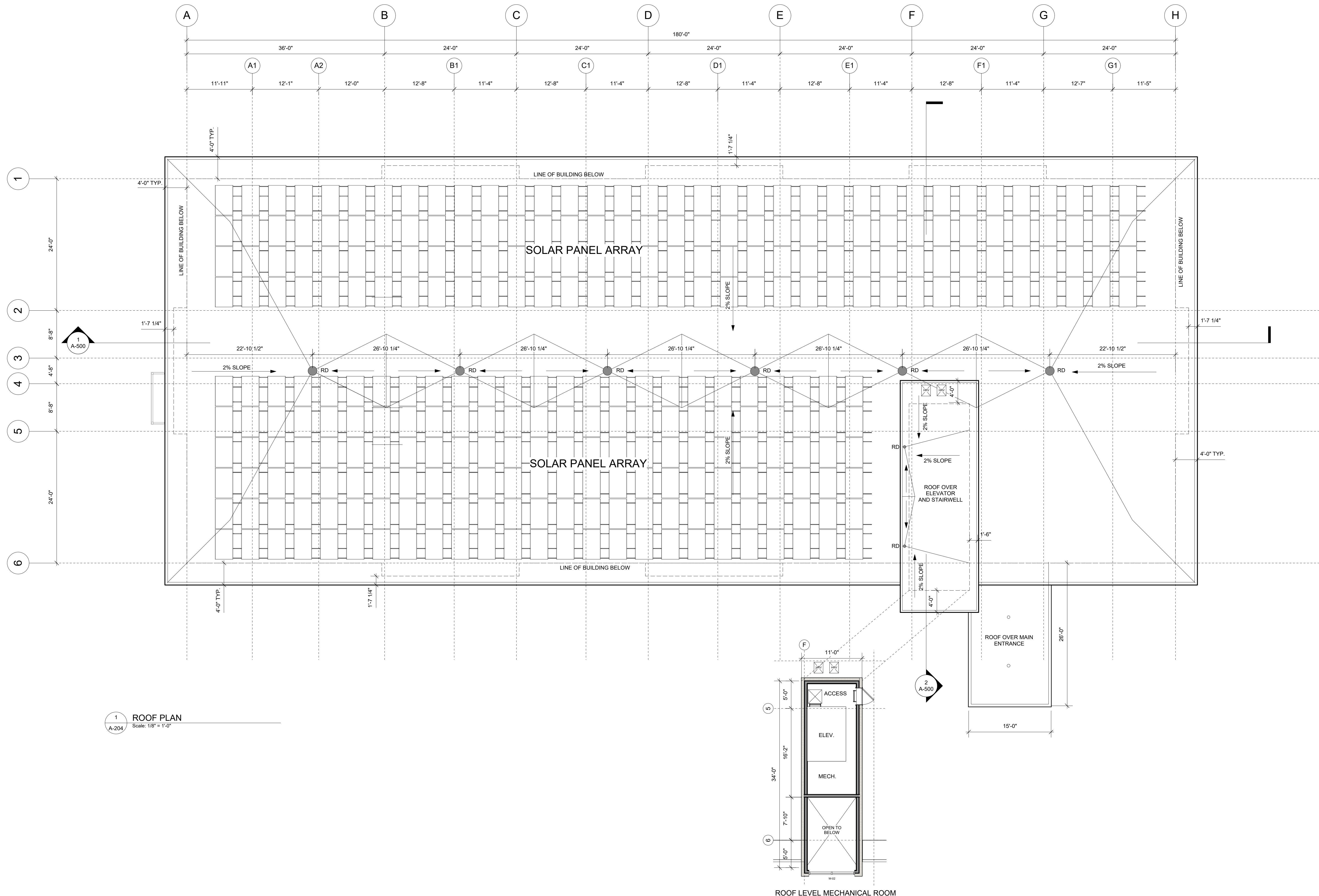
1 SECOND FLOOR PLAN  
1/8" = 1'-0"

No.	Date	Appr	Revision Notes
No.	Date	Issue Notes	
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#14-1005 Alpha Lk. Rd Whistler, BC, V0N 1B1 T: 604-902-0702 dmaguire7777@gmail.com www.dmaguire.ca			
Project Title:			
<b>Radius 2</b> <b>7350 Crabapple Court</b> <b>Pemberton B.C.</b>			
Sheet Title:			
<b>Second Floor Plan</b>			
Date:	Nov 15-17	Scale:	As Noted
Partner in Charge:	Dennis Maguire	Sheet Number:	<b>A-202</b>
Drawn by:	Tom Kennedy		
Reviewed by:			
Project ID:			



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

No.	Date	Appr	Revision Notes
No.	Date	Issue Notes	
<p>#14-1005 Alpha Lk. Rd Whistler, BC, VON 1B1 T: 604-902-0702 dmaguire7777@gmail.com www.dmaguire.ca</p>			
<p>Project Title: Radius 2 7350 Crabapple Court Pemberton B.C.</p>			
<p>Sheet Title: Third Floor Plan</p>			
Date:	Nov 15-17	Scale:	As Noted
Partner in Charge:	Dennis Maguire	Sheet Number:	<b>A-203</b>
Drawn by:	Tom Kennedy		
Reviewed by:			
Project ID:			



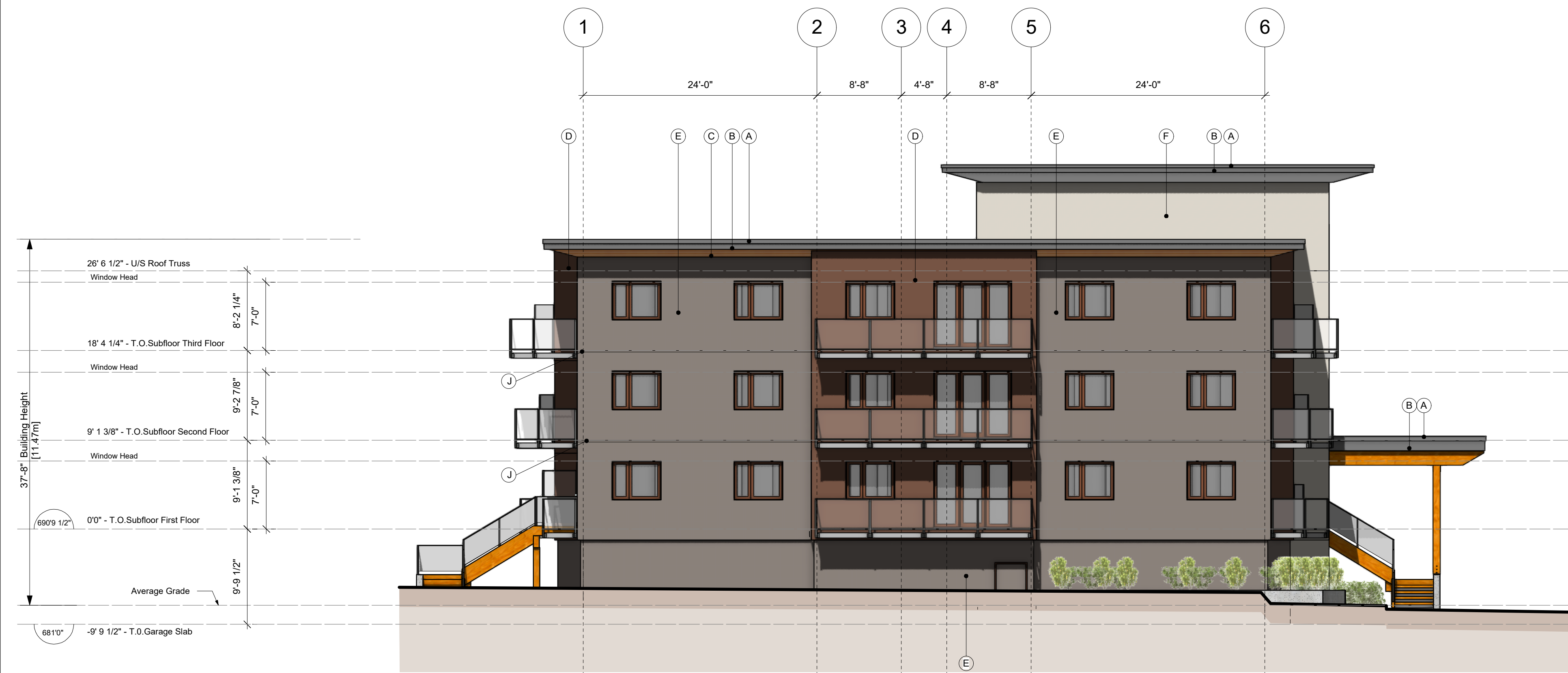
1 ROOF PLAN  
Scale: 1/8" = 1'-0"

ROOF LEVEL MECHANICAL ROOM

No.	Date	Appr	Revision Notes
No.	Date	Issue Notes	
<p><b>DENNIS MAGUIRE</b> ARCHITECT maibc</p> <p>#14-1005 Alpha Lk. Rd Whistler, BC, VON 1B1 T: 604-902-0702 dmaguire7777@gmail.com www.dmarchitect.ca</p>			
<p>Project Title: Radius 2 7350 Crabapple Court Pemberton B.C.</p>			
<p>Sheet Title: Roof Plan</p>			
Date:	Nov 15-17	Scale:	As Noted
Partner in Charge:	Dennis Maguire	Sheet Number:	A-204
Drawn by:	Tom Kennedy	Reviewed by:	
Project ID:			



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

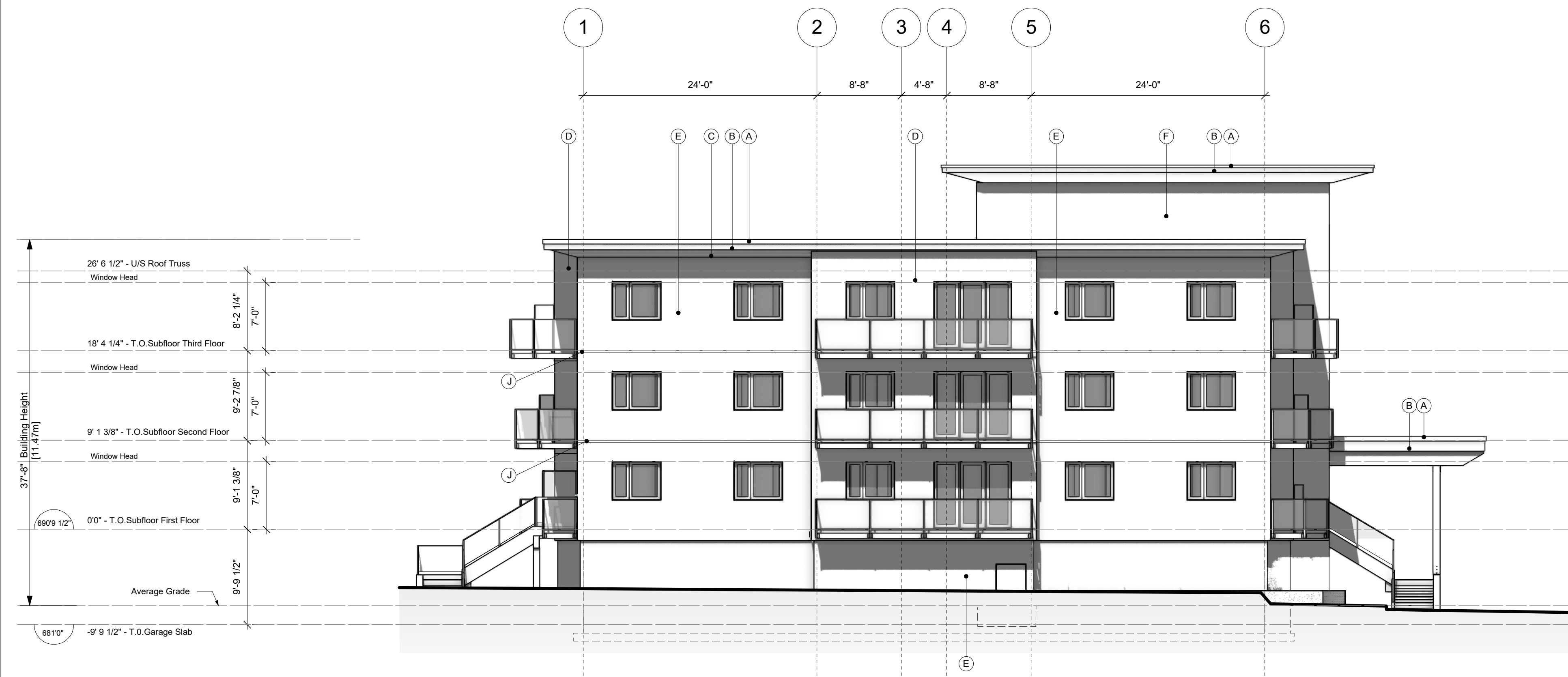
**MATERIAL LEGEND:**

- 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
No.	Date	Issue Notes	
<p>Seal:</p>			
<p><b>DENNIS MAGUIRE</b> ARCHITECT maibc</p>			
<p>#14-1005 Alpha Lk. Rd Whistler, BC, VON 1B1 T: 604-902-0702 dmaguire7777@gmail.com www.dmaguire.ca</p>			
<p>Project Title: <b>Radius 2 7350 Crabapple Court Pemberton B.C.</b></p>			
<p>Sheet Title: <b>West &amp; North Elevations</b></p>			
Date:	Nov 15-17	Scale:	As Noted
Partner in Charge:	Dennis Maguire	Sheet Number:	<b>A-400C</b>
Drawn by:	Tom Kennedy	Reviewed by:	
Project ID:			



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



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

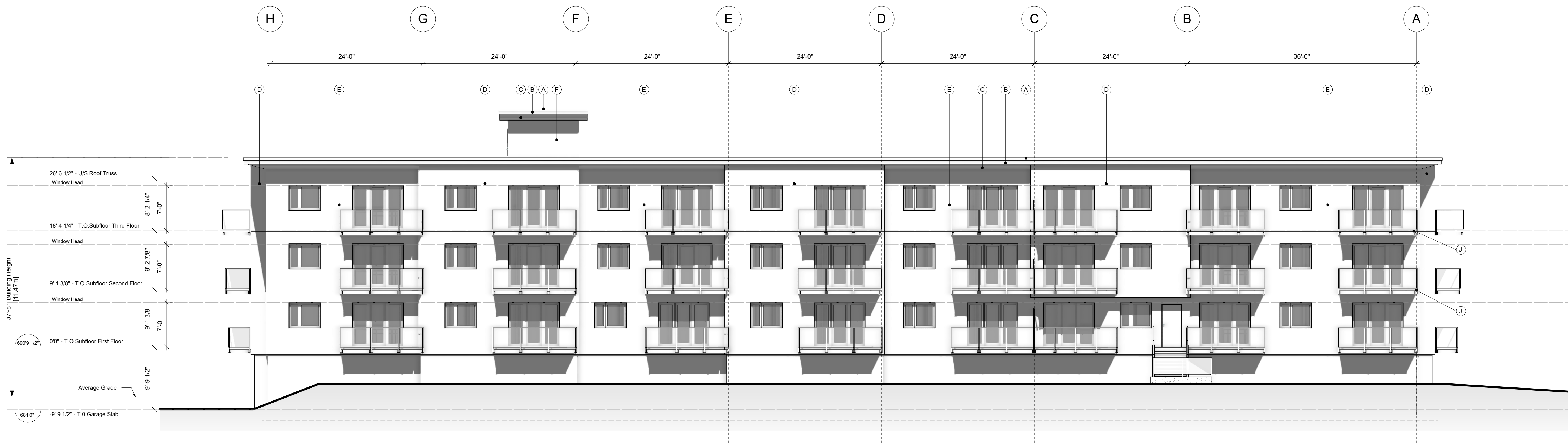
**NAFS**  
All Windows and Doors & Skylights  
Must Meet NAFS Canadian Supplement Requirements  
Province: British Columbia  
Location: Pemberton  
Building Height : 10m or below  
Terrain : Open  
Class : Multi-Residential

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

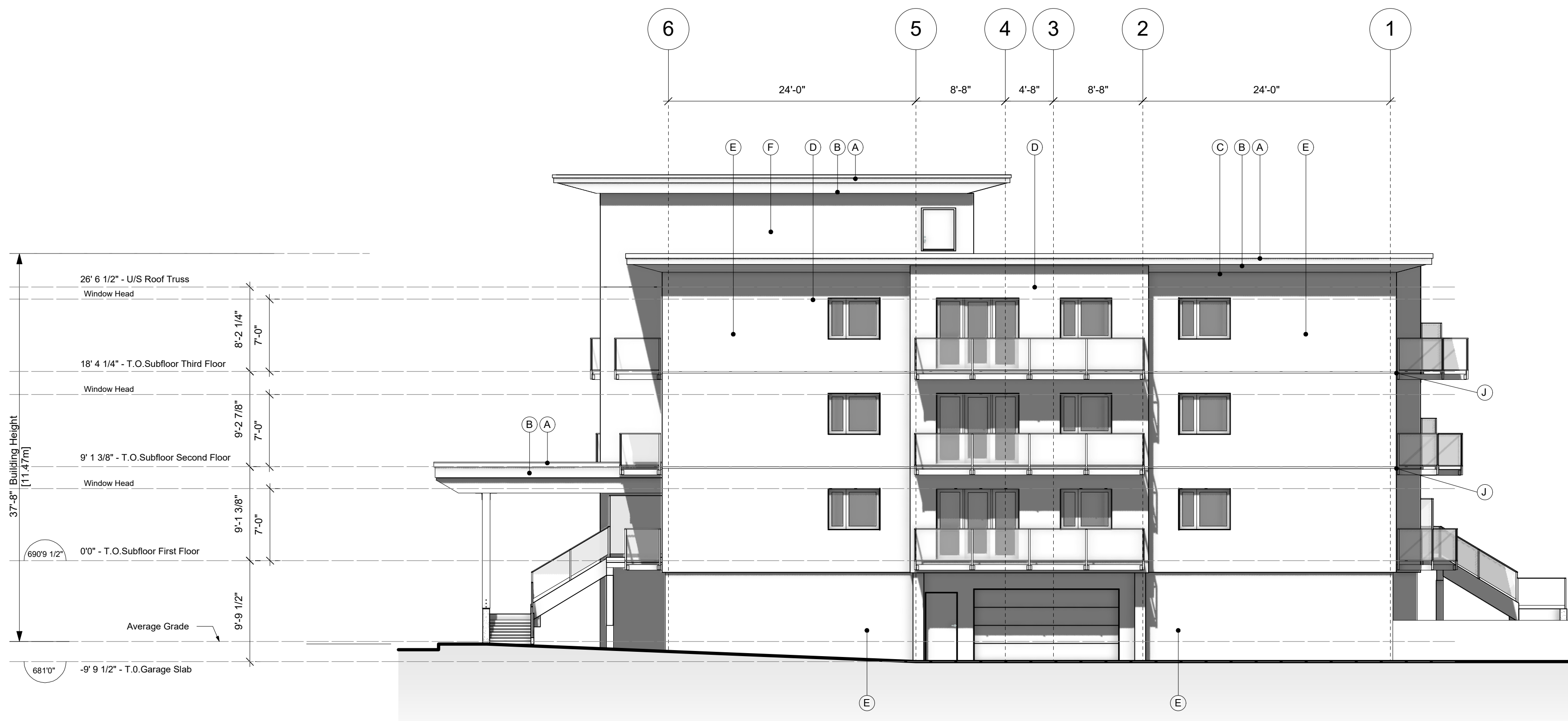
**MATERIAL LEGEND:**

- 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
No.	Date	Issue Notes	
Scale:			
#14-1005 Alpha Lk. Rd Whistler, BC. V0N 1B1 T: 604-902-0702 dmaguire7777@gmail.com www.dmaguire.ca			
Project Title:			
<b>Radius 2</b> <b>7350 Crabapple Court</b> <b>Pemberton B.C.</b>			
Sheet Title:			
<b>West &amp; North Elevations</b>			
Date:	Nov 15-17	Scale:	As Noted
Partner in Charge:	Dennis Maguire	Sheet Number:	<b>A-400</b>
Drawn by:	Tom Kennedy		
Reviewed by:			
Project ID:			



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



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

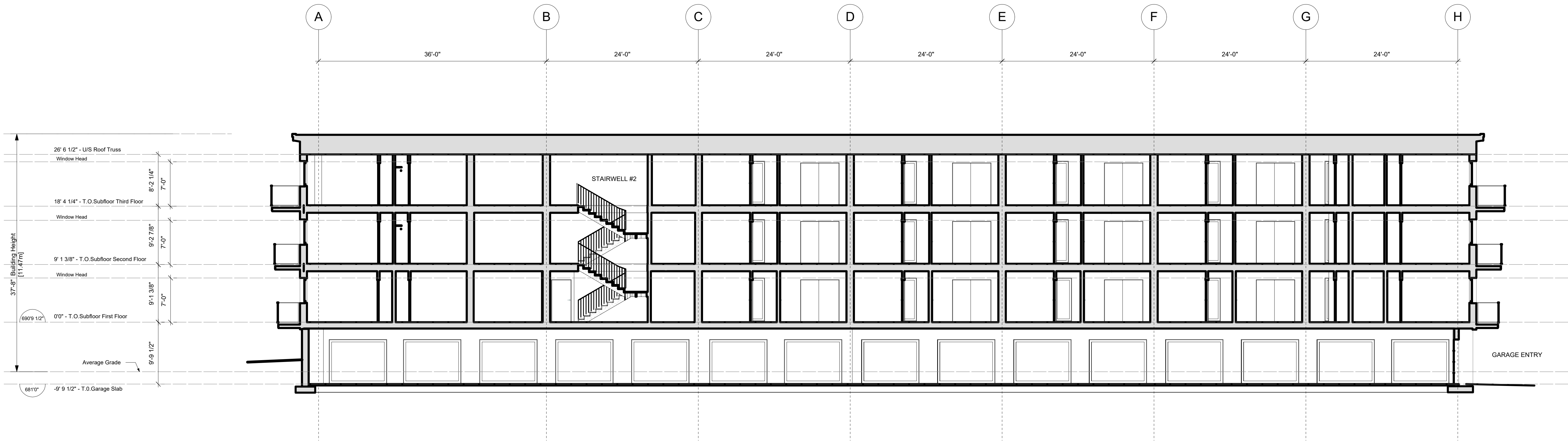
**NAFS**  
All Windows and Doors & Skylights  
Must Meet NAFS Canadian Supplement Requirements  
Province: British Columbia  
Location: Pemberton  
Building Height: 10m or below  
Terrain: Open  
Class: Multi-Residential

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

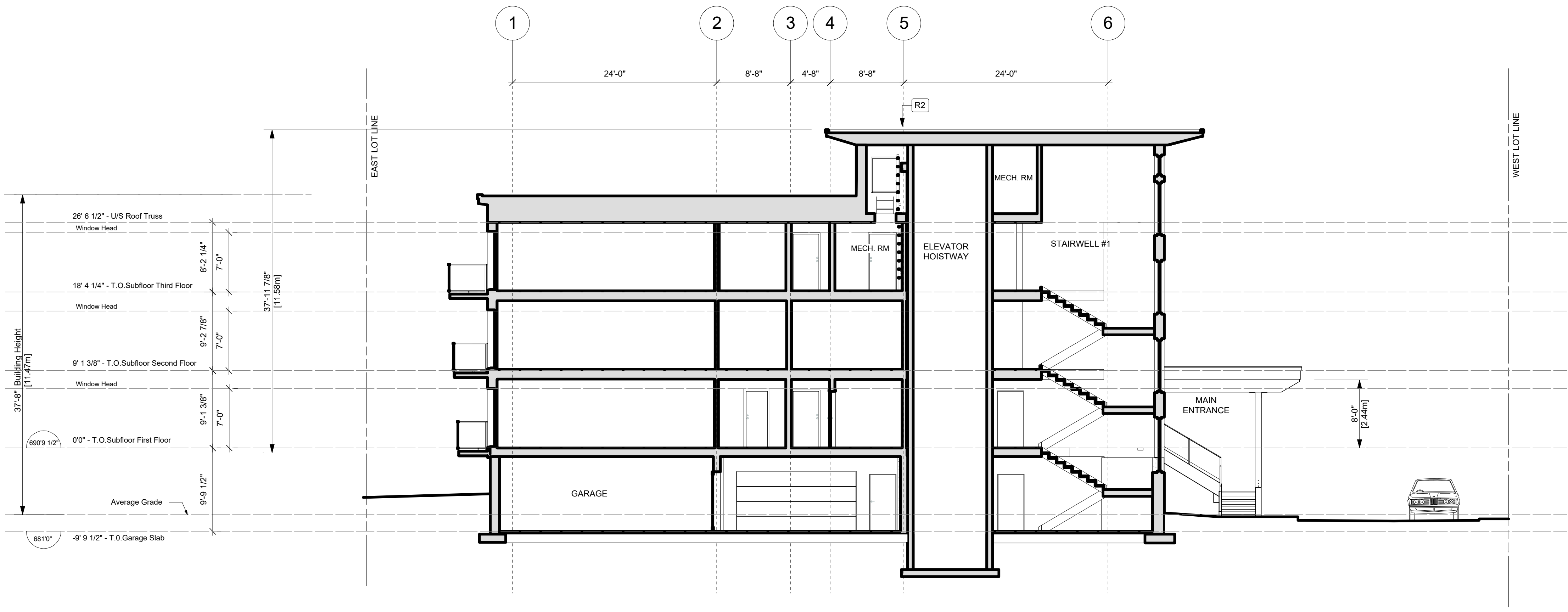
**MATERIAL LEGEND:**

- 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
No.	Date	Issue Notes	
<p><b>DENNIS MAGUIRE</b> ARCHITECT maibc</p> <p>#14-1005 Alpha Lk. Rd Whistler, BC, VON 1B1 T: 604-902-0702 dmaguire7777@gmail.com www.dmarchitect.ca</p>			
<p>Project Title: <b>Radius 2 7350 Crabapple Court Pemberton B.C.</b></p>			
<p>Sheet Title: <b>East &amp; South Elevations</b></p>			
Date:	Aug 29-17	Scale:	As Noted
Partner in Charge:	Dennis Maguire	Sheet Number:	<b>A-401</b>
Drawn by:	Tom Kennedy	Reviewed by:	
Project ID:			



1 NORTH-SOUTH SECTION  
1/8" = 1'-0"



2 EAST-WEST SECTION  
1/8" = 1'-0"

No.	Date	Appr	Revision Notes
No.	Date	Issue Notes	
#14-1005 Alpha Lk. Rd Whistler, BC, VON 1B1 T: 604-902-0702 dmaguire7777@gmail.com www.dmaguire.ca			
Project Title:		<b>Radius 2</b> 7350 Crabapple Court Pemberton B.C.	
Sheet Title: <b>Building Sections</b>			
Date:	Nov 15-17	Scale:	As Noted
Partner in Charge:	Dennis Maguire	Sheet Number:	<b>A-500</b>
Drawn by:	Tom Kennedy		
Reviewed by:			
Project ID:			















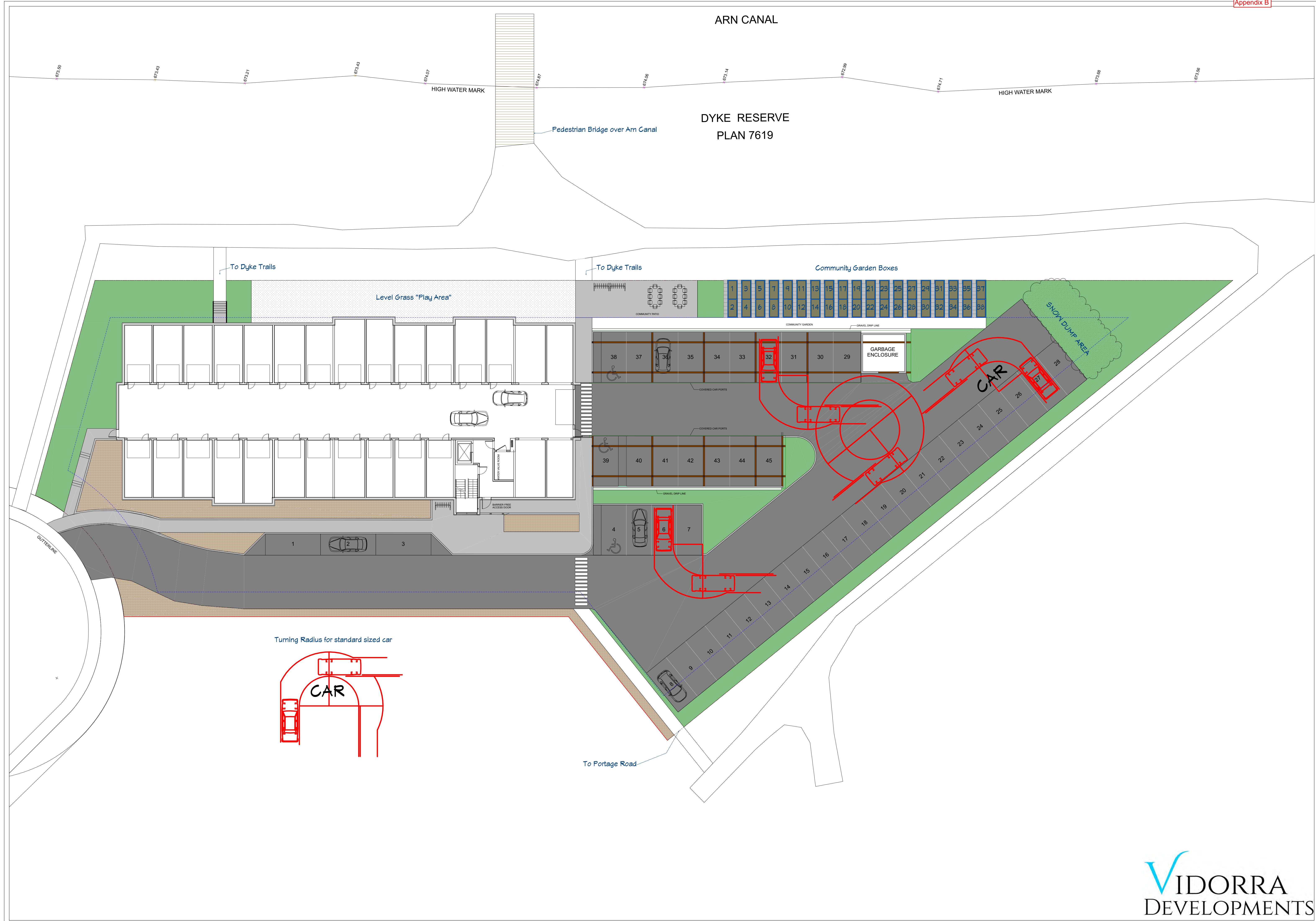












REVISION TABLE	NUMBER	DATE	REVISION BY	DESCRIPTION

**Innovation**  
BUILDING GROUP

Orion  
Site Plan (Turning Radius)

DRAWINGS PROVIDED BY:

DATE:

2/7/2018

SCALE:

1/16"=1'

SHEET:

S-200



ID	PLANT SPECIES	PLANT SIZE	PLANT TYPE	PLANT COLOR	PLANT SHAPES
01	SPICE BURNING	10 Pot	SP	Green	Round
02	BLUE WEDGE YEW	20 Pot	SP	Green	Columnar
03	BLUE PINE	10 Pot	SP	Green	Columnar
04	RED DOGWOOD	5-TR B&B	SP	Red	Round
05	DOGWOOD	5-TR B&B	SP	White	Round
06	DOGWOOD	5-TR B&B	SP	White	Round
07	DOGWOOD	5-TR B&B	SP	White	Round
08	DOGWOOD	5-TR B&B	SP	White	Round
09	DOGWOOD	5-TR B&B	SP	White	Round
10	DOGWOOD	5-TR B&B	SP	White	Round
11	DOGWOOD	5-TR B&B	SP	White	Round
12	DOGWOOD	5-TR B&B	SP	White	Round
13	DOGWOOD	5-TR B&B	SP	White	Round
14	DOGWOOD	5-TR B&B	SP	White	Round
15	DOGWOOD	5-TR B&B	SP	White	Round
16	DOGWOOD	5-TR B&B	SP	White	Round
17	DOGWOOD	5-TR B&B	SP	White	Round
18	DOGWOOD	5-TR B&B	SP	White	Round
19	DOGWOOD	5-TR B&B	SP	White	Round
20	DOGWOOD	5-TR B&B	SP	White	Round
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23	DOGWOOD	5-TR B&B	SP	White	Round
24	DOGWOOD	5-TR B&B	SP	White	Round
25	DOGWOOD	5-TR B&B	SP	White	Round
26	DOGWOOD	5-TR B&B	SP	White	Round
27	DOGWOOD	5-TR B&B	SP	White	Round
28	DOGWOOD	5-TR B&B	SP	White	Round
29	DOGWOOD	5-TR B&B	SP	White	Round
30	DOGWOOD	5-TR B&B	SP	White	Round
31	DOGWOOD	5-TR B&B	SP	White	Round
32	DOGWOOD	5-TR B&B	SP	White	Round
33	DOGWOOD	5-TR B&B	SP	White	Round
34	DOGWOOD	5-TR B&B	SP	White	Round
35	DOGWOOD	5-TR B&B	SP	White	Round
36	DOGWOOD	5-TR B&B	SP	White	Round
37	DOGWOOD	5-TR B&B	SP	White	Round
38	DOGWOOD	5-TR B&B	SP	White	Round

- Bark Mulch
- Level Grass "Play Area"
- Wildflow / Wild Grass Seed Mix
- Area to blend with off site landscaping
- Concrete Walkway
- On Site Gravel Path
- Off Site Gravel Path
- Asphalt Paved Surface

**Note:**  
Landscaping will be irrigated with controls set to existing Village of Pemberton watering guidelines.  
Irrigation plan to be provided by irrigation contractor.

REVISION TABLE	NUMBER	DATE	REVISION BY	DESCRIPTION

January 12, 2018

Our Reference: 30387

**Village of Pemberton**

PO Box 100  
7400 Prospect Street  
Pemberton, BC V0N 2L0

Attention: Lisa Pedrini, Village Planner

Dear Madam:

**Reference: Review Comments for Development Permit Application – Radius2 (DPA012)**

ISL Engineering & Land Services has completed our initial review of the development permit application for the above mentioned project. The following items should be considered as requirements for this project:

Part of the development permit application process requires an evaluation of the water and sanitary sewer servicing be completed for this project. Pursuant to the Village's Subdivision and Development Control Bylaw, the Village of Pemberton requires the Developer to cover the Village's engineering consultant's cost to update and evaluate both the water and sanitary system models as they pertain to any proposed works. These computer models must be maintained by the Village to ensure the existing infrastructure is adequately sized to supply sufficient capacity for the developing community.

The following information is to be provided in a package for evaluation:

- AutoCAD based base plan illustrating the onsite collection/distribution system of each utility. Base plan must be referenced to legal cadastral.
- Sanitary catchment plan complete with calculations and expected pipe inverts.
- Water system plan complete with all expected fixtures (fire hydrants, air valves etc. if applicable) and load calculations. Fire Underwriters Survey fire flow calculation sheet under a Professional Engineer's seal.
- Proposed offsite works in AutoCAD format for each utility as supported above (if applicable).
- Preliminary ground elevations within the development.

Offsite sanitary and water infrastructure improvements may be required once the design flows have been provided to the Village and the existing systems including pipe networks, pump stations, forcemains and other related infrastructure has been evaluated.

Additional comments include the following:

1. A Stormwater Management Report will be required as part of development of this site. The report shall include capacity calculations of stormwater runoff from onsite and all offsite drainage with regards to all existing and proposed facilities affected. Drainage facilities that provide stormwater treatment shall be used as part of this development (such as bioswales if supported by geotechnical analysis) and oil and grit separators. Such facilities would be supported by LEED principles. Offsite improvements may be required as determined by the Development Engineer as necessary; the presence of infrastructure offsite does not necessarily imply that there is available capacity. The drainage corridor on the north side of the property shall remain and shall be improved as necessary to convey anticipated storm water flows.
2. The Village will require that all improvement works including but not limited to water, storm and sanitary infrastructure and all road works, meet the highest of the following three standards:
  - Village of Pemberton Subdivision and Development Control Bylaw
  - Master Municipal Construction Documents (MMCD), latest edition
  - Sound engineering practice with approval by the Village.
3. Given acceptance of the proposed site works and services, a detailed construction cost estimate shall be prepared by a Professional Engineer registered in the Province of British Columbia and in good standing will be required by the Village of Pemberton and will form as the basis for the Servicing Agreement and any bonding requirements. The Developer will be required to enter into a Servicing Agreement with the Village of Pemberton for all site improvement works as outlined in the current Subdivision and Development Control Bylaw.
4. The Development application shall include a completed traffic impact study that should, among other items, address impacts to Arbutus Road, Portage Road and Highway in terms of traffic flows, access and parking arrangements. Ultimate scope of the study shall be approved by the Village prior to commencement of the works.
5. A 3m wide gravel trail is required to be built adjacent to the north side of the property with connection to the existing letdown on Crabapple Court and existing gravel trail at the dyke. The trail is to be built with a minimum of 150mm thick 19mm minus gravel base and granular surfacing. Please contact the Village of Pemberton for the granular surfacing specification for the trail.
6. Provide 1-50mm dia. RPVC conduit and pull boxes for future lighting of the existing bridge that crosses over the Arn Canal. The conduit shall be installed at a minimum of 0.9m bury from the existing streetlight on Crabapple Court to the existing bridge with concrete pullboxes at any changes in direction.
7. Confirm the presence or condition of a drainage outlet on the neighboring vacant lot immediately west of the subject property.
8. Provide a proposed cross section between the subject property and the neighboring lot immediately west of the subject property. Confirm if a retaining wall or fill slope is proposed to achieve proposed elevations.
9. The Site Plan A-101 appears to show one low spot for collection of all surface water on the site. Confirm this is sufficient or add additional catchbasins to provide adequate drainage and show curb cuts where appropriate to permit flow paths as shown on A-101.
10. Comment and approval from MOTI will be required as this property borders the MOTI Right-of-Way along Portage Road.
11. Comment and approval from the Pemberton Valley Dyking District will be required as this property borders the Dyke Reserve Lands.

The above comments do not necessarily represent a complete list of the development requirements. Should the applicant proceed with this concept, additional requirements may be imposed. Please do not hesitate to contact the undersigned if you would like to discuss this application further.

Yours truly,



Richard Avedon-Savage, P.Eng.,  
Senior Engineer

**VILLAGE OF PEMBERTON  
ADVISORY DESIGN REVIEW COMMISSION MINUTES**

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**Minutes** for the Advisory Design Review Commission of the Village of Pemberton held Thursday, January 25, 2018 at 5:45pm at 7400 Prospect Street.

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**MEMBER IN ATTENDANCE:** Tracy Napier (Chair)  
Caroline McBain  
Lisa Ames  
Woody Bishop (Chamber Representative)  
Annie Oja

**REGRETS:** Saad Hassan

**STAFF IN ATTENDANCE:** Lisa Pedrini, Senior Planner  
Tim Harris, Manager of Operations & Development Services  
Sheena Fraser, Manager of Corporate & Legislative Services (minutes)

**PROJECT REPRESENTATIVES:**

**Orion** Rod Nadeau  
Ryan Nadeau  
Dennis Maguire, Architect– by phone.

**GENERAL PUBLIC:** 0

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**1) CALL TO ORDER**

At 5:47 pm the meeting was called to order.

**2) MEMBERS & STAFF INTRODUCTIONS**

Lisa Pedrini, Senior Planner, welcomed everyone to the first meeting of the ADRC Commission for 2018. Pedrini noted that there are two new members on the Commission and extended a special welcome to Annie Oja and Lisa Ames.

Ms. Pedrini noted that the role of the ADRC is to provide recommendations to Council that will assist in their consideration of development applications, and that the Commission itself was not a decision maker. Recommendations should be based on the Village's policies and plans, in particular the Official Community Plan and its Development Permit Guidelines.

The Commission members and Staff introduced themselves. **Review of Other Applicable Village Policies:**

Sheena Fraser, Manager of Corporate and Legislatives Services, advised that the Village has recently implemented a new process whereby all members of Village Committees or Commissions are required to review the Code of Conduct, Social Media Policy and Bullying & Harassment Policy and sign an acknowledgment form. Village policies apply to not only Council and Staff but volunteers such as those participating on Committees of Council. Commission members were asked to review the policies and sign and return the acknowledgment at their convenience.

Ms. Pedrini noted that as it is the beginning of a new year the Commission must elect a Chair and Vice-Chair.

**Commission Chair:**

Wood Bishop nominated Tracey Napier as Chair  
Lisa Ames seconded the nomination

Moved/Seconded

**THAT** Tracey Napier be appointed Chair of the ADRC for 2018.  
**CARRIED**

**Commission Vice Chair:**

Tracey Napier nominated Woody Bishop  
Annie Oja seconded the nomination

Moved/Seconded

**THAT** Woody Bishop be appointed Vice-Chair of the ADRC for 2018.  
**CARRIED**

**3) MINUTES**

Lisa Ames pointed out that she was unable to attend the December 4, 2017 meeting and would like her regrets noted for the record.

Moved/Seconded

**THAT** the minutes of the Advisory Design Review Commission Meeting, held Monday, December 4, 2017, be approved as amended.  
**CARRIED**

Lisa Pedrini provided an update on the status of the DPA010-BC Hydro Field Office/Works Yard (1363 Aster Street) advising that Council approved the DPA with conditions in December. Pedrini further noted that revised DPA008 -



CRESTLINE (1422, 1426, 1430 Portage Road) was considered at the January Council meeting at which the DPA was approved with conditions. Ms. Pedrini thanked the Commission members for their guidance and work on these two referrals.

**4) MAJOR DEVELOPMENT PERMIT: DPA012 and DVP120  
ORION  
7350 Crabapple Court**

Ms. Pedrini introduced Rod and Ryan Nadeau, who were in attendance, and Dennis Mcguire, Architect, who was attending by conference call.

Rod Nadeau introduced the project noting that the building is very similar to the Radius project, built on Arbutus Street, but that some of the features had been improved upon as a result of learning from the construction of Radius. In particular, Mr. Nadeau noted the following:

- Modification of the design due to better insulation product
- Trusses will be made of wood rather than steel
- Balconies will be larger and cantilevered so the connection to the main building is easier
- The interior layout and living space will not change

Mr. Nadeau reviewed some of the differences between the two buildings and noted that some of these were as a result of the grade differential of the lots. In particular:

- Parking has been moved to the south end of the building rather than in front like Radius
- Building is taller by 1 meter as a result of the lower grade
- The entrance is different in that the port cochere is smaller and access is at grade
- Wood-grained steel siding on soffit has been replaced on the bump outs with a stucco, three different colours of stucco are being proposed
- The floor heights will vary slightly as a result of using timber instead of steel
- Energy performance in Orion will be increased by over 10% and this has been accomplished through insulation and the building will be passive house certified
- The windows have been recessed by 6 inches with stucco returns to create a better look
- 28 underground parking stalls (with garages and storage space) will be provided with the remainder outside, including 17 under a carport. The parking exceeds the requirements by one space.

- Carport roof will house additional solar panels as a means to achieving net zero energy use
- Bioswale in the middle of the parking will address site drainage and the intent is to achieve minimal overflow or infiltration into the Village's stormwater system
- Landscaping design includes use of native plants from BC as per the Village's Planting List with attention paid to drought tolerant shrubs and trees in order to conserve water
- A planter will be built as a means of breaking up the building lines and provide privacy
- Although a 1 meter variance has been requested the height of the building at completion will be a little lower than the Gateway building next door

The Commission members provided comment respecting the following:

- Height of the retaining wall and what it will look like between the Orion lot and the lot to the west (Gateway 2)
- Need for safety railings given the height of the retaining wall
- Access to the Village trails
  - Mr. Nadeau noted that consideration has been given to the current flow of foot traffic across the existing empty lot and as such a pathway has been established through the property to link directly to the Arn Canal Trail / Bridge and that it will flow through to Crabapple Court.
- Purpose of the height variance
  - Mr. Nadeau noted that due to the grade level of the lot, and the Flood Construction Level which is quite high, a height variance of 1 meter is required to avoid berming up around the building which would give the appearance of "a building on top of an ant hill"
- Location of the loading zone to allow for short term deliveries or moving trucks
- Location of snow dump and consideration of establishing a second snow dump area
- Impacts of snow on the balconies
  - Mr. Nadeau noted that most of the balconies are covered by a 4 foot wide overhang except for those in the bump out areas which will have a little less coverage (2 feet) but snow should not be an issue except for the top decks
  - Snow from top decks could be removed by shoveling into planter/landscaping below
- Concerns that a more robust landscaping plan is needed along the edge of the property bordering Portage Road to hide the parking area and along the edge of the property bordering the Arn Canal; desire to see this addressed with the use of more evergreens (shrubs and trees)

- Drainage and how this will be managed especially in winter if it warms up and snow blocks the drains
- Site circulation and the lack of an easily-identified turnaround; desire to see a designated turnaround area
- Parking garage circulation challenging and tight with no turn around area – drivers will be forced to back out; suggestion to keep the first 2 stalls on either side open to allow for turnaround
- Storage areas and expectations as to how those will be used – will there be enough space to store bikes etc.
  - 10'x8' storage rooms are also provided in several of the unit designs
- Questions respecting the use of stucco given its reputation
- Suggestion to add more community garden spaces or split the boxes to allow for more opportunities for residents to garden
- Artist rendering is deceiving as it suggests that there is green space where the current Gateway parking lot is located; desire to see this adjusted
- Car/bike/dog wash locations should be indicated
- Overall building design and colours are pleasing and it is a good use of the property considering the siting constraints
- Purpose of the picnic area and whether it could be replaced with a small playground

### **Development Permit Application (DPA012)**

Moved/Seconded

**THAT** the ADRC recommend to Council that the Development Permit Application (DPA012) be supported subject to staff working with the applicant to address the following concerns:

- Site Circulation;
- Development of a landscaping plan by a landscape professional that includes more robust plantings along Highway 99/Portage Road border as a means of screening the parking lot and along the Arn Canal border to create a better feel and more usable green space for families;
- Establishment of an interim fencing plan between the neighbouring property to the west to address the look and safety of the retaining wall.

**CARRIED**

### **Development Variance Permit (DVP120)**

Moved/Seconded

**THAT** the ADRC recommend to Council that the variance of one (1) meter to accommodate the height differential due to the grade of the lot be supported.

**CARRIED**

**5) NEXT MEETING**

Ms. Pedrini advised the Commission that it is anticipated that the ADRC will be meeting at least once a month due to the amount of development activity and interest the Village is seeing.

Discussion took place with respect to the best day and time for the Commission members to meet and it was agreed that Monday's at 6PM is the preferred day of the week and time. Thursdays was also noted as a second possibility.

**6) ADJOURNMENT**

At 7:14 p.m. the meeting was adjourned.

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Tracy Napier  
ADRC Chair