Robinson - Fintry House

PERMIT DRAWINGS
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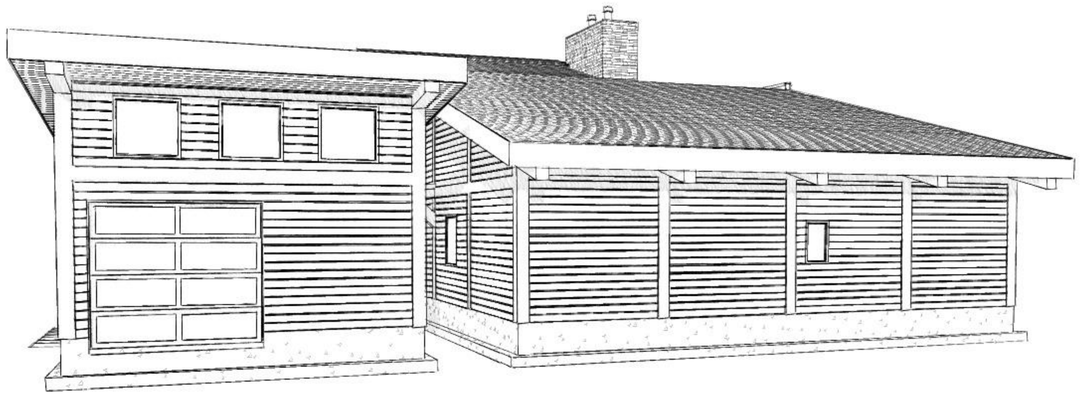
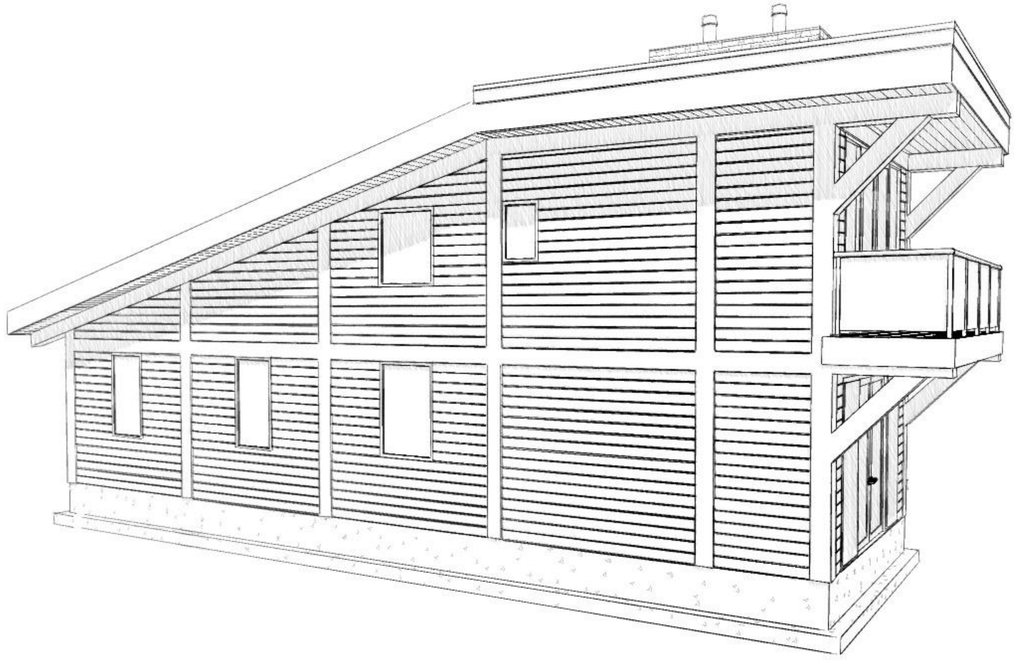
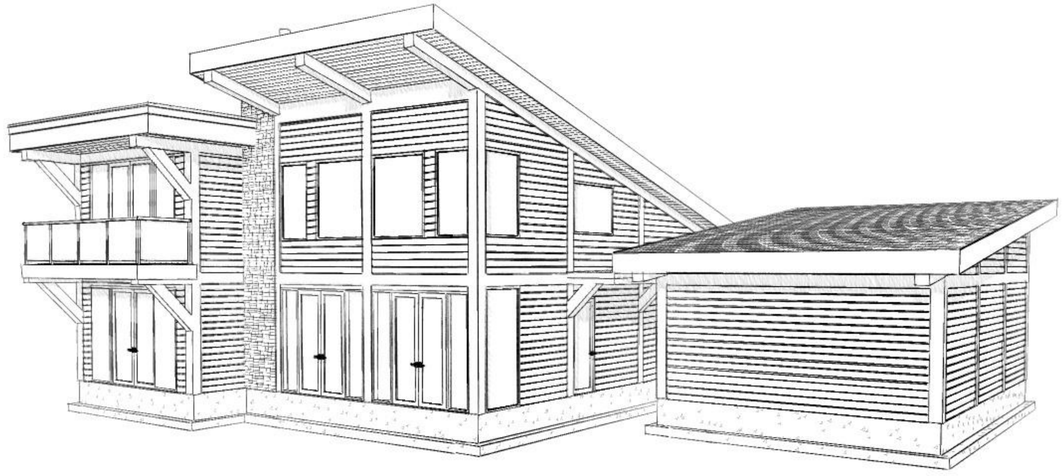


Front Perspective



Side Perspective



Rear Perspective

DATE ISSUED	DESCRIPTION
2020-03-13	PERMIT DRAWINGS

Cover Sheet

Robinson - Fintry House
PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

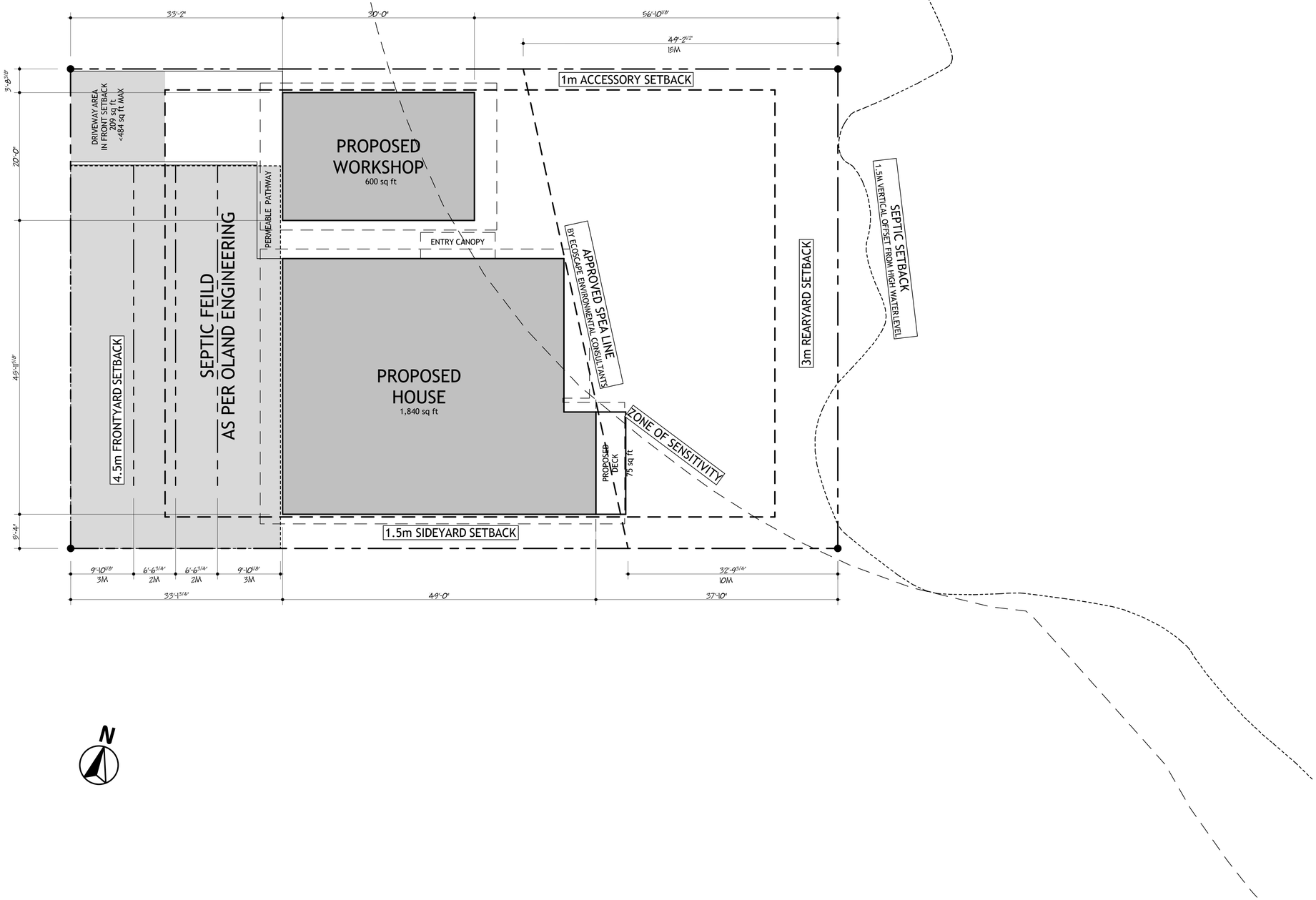
SCALE

SHEET No

A-001

TOTAL FLOOR AREA:	FINISHED
MAIN FLOOR	1,840 ft²
UPPER FLOOR	461 ft²
TOTAL LIVING SPACE	2,301 ft²
GARAGE	600 ft²
TOTAL BUILDING	2,901ft²

SITE COVERAGE: R1 Zoning	
PROPERTY AREA	= 8,999 ft²
HOUSE AREA	= 1,840 ft²
GARAGE AREA	= 600 ft²
DECK	= 72 ft²
TOTAL AREA	= 2,512 ft²
SITE COVERAGE	= 27.9%
MAXIMUM ALLOWABLE	= 35%
DRIVEWAY / PARKING AREA	= 879 ft²
TOTAL AREA	= 3,391 ft²
SITE COVERAGE	= 37.7%
MAXIMUM ALLOWABLE	= 50%



Site Plan
SCALE: 1/8" = 1'-0"

The Homesmith

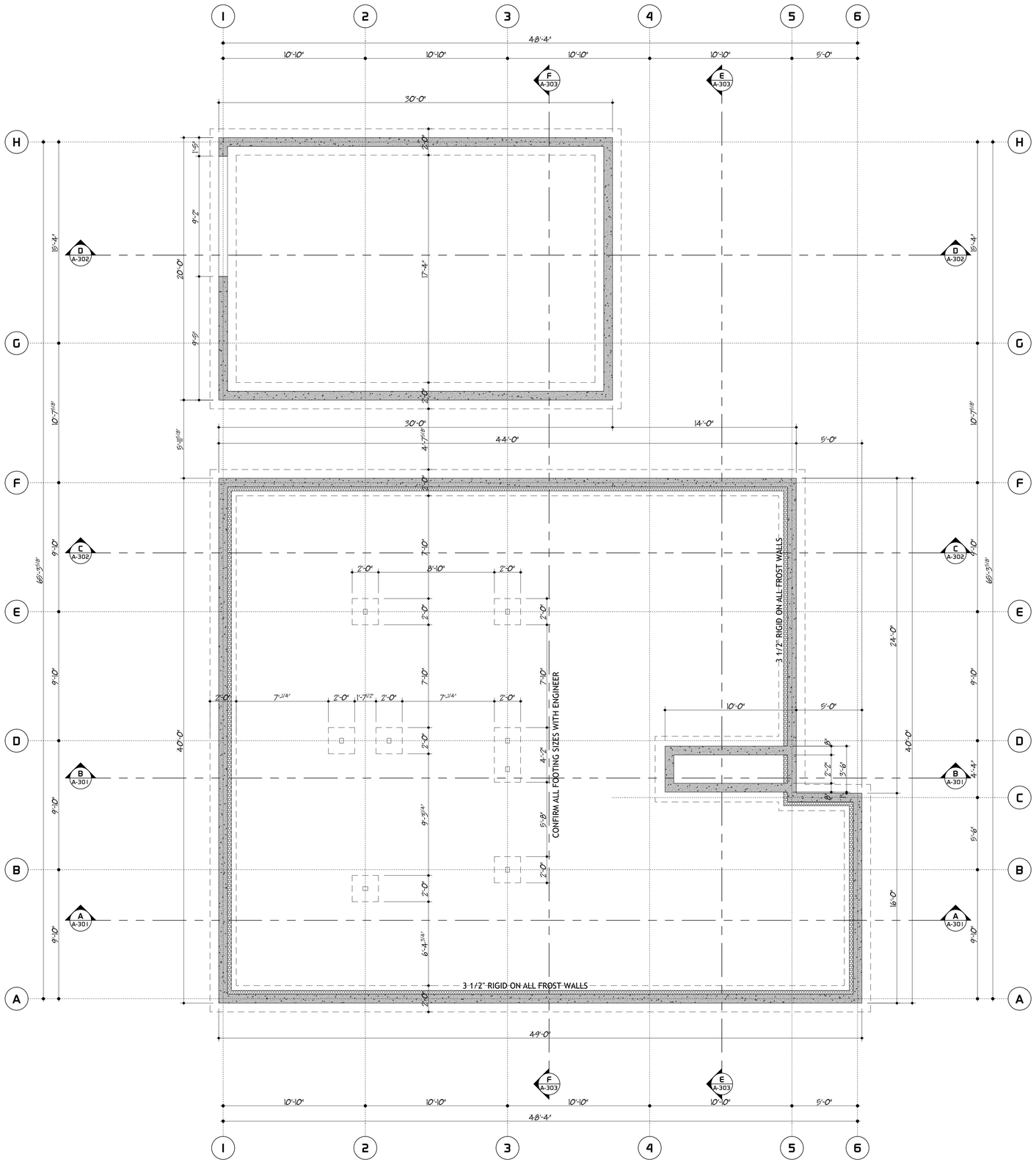
DATE ISSUED	DESCRIPTION
2020-03-13	PERMIT DRAWINGS

Site Plan

Robinson - Fintry House
PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

SCALE
1/8" = 1'-0"

SHEET No
A-101



Foundation Plan
SCALE: 1/4" = 1'-0"

CONCRETE VOLUMES:

FOOTINGS	= 11.52 M^3
FOUDATION WALLS	= 23.17 M^3
HOUSE SLAB	= 16.16 M^3
GARAGE SLAB	= 4.06 M^3

REFER TO ENGINEER'S DRAWINGS
FOR FOUNDATION WALL THICKNESS
FOOTING DIMENSIONS
AND REINFORCEMENT SPECIFICATIONS

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DATE ISSUED	DESCRIPTION
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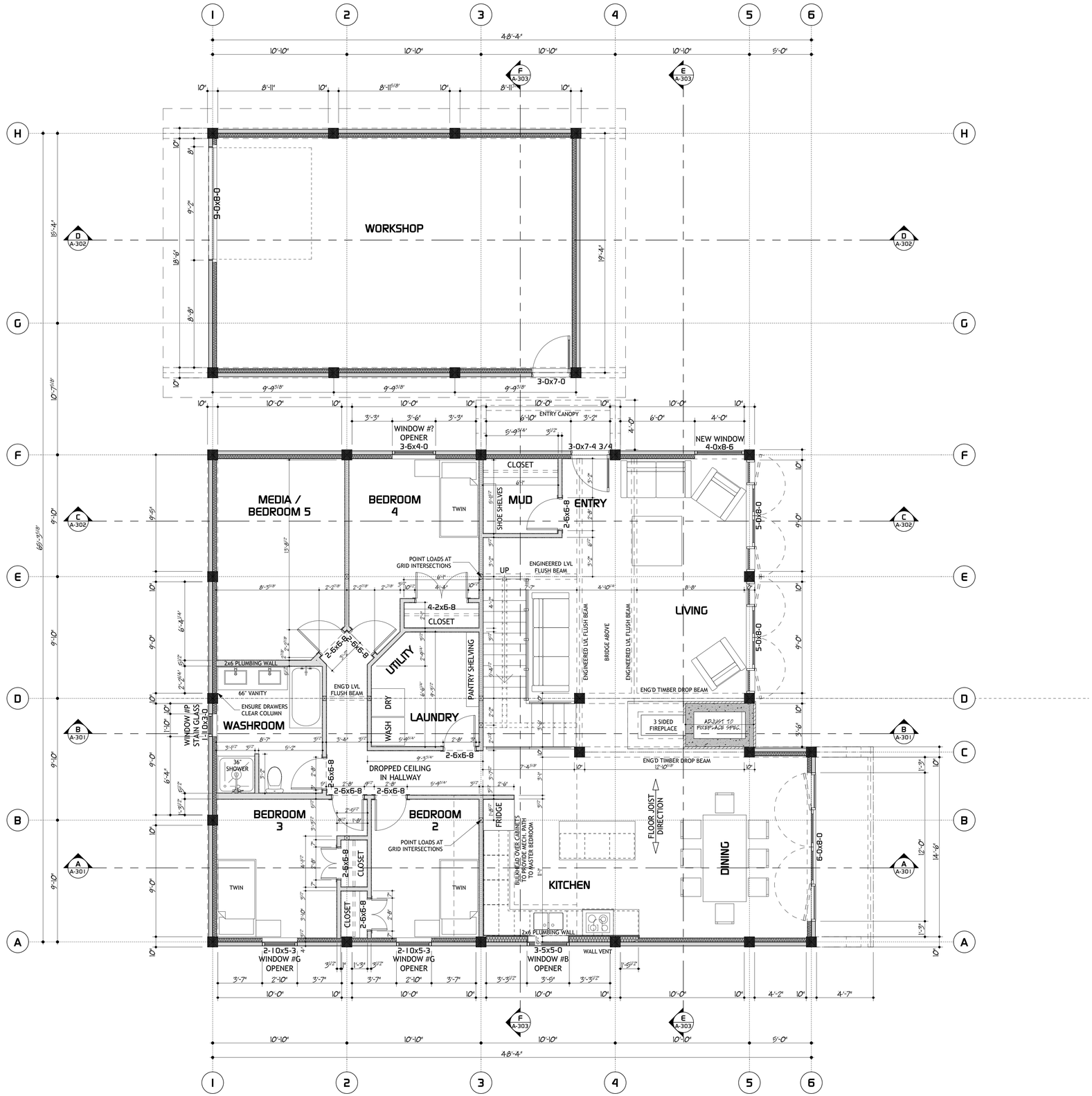
Robinson - Fintry House
PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

SCALE
1/4" = 1'-0"

SHEET No
A-201

Foundation Plan



AREA MEASUREMENTS:
MAIN FLOOR AREA = 1,840 ft²
GARAGE AREA = 600 ft²

Main Floor Construction Plan
SCALE: 1/4" = 1'-0"

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DATE ISSUED	DESCRIPTION
2020-03-13	PERMIT DRAWINGS

Main Floor Construction Plan

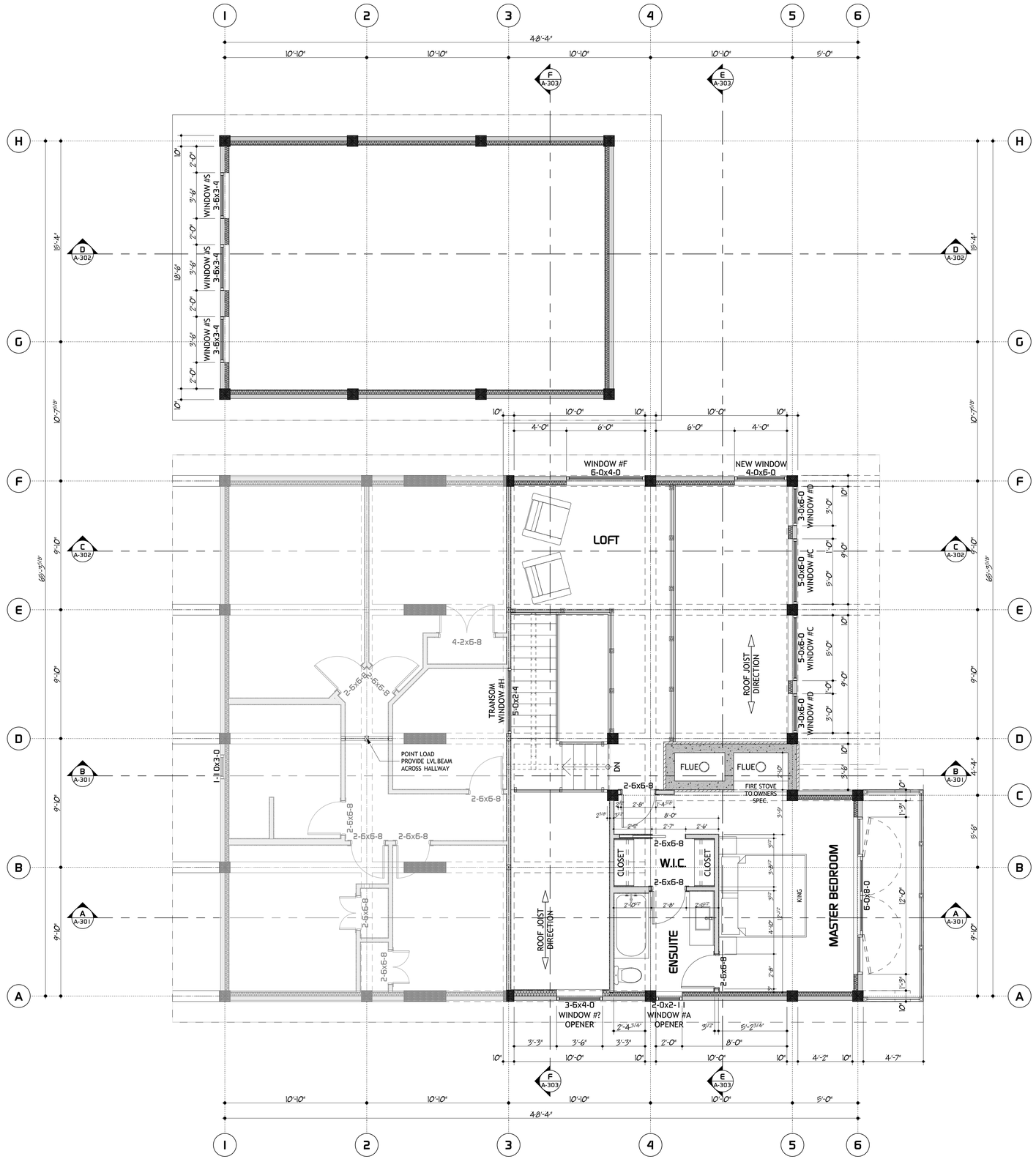
Robinson - Fintry House
PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

SCALE
1/4" = 1'-0"

SHEET No
A-202

AREA MEASUREMENTS:

UPPER FLOOR AREA	= 461 ft²
DECK AREA	= 76 ft²



Upper Floor Construction Plan

SCALE: 1/4" = 1'-0"

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DATE ISSUED	DESCRIPTION
2020-03-13	PERMIT DRAWINGS

Upper Floor Construction Plan

Robinson - Fintry House

PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

SCALE

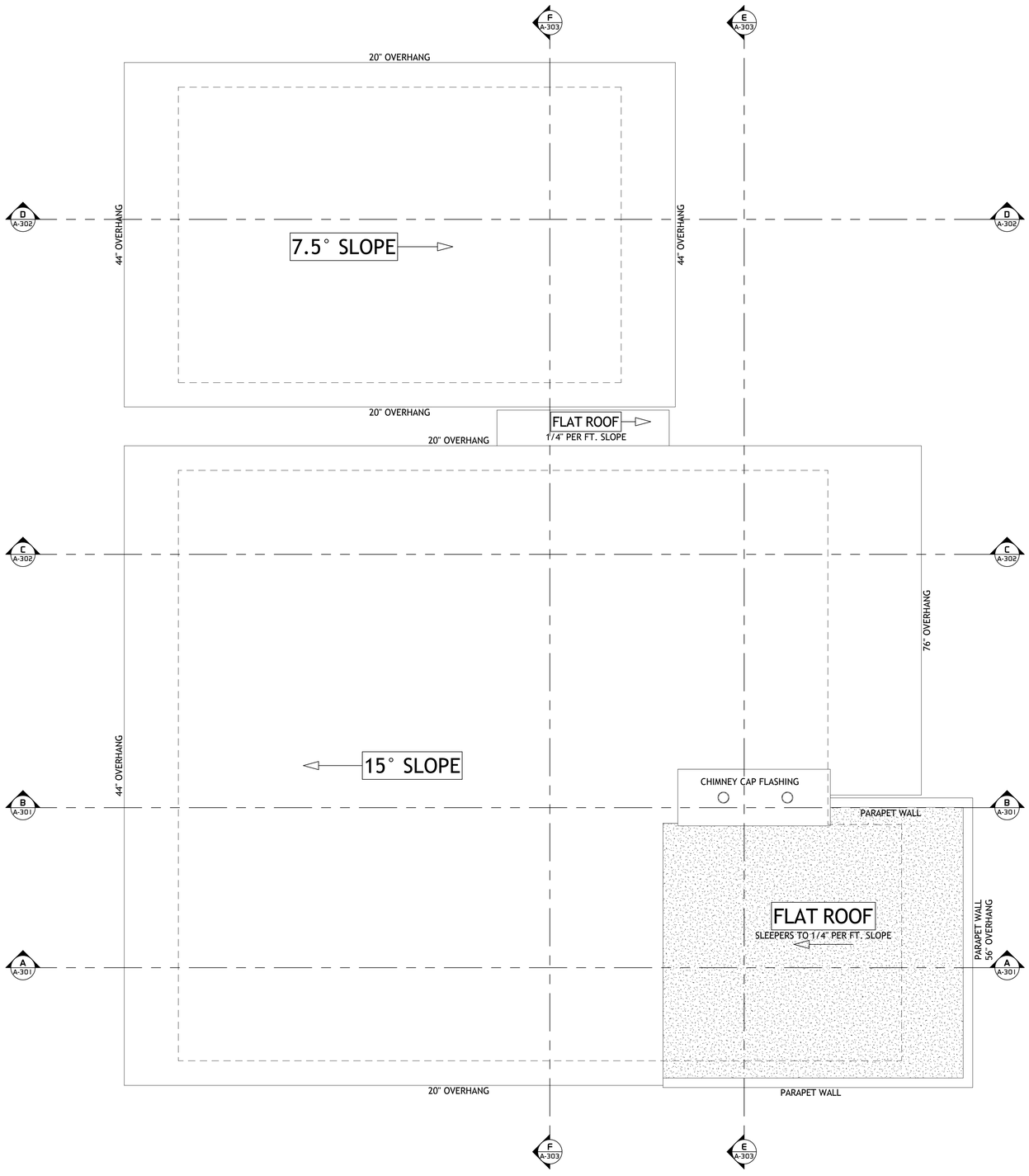
1/4" = 1'-0"

SHEET No

A-203

AREA MEASUREMENTS:

SLOPED ROOF AREA	=	2,785 ft^2
FLAT ROOF AREA	=	589 ft^2
ENTRY ROOF AREA	=	48 ft^2
FASCIA LENGTH (INCLUDING GARAGE)	=	376 ft



Roof Plan
SCALE: 1/4" = 1'-0"

The Homesmith

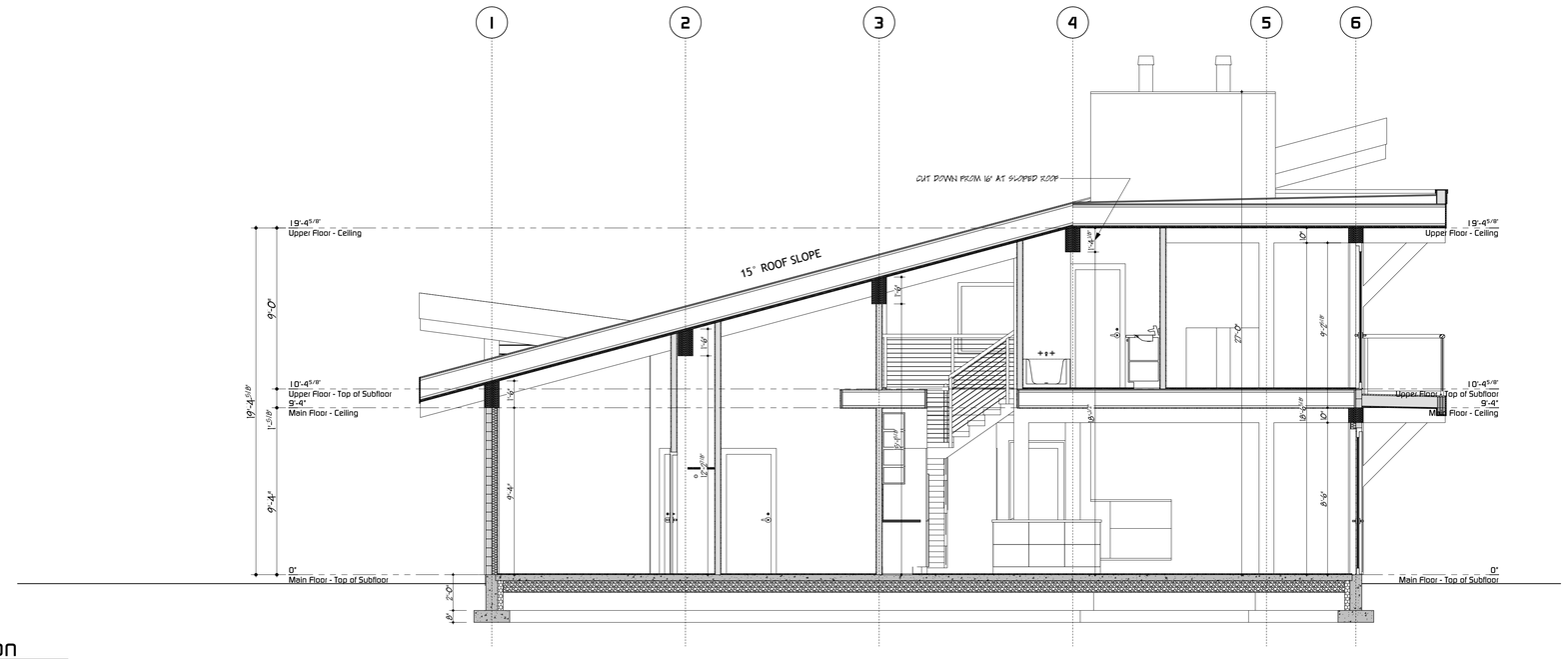
DATE ISSUED	DESCRIPTION
2020-03-13	PERMIT DRAWINGS

Roof Plan

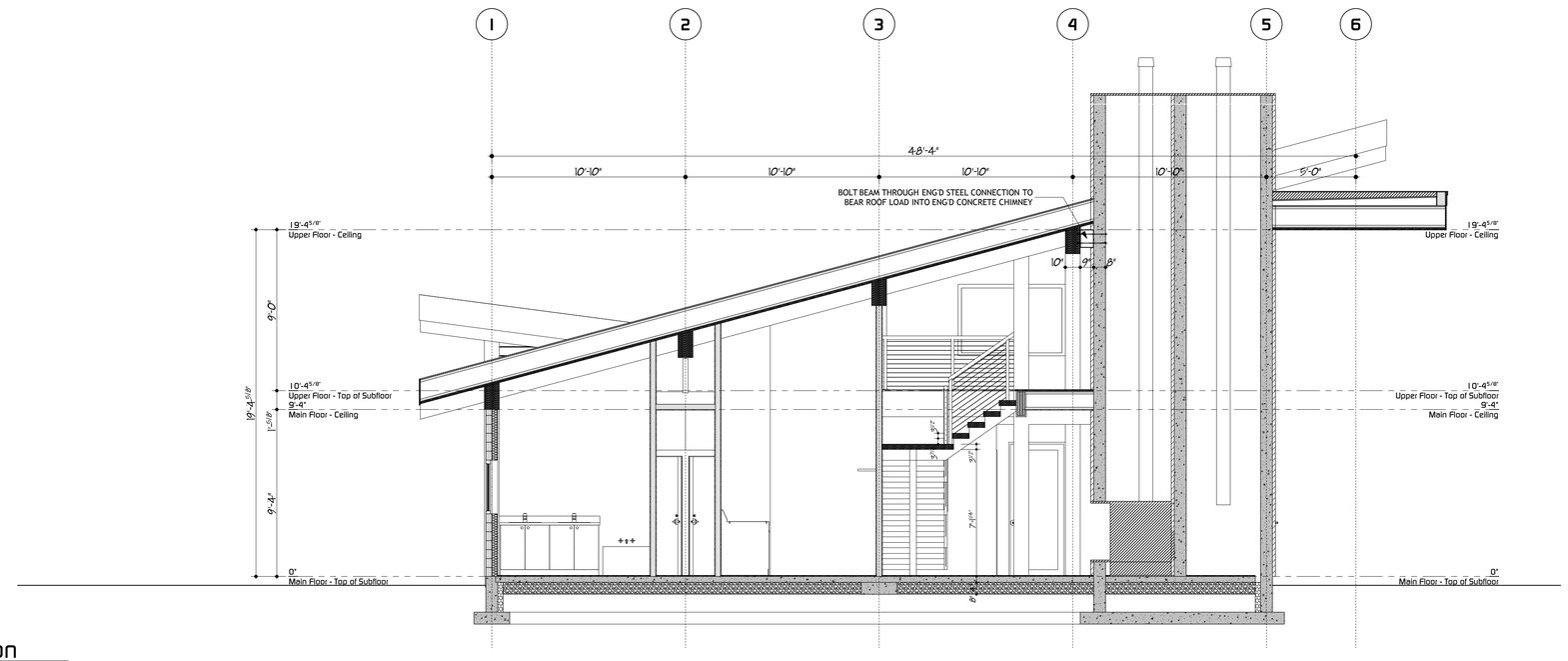
Robinson - Fintry House
PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

SCALE
1/4" = 1'-0"

SHEET No
A-204



A Section
SCALE: 1/4" = 1'-0"



B Section
SCALE: 1/4" = 1'-0"

Bulletin

BCBC Energy Efficiency Requirements for an SFD

NUMBER 14-04

Typical Wall Assembly - 4"x6" Panabode & 2x4 (W1)				
	Material		**RSI**	**R**
Outside air film	Wind 6.7m/s (winter)		0.03	0.17
Cladding	4" Panabode Western Red Cedar (.0102 x 102mm)		1.04	5.911
Sheathing membrane	2 Layers 30 min. building paper		0.011	0.062
Stud wall	2x4 @ 24" o.c.			
Insulation	R14 Batt insulation	RSI wall =	1.70	9.66
Vapour barrier	6 Mil polyethylene		0.00	0.00
Gypsum	12mm (RSI 0.0061 x 12mm)		0.073	0.415
Interior air film	Heat flow horizontal		0.12	0.68
	Total Effective RSI/R value of entire assembly		**2.974**	**= 16.90**
With HRV	**Min. Required Effective RSI/R value (Zone 5):**		**2.97**	**16.86**

Typical Wall Assembly - Siding (W2)				
	Material		**RSI**	**R**
Outside air film	Wind 6.7m/s (winter)		0.03	0.17
Cladding	8mm Fiberboard siding (RSI 0.003 x 8mm)		0.026	0.15
Sheathing membrane	2 Layers 30 min. building paper		0.011	0.062
Sheathing	11mm OSB (RSI 0.0098 x 11mm)		0.108	0.612
Stud wall	2x6 @ 24" o.c.			
Insulation	R22 Batt insulation	RSI wall =	2.668	15.16
Vapour barrier	6 Mil polyethylene		0.00	0.00
Gypsum	12mm (RSI 0.0061 x 12mm)		0.073	0.415
Interior air film	Heat flow horizontal		0.12	0.68
	Total Effective RSI/R value of entire assembly		**3.036**	**= 17.25**
With HRV	**Min. Required Effective RSI/R value (Zone 5):**		**2.97**	**16.86**

Typical Wall Separating Conditioned Space (W4)				
	Material		**RSI**	**R**
Interior air film	Heat flow horizontal		0.12	0.68
Gypsum Garage side	12mm (RSI 0.0061 x 12mm)		0.073	0.415
Stud wall	2x6 @ 24" o.c.			
Insulation	R22 Batt insulation	RSI wall =	2.668	15.16
Vapour barrier	6 Mil polyethylene (Residential side)		0.00	0.00
Gypsum Resid. side	12mm (RSI 0.0061 x 12mm)		0.073	0.415
Interior air film	Heat flow horizontal		0.12	0.68
	Total Effective RSI/R value of entire assembly		**3.054**	**= 17.35**
With HRV	**Min. Required Effective RSI/R value (Zone 5):**		**2.97**	**16.86**

Typical Sloped Roof Assembly (R1)				
	Material		**RSI**	**R**
Outside air film	Wind 6.7m/s (winter)		0.03	0.17
Roofing	Built-up		0.06	0.34
Sheathing membrane	Vapour retarder		0.00	0.00
Sheathing	19mm Plywood (RSI 0.0087 x 19mm)		0.165	0.937
Roof joists	11 7/8" Eng'd I-Joists @ 24" o.c.	RSI Flat		
Insulation	R40 Batt Insulation	Roof =	6.404	36.38
Vapour barrier	6 MIL Polyethylene		0.00	0.00
Gypsum	12 mm (RSI 0.0061 x 12mm)		0.073	0.415
Interior air film	Heat flow up		0.11	0.623
	Total Effective RSI/R value of entire assembly		**6.842**	**= 38.87**
	Min. Required Effective RSI/R value:		**4.67**	**26.52**

Total Effective RSI/R Value Calculations for Cavities:

$$\text{Effective RSI} = \frac{100}{\frac{\%\text{ area f}}{\text{RSI frame}} + \frac{\%\text{ area c}}{\text{RSI cavity}}}$$

RSI = 5.681 R

$$\text{Effective RSI} = \frac{100}{\frac{20}{0.76} + \frac{80}{2.46}}$$

2x4 R14 Batt

RSI wall = 1.700 (R 9.66)

$$\text{Effective RSI} = \frac{100}{\frac{20}{1.19} + \frac{80}{3.87}}$$

2x6 R22 Batt

RSI wall = 2.668 (R 15.16)

$$\text{Effective RSI} = \frac{100}{\frac{6}{2.65} + \frac{94}{7.04}}$$

11 7/8" TJI's @ 24" R40

RSI flat roof = 6.404 (R 36.38)

The Homesmith

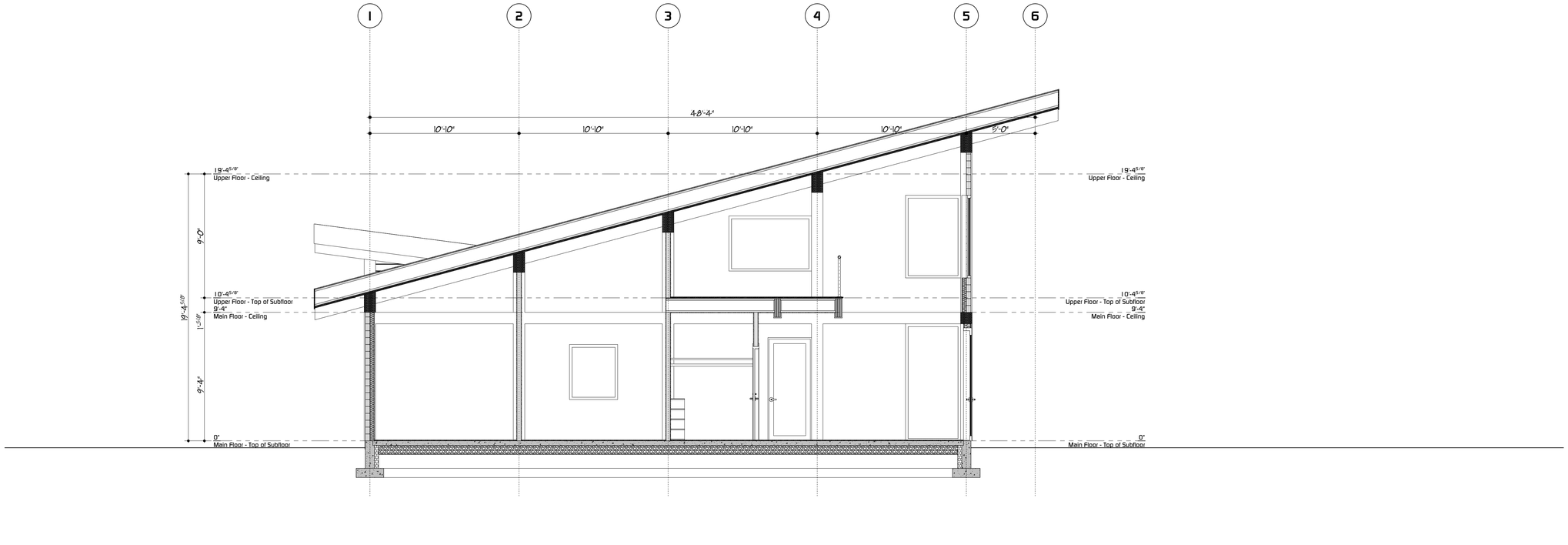
DATE ISSUED	DESCRIPTION
2020-03-13	PERMIT DRAWINGS

Sections - 1

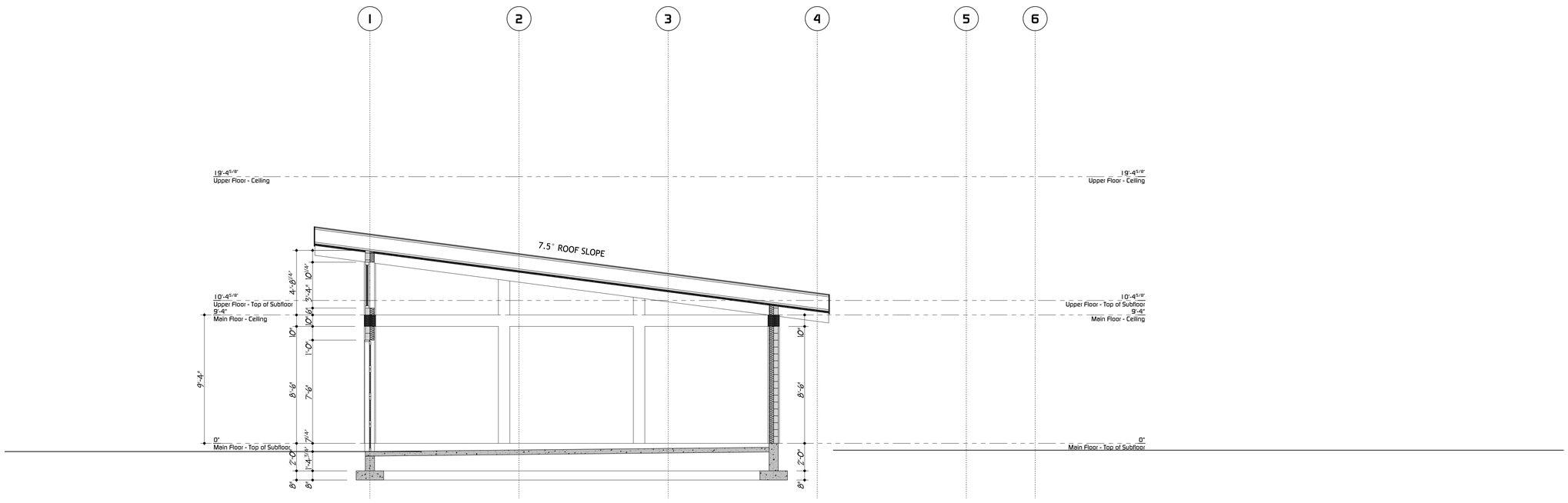
Robinson - Fintry House
PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

SCALE
1/4" = 1'-0"

SHEET No
A-301



C Section
SCALE: 1/4" = 1'-0"



D Section
SCALE: 1/4" = 1'-0"

The Homesmith

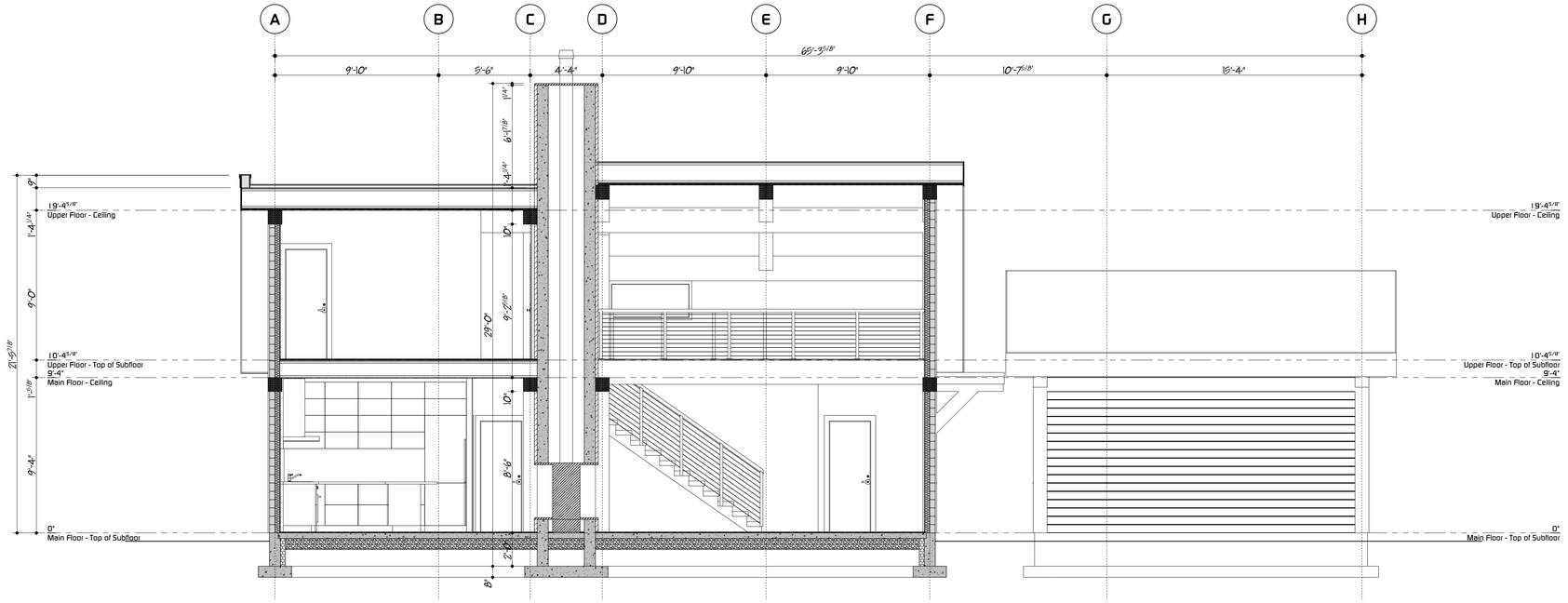
DATE ISSUED	DESCRIPTION
2020-03-13	PERMIT DRAWINGS

Sections - 2

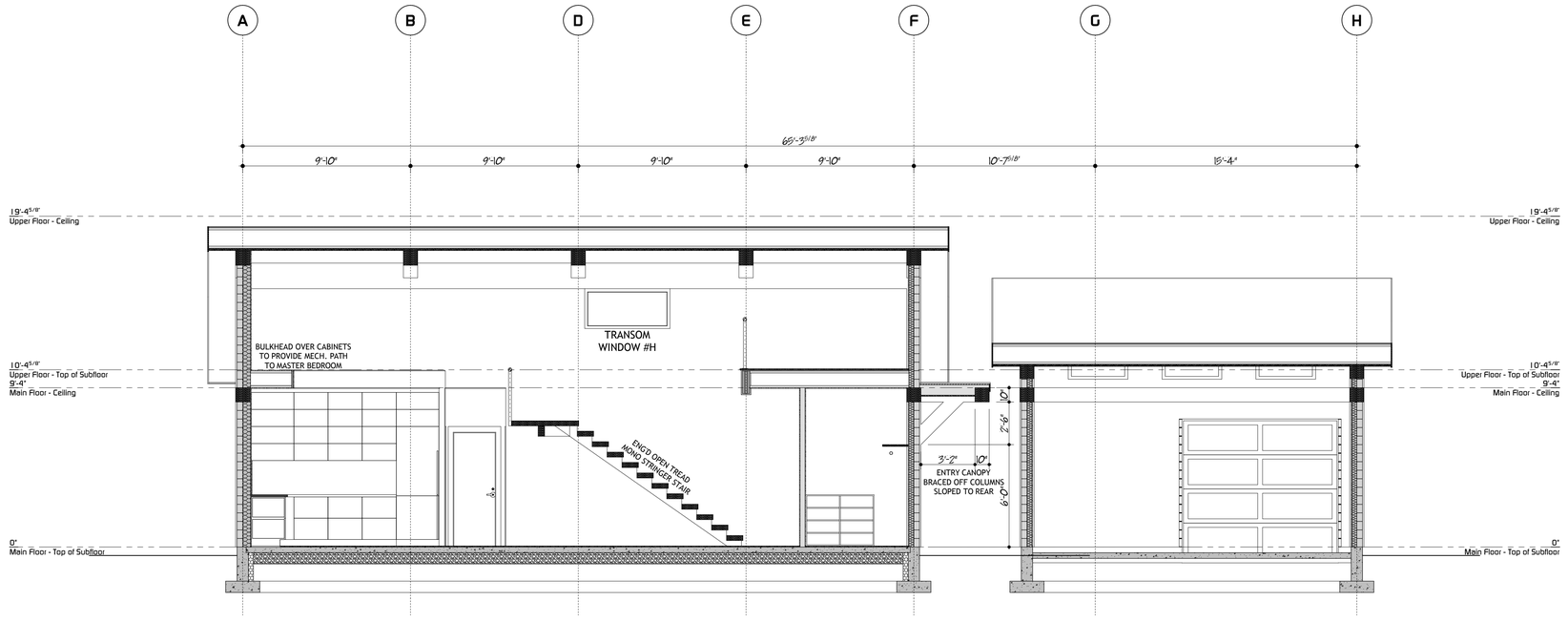
Robinson - Fintry House
PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

SCALE
1/4" = 1'-0"

SHEET No
A-302



E Section
SCALE: 1/4" = 1'-0"



F Section
SCALE: 1/4" = 1'-0"

The Homesmith

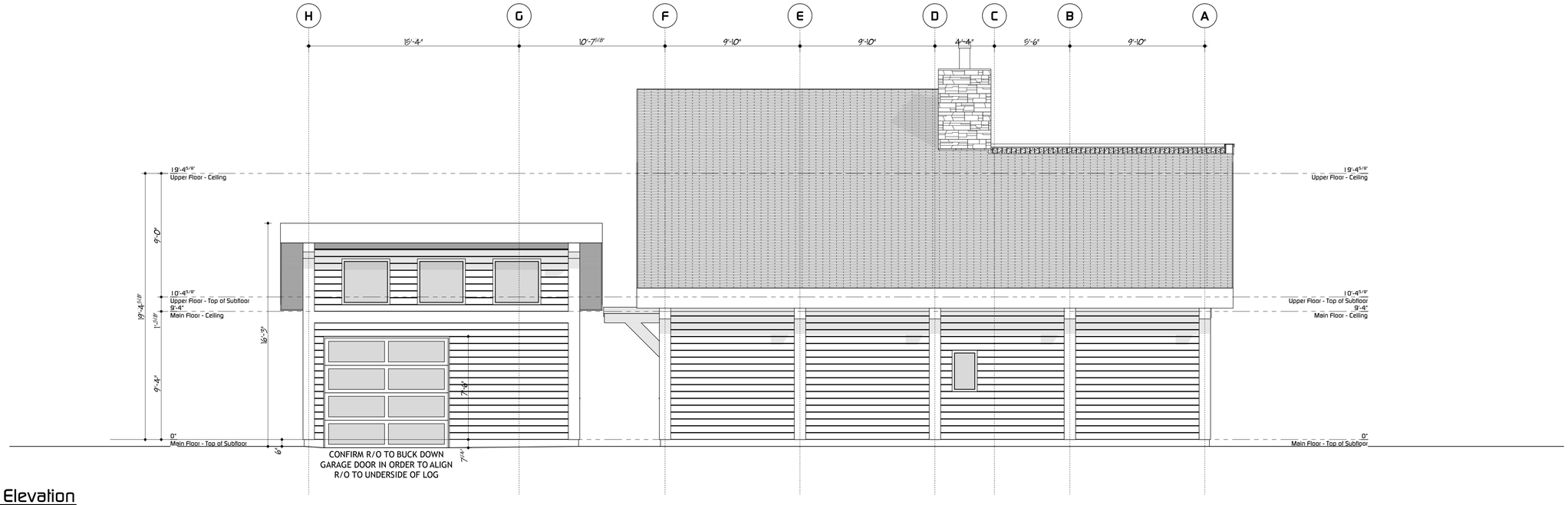
DATE ISSUED	DESCRIPTION
2020-03-13	PERMIT DRAWINGS

Sections - 3

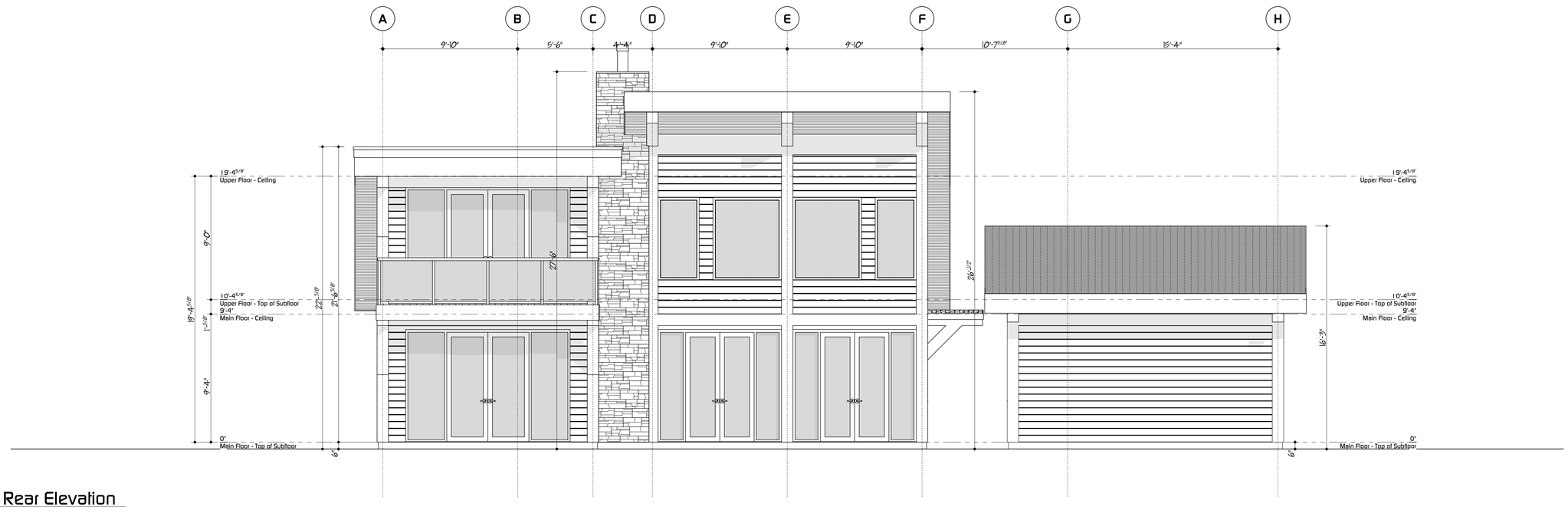
Robinson - Fintry House
PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

SCALE
1/4" = 1'-0"

SHEET No
A-303



1 Front Elevation
SCALE: 1/4" = 1'-0"



2 Rear Elevation
SCALE: 1/4" = 1'-0"

The Homesmith

DATE ISSUED	DESCRIPTION
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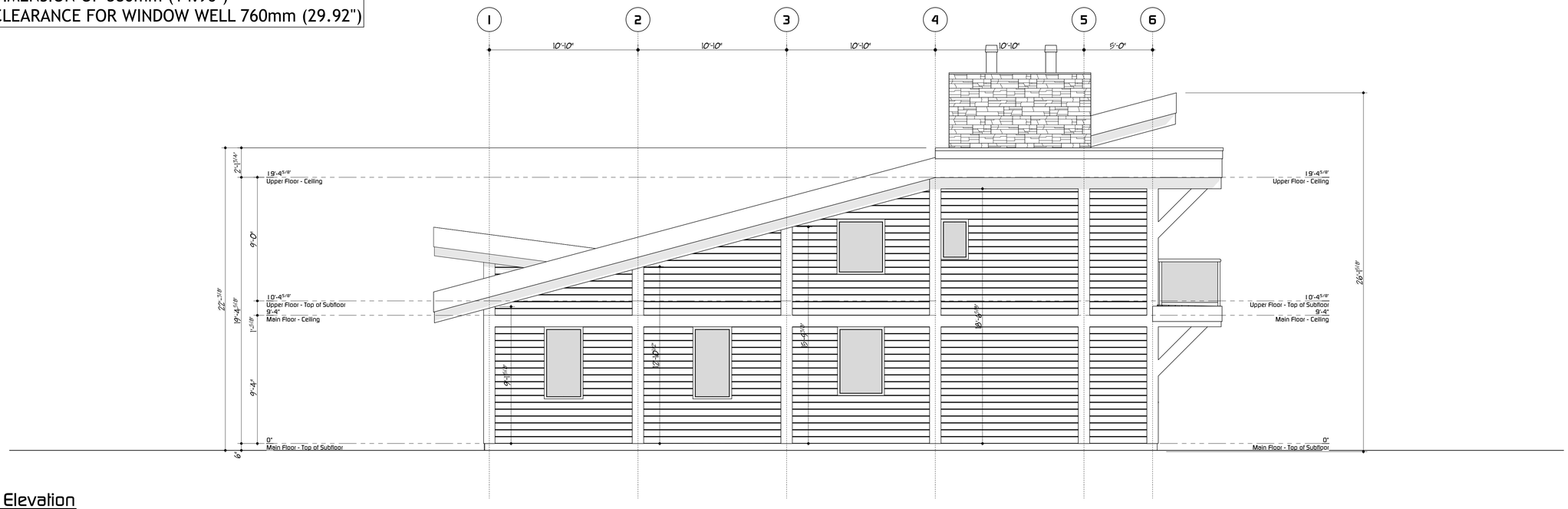
Elevations - 1

Robinson - Fintry House
PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

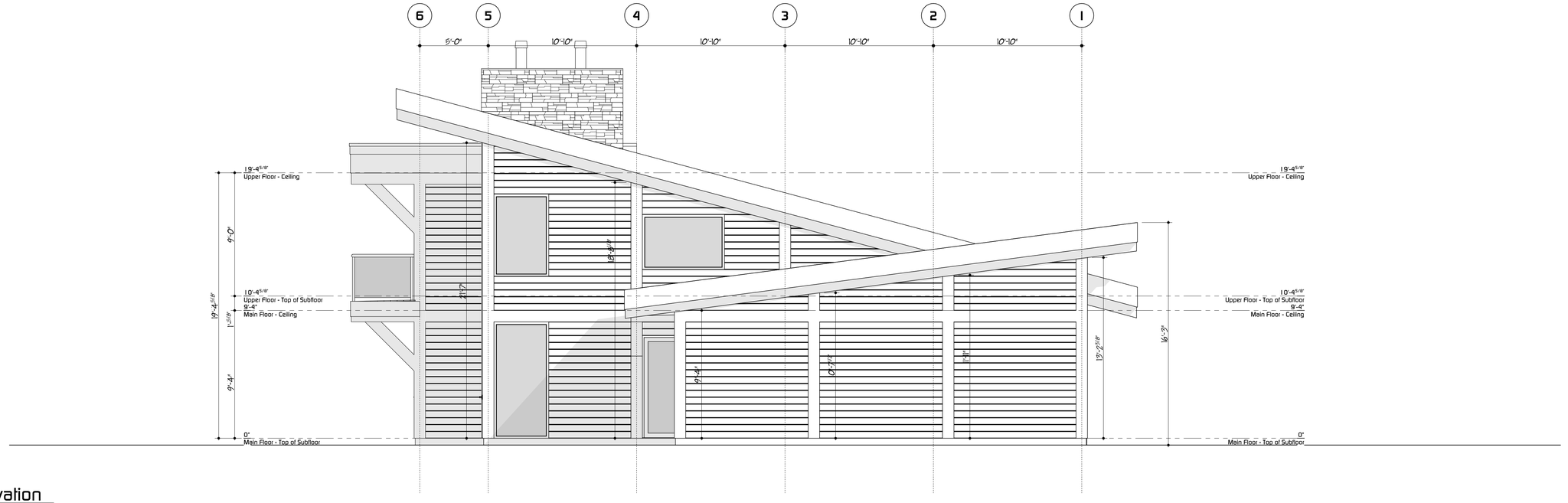
SCALE
1/4" = 1'-0"

SHEET No
A-401

9.9.10.1 (2):
MINIMUM AREA OF EGRESS WINDOW 0.35m^2 (3.76 SQ.FT.)
MINIMUM DIMENSION OF 380mm (14.96")
MINIMUM CLEARANCE FOR WINDOW WELL 760mm (29.92")



3 Right Elevation
SCALE: 1/4" = 1'-0"



4 Left Elevation
SCALE: 1/4" = 1'-0"

The Homesmith

DATE ISSUED	DESCRIPTION
2020-03-13	PERMIT DRAWINGS

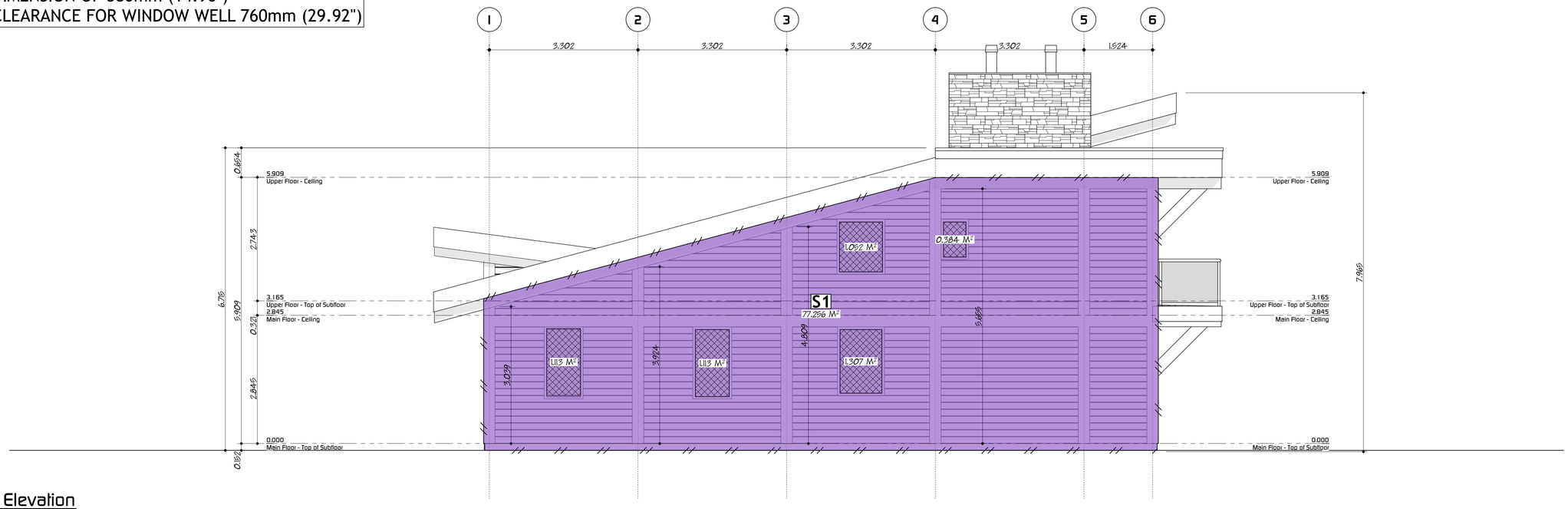
Elevations - 2

Robinson - Fintry House
PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

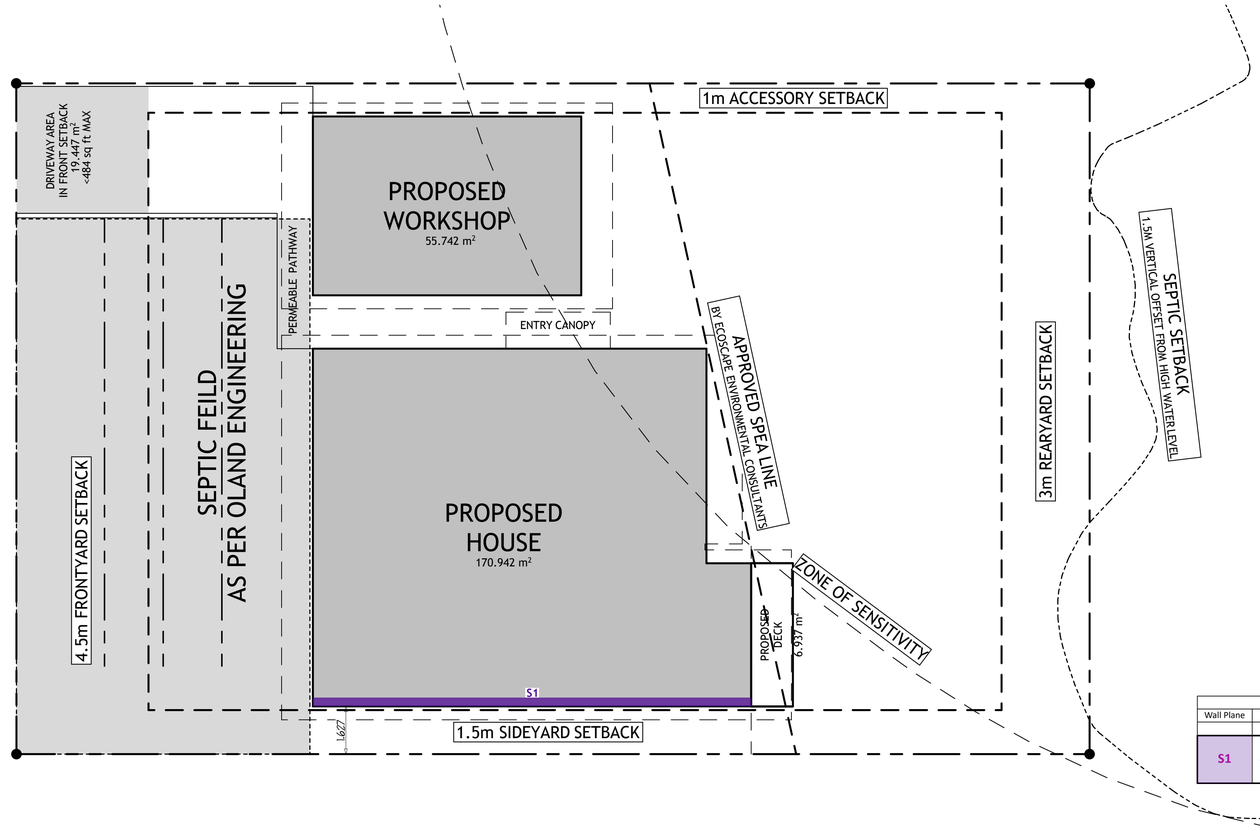
SCALE
1/4" = 1'-0", 1/8" = 1'-0"

SHEET No
A-402

9.9.10.1 (2):
MINIMUM AREA OF EGRESS WINDOW 0.35m² (3.76 SQ.FT.)
MINIMUM DIMENSION OF 380mm (14.96")
MINIMUM CLEARANCE FOR WINDOW WELL 760mm (29.92")



3 Right Elevation
SCALE: 1/4" = 1'-0"



Site Plan
SCALE: 1/8" = 1'-0"

Table 9.10.15.4.
Maximum Area of Glazed Openings in Exterior Walls <of Houses>
Forming part of Sentences 9.10.15.4.(1) and (2)

Maximum Total Area of *Exposing Building Face*, m²	Maximum Aggregate Area of Glazed Openings, % of *Exposing Building Face* Area										
	Limiting Distance, m										
	Less than 1.2	1.2	1.5	2.0	4.0	6.0	8.0	10.0	12.0	16.0	20.0	25.0
30	0	7	9	12	39	88	100	—	—	—	—	—
40	0	7	8	11	32	69	100	—	—	—	—	—
50	0	7	8	10	28	57	100	—	—	—	—	—
100	0	7	8	9	18	34	56	84	100	—	—	—
Over 100	0	7	7	8	12	19	28	40	55	92	100	—

Limiting Distance														
Wall Plane	Wall Area		Limiting Distance		Percentage From Table 9.10.15.4				Outside 10 Min. Range	Window Area				
	ft²	m²	ft	m	Area (m²)	Limiting Distance (m)			N	Permitted	Proposed			
						1.5	1.63	2						
S1	831.58	**77.26**	5.34	**1.63**	50.00	8.00	8.51	10.00	100%	8.37%	**6.43%**			
					77.26	*8.00*	*8.37*	*9.45*						
					100.00	8.00	8.25	9.00		6.47	**4.97**	m²		

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Limiting Distance

Robinson - Fintry House
PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

SCALE
1/4" = 1'-0", 1/8" = 1'-0", 1' = 1'-0"

SHEET No
A-403

Bulletin

BCBC Energy Efficiency Requirements for an SFD

NUMBER 14-04

Typical Wall Assembly - 4"x6" Panabode & 2x4 (W1)				
	Material		**RSI**	**R**
Outside air film	Wind 6.7m/s (winter)		0.03	0.17
Cladding	4" Panabode Western Red Cedar (.0102 x 102mm)		1.04	5.911
Sheathing membrane	2 Layers 30 min. building paper		0.011	0.062
Stud wall	2x4 @ 24" o.c.			
Insulation	R14 Batt insulation	RSI wall =	1.70	9.66
Vapour barrier	6 Mil polyethylene		0.00	0.00
Gypsum	12mm (RSI 0.0061 x 12mm)		0.073	0.415
Interior air film	Heat flow horizontal		0.12	0.68
	Total Effective RSI/R value of entire assembly		**2.974** =	**16.90**
With HRV	**Min. Required Effective RSI/R value (Zone 5):**		**2.97**	**16.86**

Typical Wall Assembly - Siding (W2)				
	Material		**RSI**	**R**
Outside air film	Wind 6.7m/s (winter)		0.03	0.17
Cladding	8mm Fiberboard siding (RSI 0.003 x 8mm)		0.026	0.15
Sheathing membrane	2 Layers 30 min. building paper		0.011	0.062
Sheathing	11mm OSB (RSI 0.0098 x 11mm)		0.108	0.612
Stud wall	2x6 @ 24" o.c.			
Insulation	R22 Batt insulation	RSI wall =	2.668	15.16
Vapour barrier	6 Mil polyethylene		0.00	0.00
Gypsum	12mm (RSI 0.0061 x 12mm)		0.073	0.415
Interior air film	Heat flow horizontal		0.12	0.68
	Total Effective RSI/R value of entire assembly		**3.036** =	**17.25**
With HRV	**Min. Required Effective RSI/R value (Zone 5):**		**2.97**	**16.86**

Typical Wall Separating Conditioned Space (W4)				
	Material		**RSI**	**R**
Interior air film	Heat flow horizontal		0.12	0.68
Gypsum Garage side	12mm (RSI 0.0061 x 12mm)		0.073	0.415
Stud wall	2x6 @ 24" o.c.			
Insulation	R22 Batt insulation	RSI wall =	2.668	15.16
Vapour barrier	6 Mil polyethylene (Residential side)		0.00	0.00
Gypsum Resid. side	12mm (RSI 0.0061 x 12mm)		0.073	0.415
Interior air film	Heat flow horizontal		0.12	0.68
	Total Effective RSI/R value of entire assembly		**3.054** =	**17.35**
With HRV	**Min. Required Effective RSI/R value (Zone 5):**		**2.97**	**16.86**

Typical Sloped Roof Assembly (R1)				
	Material		**RSI**	**R**
Outside air film	Wind 6.7m/s (winter)		0.03	0.17
Roofing	Built-up		0.06	0.34
Sheathing membrane	Vapour retarder		0.00	0.00
Sheathing	19mm Plywood (RSI 0.0087 x 19mm)		0.165	0.937
Roof joists	11 7/8" Eng'd I-Joists @ 24" o.c.	RSI Flat		
Insulation	R40 Batt Insulation	Roof =	6.404	36.38
Vapour barrier	6 MIL Polyethylene		0.00	0.00
Gypsum	12 mm (RSI 0.0061 x 12mm)		0.073	0.415
Interior air film	Heat flow up		0.11	0.623
	Total Effective RSI/R value of entire assembly		**6.842** =	**38.87**
	Min. Required Effective RSI/R value:		**4.67**	**26.52**

Total Effective RSI/R Value Calculations for Cavities:

$$\text{Effective RSI} = \frac{100}{\frac{\%\text{ area f}}{\text{RSI frame}} + \frac{\%\text{ area c}}{\text{RSI cavity}}}$$

RSI = 5.681 R

$$\text{Effective RSI} = \frac{100}{\frac{20}{0.76} + \frac{80}{2.46}}$$

2x4 R14 Batt

RSI wall = 1.700 (R 9.66)

$$\text{Effective RSI} = \frac{100}{\frac{20}{1.19} + \frac{80}{3.87}}$$

2x6 R22 Batt

RSI wall = 2.668 (R 15.16)

$$\text{Effective RSI} = \frac{100}{\frac{6}{2.65} + \frac{94}{7.04}}$$

11 7/8" TJI's @ 24" R40

RSI flat roof = 6.404 (R 36.38)

The Homesmith

DATE ISSUED	DESCRIPTION
2020-03-13	PERMIT DRAWINGS

Details

Robinson - Fintry House

PLAN KAP15329, LOT 86, DL 686 ODYD
7379 Fintry Delta Road Fintry BC
R1 Zoning

SCALE

1" = 1'-0"

SHEET No

A-501