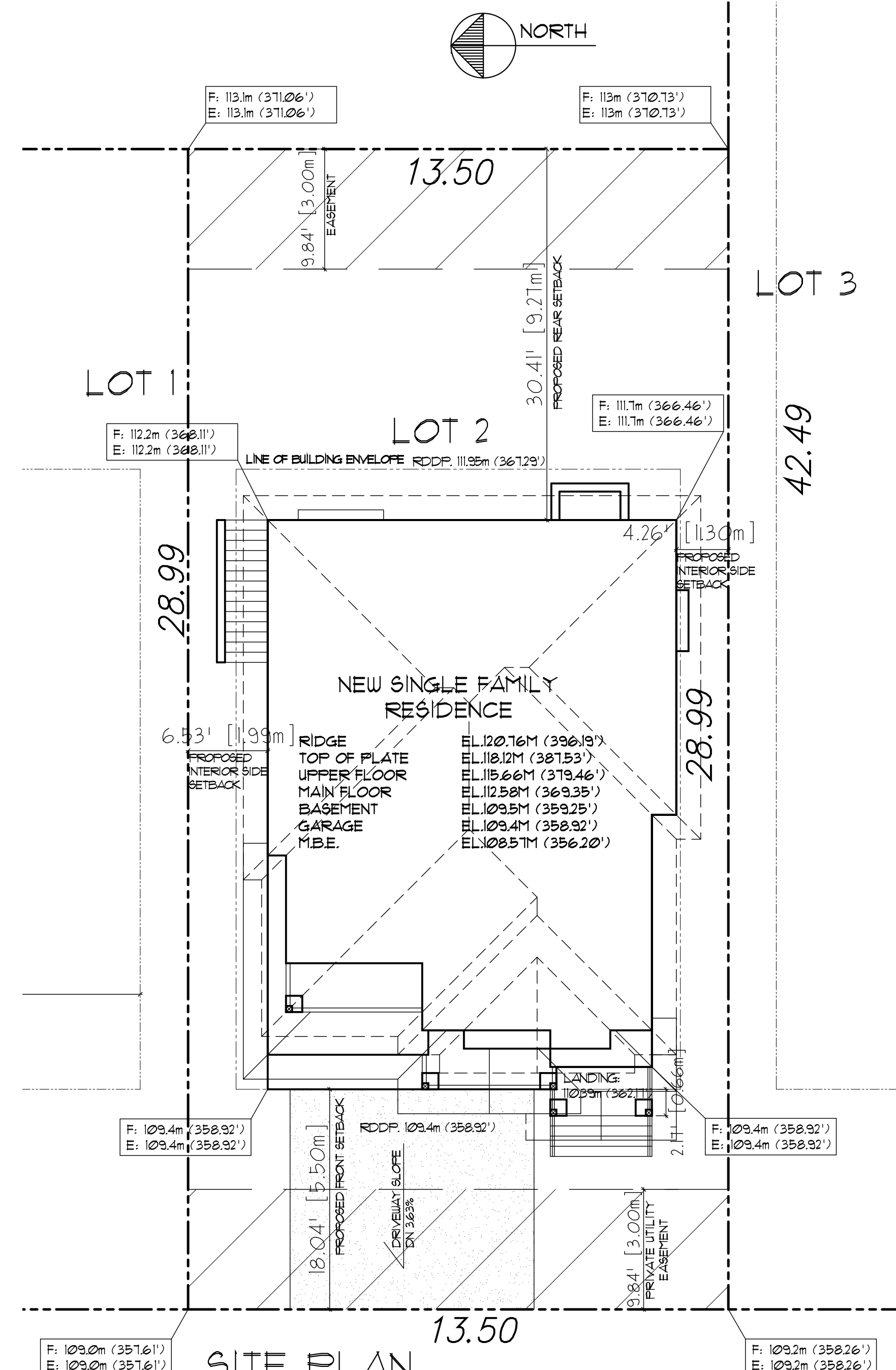


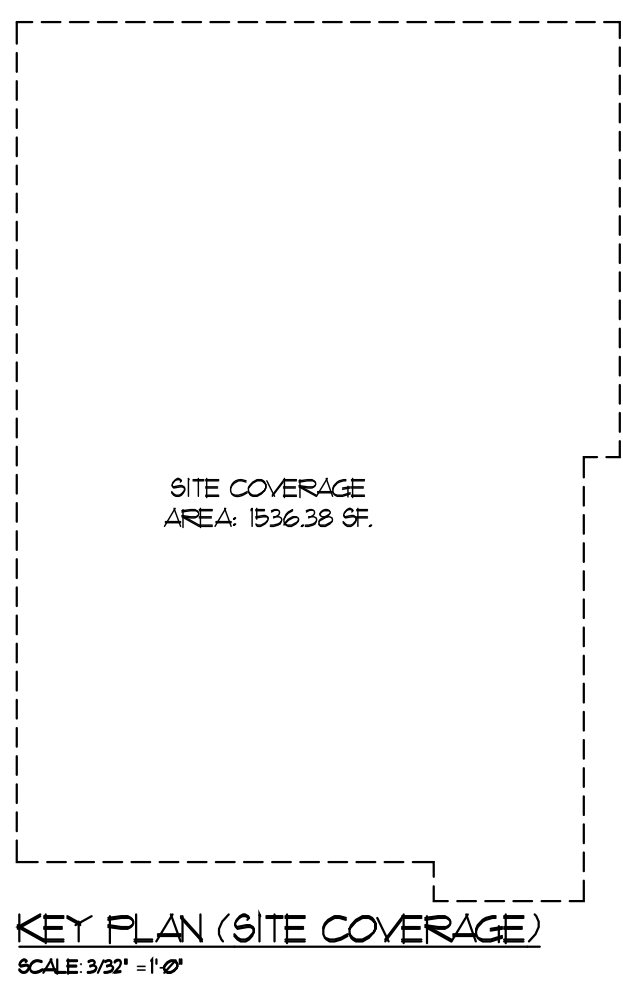
**GENERAL NOTES**

- ALL WORK AND MATERIALS TO CONFORM TO STANDARDS AND REQUIREMENTS OF THE BRITISH COLUMBIA BUILDING CODE (B.C.B.C.) 2018.
- ALL DRAWINGS MUST BE APPROVED BY CITY/MUNICIPAL AUTHORITIES HAVING JURISDICTION AND HAVE APPLICABLE PERMITS ISSUED BEFORE STARTING CONSTRUCTION.
- BUILDER MUST ENSURE THAT ALL WORK PERFORMED ON SITE COMPLIES WITH WORKER'S COMPENSATION BOARD'S REQUIREMENTS AND STANDARDS. BUILDER MUST NOTIFY HIS ENGINEER BEFORE AND AFTER EXCAVATION AND OBTAIN CERTIFICATION FROM THE ENGINEER BEFORE ANY WORKERS ARE ALLOWED TO WORK IN THE EXCAVATED AREA. SUCH CERTIFICATION MUST BE POSTED ON SITE AT A PROMINENT LOCATION AND UPDATED BY THE ENGINEER AT REGULAR INTERVALS.
- SUB-CONTRACTORS AND/OR SUB-TRADES RESPONSIBLE FOR ON SITE EXECUTION OF WORK THESE DRAWINGS DETAIL, ARE TO CHECK AND VERIFY ALL DRAWINGS FOR ERRORS AND OMISSIONS BEFORE ORDERING MATERIALS OR STARTING WORK. CONTRACTOR TO NOTIFY SEL ENGINEERING LTD. IMMEDIATELY OF ANY CHANGES OR OMISSIONS.
- TRUSS DESIGN MUST BE COMPLETED BEFORE FORM CONSTRUCTION AND ENLARGED FOOTINGS AS DESIGNED BY STRUCTURAL ENGINEER PURSUANT TO TRUSS POINT LOADS MAY BE REQUIRED.
- ALL POINT LOADS MUST BE FULLY SUPPORTED DOWN TO FOUNDATION THE WIDTH OF SUPPORTING COLLUMS SHALL NOT BE LESS THAN THE WIDTH OF THE SUPPORTED MEMBER (S17.4.1). ALL POINT LOADS FROM TRUSSES MUST BE STRUCTURALLY SUPPORTED BY COLLUMS OR ENGINEERED BEAMS AND DOUBLE CRIPPLE STUDS AS DESIGNED BY STRUCTURAL ENGINEER.
- CONTRACTORS, SUB-CONTRACTORS AND/OR SUB-TRADES SHALL INSURE THAT ANY CONCENTRATED LOAD WHICH MAY ARISE DURING CONSTRUCTION, WHETHER OR NOT IT HAS BEEN SPECIFICALLY DETAILED, SHALL BE SUPPORTED ACCORDING TO GOOD PRACTICE AND THAT THE METHOD OF SUPPORT, AS WELL AS ALL MEMBERS SUPPORTING SUCH LOADS, SHALL FIRST BE APPROVED BY THE AUTHORITY HAVING JURISDICTION AND/OR A PROFESSIONAL ENGINEER AND SHALL CONFORM TO THE B.C.B.C. BEFORE SUCH LOADING SHALL BE ALLOWED TO OCCUR.
- ALL BEAM SIZES TO BE CONFIRMED OR DESIGNED BY PROFESSIONAL ENGINEER.
- BEAMS WHICH EXCEED SPECIFICATIONS OF THE B.C.B.C. MUST BE CHECKED AND VERIFIED BY A STRUCTURAL ENGINEER BEFORE STARTING CONSTRUCTION.
- FRAMING MATERIAL TO BE DOUGLAS FIR NO. 2 OR BETTER GRADE (S3.2.1), UNLESS NOTED OTHERWISE BY A PROFESSIONAL ENGINEER.
- ALL LINTELS TO BE MIN. 2"x10" D.F. NO. 2 UNLESS OTHERWISE NOTED (S23.2.3).
- CONCRETE TO BE MIN. 25 MPA + 28 DAYS, 100 MM SLUMP UNLESS OTHERWISE DESIGNED BY STRUCTURAL ENGINEER (S3.1).
- FOUNDATION WALLS NOT LATEROALLY SUPPORTED HIGHER THAN 4'-0" FROM SLAB TO GRADE AND NON-LATERALLY SUPPORTED WALLS GREATER THAN 1'-6" FROM SLAB TO GRADE MUST BE REINFORCED.
- ALL FOOTINGS SHALL EXTEND BELOW FROST LEVEL TO SUITABLE BEARING. IF SUITABLE BEARING CANNOT BE OBTAINED A PROFESSIONAL SOILS ENGINEER SHOULD BE CONSULTED.
- GUARDS SHALL CONFORM TO S3.8.
- ALL EXTERIOR GUARDRAILS TO BE 42" HIGH (36" IF DIFFERENCE IN ELEVATION IS LESS THAN 6 FT).
- ALL INTERIOR GUARDRAILS TO BE 36" HIGH.
- ALL HANDRAILS 315" TO 38" HIGH (S3.1.4).
- ALL EXTERIOR DOORS TO BE SOLID CORE AND WEATHER STRIPPED.
- INSTALL C.S.A. APPROVED SMOKE ALARMS AND CO2 DETECTORS ON ALL FLOOR LEVELS TO CEILING OF HALLWAYS SERVING SLEEPING AREAS (S10.8.1).
- PROVIDE VENTILATION FOR THE DUELLING IN ACCORDANCE WITH (S3.2).
- ROOF ACCESS MIN. 20" X 21" (S19.2.1) VENTING MIN. 1/300 (S19.12).
- SECURITY BLOCKS FOR 2 STUD SPACES BY ALL EXTERIOR DOORS (S3.8.9).
- WATERPROOF BACKING (AQUA BOARDS) TO BE USED FOR ALL BATHUBS AND SHOWER ENCLOSURES.
- INSULATION AND VAPOUR BARRIER TO CONFORM TO PART 5 AND PART 5.36. PROVIDE INSULATION, VAPOUR BARRIER AND GYPROC FOR FIREPLACE AND 8 VENT SHAFTS.
- STAIR RISE AND RUN TO CONFORM TO S3.3.1. HEADROOM MIN. 6'-9" (2057mm) (S3.3.4).  
RISE 4.92' - 181" (1257mm - 2027mm)  
RUN 10.03' - 13.91" (2557mm - 3531mm)
- BUILDINGS WITH ATTACHED GARAGE - ALL WALLS AND CEILING SEPARATING ATTACHED GARAGE AND DUELLING MUST BE INSULATED, BE AIR TIGHT, HAVE TWO LAYERS OF DRYWALL, STAGGERED JOISTS, ON THE GARAGE SIDE AS A BARRIER. DOORS SEPARATING GARAGE AND DUELLING MUST BE SOLID CORE WEATHER STRIPPED AND WITH SELF-CLOSING DEVICES.
- WINDOWS AND SKYLIGHTS - ALL WINDOWS SHALL CONFORM TO WINDOW STANDARDS AS PER S12. AND GLASS STANDARDS AS PER S13. SKYLIGHTS SHALL CONFORM TO STANDARDS AS PER S11. WINDOWS LOCATED WITHIN 3 FT OF EXTERIOR DOOR LOCKS SHALL HAVE SAFETY GLASS, WIRED GLASS OR TEMPERED GLASS. ALL WINDOWS AND DOORS SHALL HAVE A U FACTOR NO GREATER THAN 0.30 W/m<sup>2</sup>K. ALL SKYLIGHTS SHALL HAVE A U FACTOR NO GREATER THAN 2.3 W/m<sup>2</sup>K.
- DECK OVER HABITABLE AREA - PROVIDE 2x4 CROSS FURLIN AT 16" O.C. ON DECK JOIST AND CROSS VENTILATION EXCEPT FOR BUILD-UP ROOFING (TAR AND GRAVEL) ALL OTHER WATER PROOFING MEMBRANE MUST BE AN APPROVED PRODUCT AND BE CERTIFIED BY A REGISTERED ARCHITECT OR PROFESSIONAL ENGINEER.
- STARTING WORK SHALL IMPLY ACCEPTANCE OF THESE TERMS AND SHALL MEAN ACCEPTANCE OF ALL SPECIFICATIONS, DIMENSIONS AND REQUIREMENTS AS WELL AS ALL SURFACES AND CONDITIONS AS BEING SUITABLE TO RECEIVE SAID WORK.
- DO NOT SCALE DRAWINGS.
- MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS PLACED WITHIN AND PARALLEL TO AN EXTERIOR WALL ARE TO BE INSULATED TO THE EFFECTIVE THERMAL RESISTANCE REQUIRED FOR THE WALL AT THE PROJECTED AREA OF THE SYSTEM COMPONENT.
- AIR BARRIERS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 9.36.2.5 AND 9.36.2.10.
- HVAC AND SERVICE WATER EQUIPMENT TO CONFORM TO SECTION 9.36.
- ALL NON-GASKET DEVICES INSTALLED IN INSULATED ASSEMBLIES ARE TO BE PROVIDED WITH BACKING TO ALLOW SEALING OF SHEET POLY TO POLY BOOT.

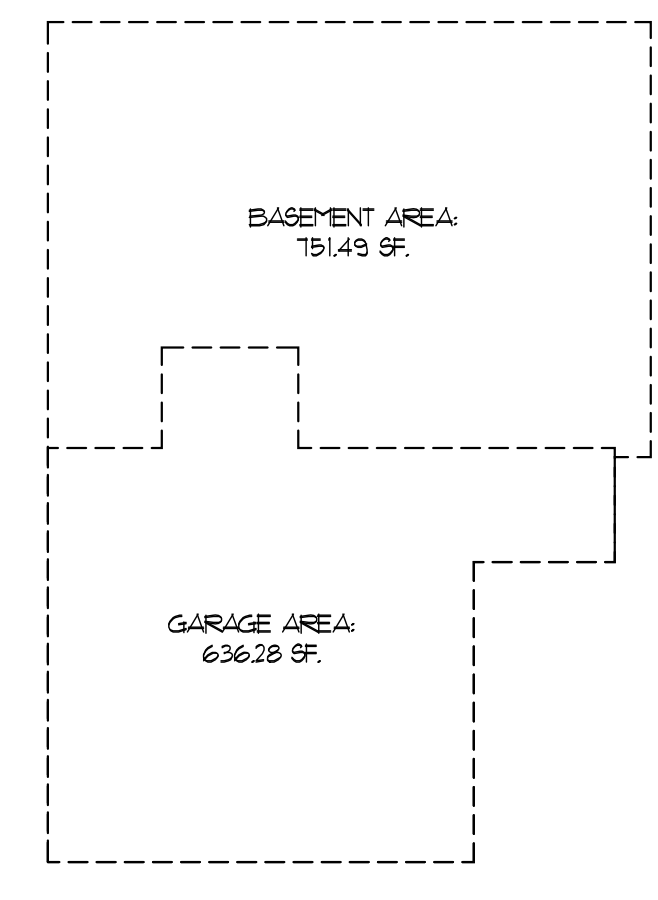
**ATTENTION**  
IN THE CASE OF RENOVATIONS, THESE DRAWINGS WERE DERIVED FROM AS-BUILT SKETCHES AND/OR ON-SITE DIMENSION TAKEOFFS. DUE TO THE FACT THAT SOME SURFACES AND AREAS AFFECTED ARE HIDDEN PRIOR TO COMPLETION OF THESE DRAWINGS, CONTRACTORS SHALL NOTIFY SEL ENGINEERING LTD. AND ADJUST AFFECTED AREAS ON SITE AS NECESSARY.



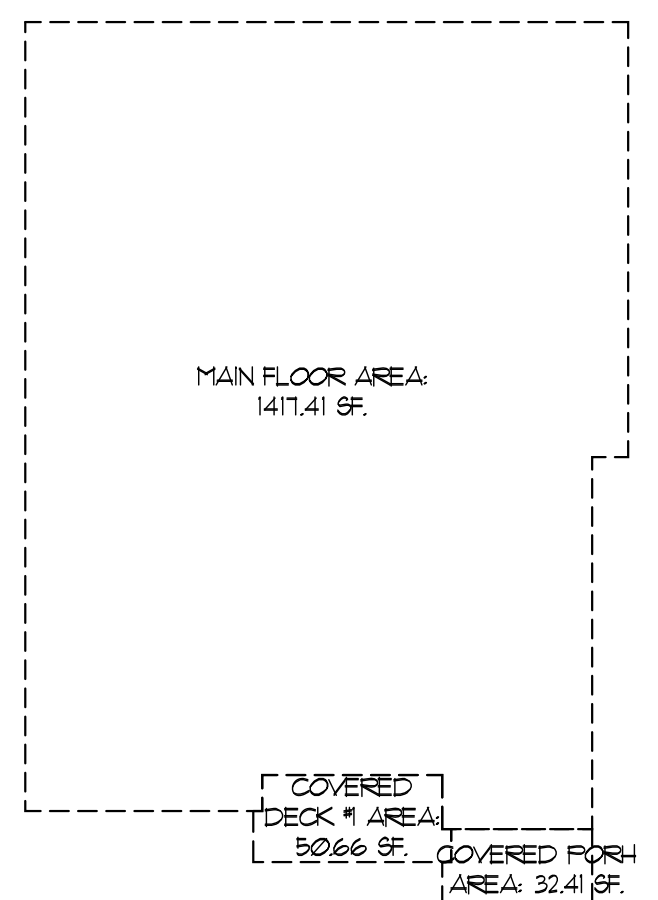
**SITE PLAN**  
SCALE: 1/8" = 1'-0"



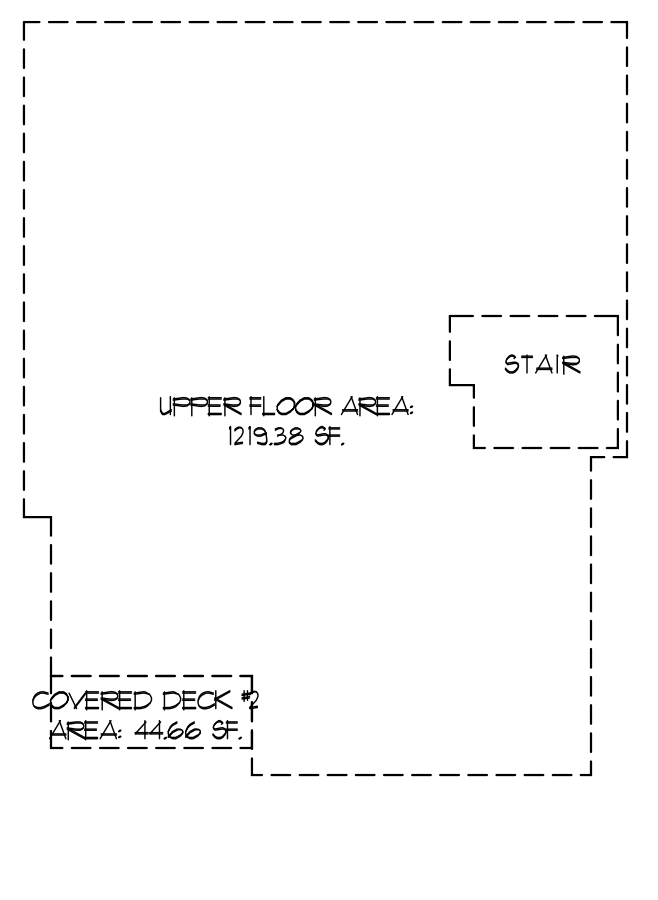
**KEY PLAN (SITE COVERAGE)**  
SCALE 3/32" = 1'-0"



**KEY PLAN (BASEMENT FLOOR)**  
SCALE 3/32" = 1'-0"



**KEY PLAN (MAIN FLOOR)**  
SCALE 3/32" = 1'-0"



**KEY PLAN (UPPER FLOOR)**  
SCALE 3/32" = 1'-0"

**ZONING SUMMARY:**

CIVIC ADDRESS: LOT 2 - 24850 106 AVENUE  
MAPLE RIDGE, B.C.

LEGAL DESCRIPTION: LT 2 SEC 11 TWP 12 NWD PL EFS4350

ZONING: R-1

SITE AREA: 391.36m<sup>2</sup> (4212.66 SF.)  
SITE DIMENSIONS: 13.50m x 28.99m

PRINCIPLE BUILDING:

DESCRIPTION:	ALLOWED:	PROPOSED:
SETBACKS		
FRONT YARD:	5.5m (18.04')	5.5m (18.04')
REAR YARD:	8.0m (26.24')	9.27m (30.41')
LEFT SIDE YARD: (SOUTH)	1.2m (3.93')	1.30m (4.26')
RIGHT SIDE YARD: (NORTH)	1.2m (3.93')	1.99m (6.53')
MAX. BUILDING HEIGHT:	11.0m (36.08')	10.10m (33.13')

MAX. SITE COVERAGE (ALL STRUCTURE):  
40% 156.54m<sup>2</sup> (1685.06 SF.) 36.47% 142.73m<sup>2</sup> (1536.38 SF.)

MAIN HOUSE AREAS:

	PROPOSED:
UPPER FLOOR:	1219.38 SF.
MAIN FLOOR:	1417.41 SF.
BASEMENT FLOOR:	1514.9 SF.
COVERED PORCH:	32.41 SF.
COVERED DECK #1:	50.66 SF.
COVERED DECK #2:	44.66 SF.
GARAGE:	636.28 SF.

ALL CONSTRUCTION SHALL CONFORM TO THE BC BUILDING CODE AND ALL OTHER APPLICABLE BY-LAWS

**REVISIONS:**

NO.	DESCRIPTION	DATE
1	ISSUED FOR BLDG. PERMIT	02.06.2020

**SEL Engineering Limited**  
Consulting Engineers

201, 3003 ST. JOHN'S STREET  
FORT MOODY, BC V3H 2C4  
TELEPHONE: 604.469.3123  
FACSIMILE: 604.469.3101  
E-MAIL: SEL@SELENG.COM

**SEAL:**

I, CHANGMO CHUNG, P. ENG., HAVE REVIEWED AND CONFIRMED THAT ALL STRUCTURAL MEMBERS AND CONNECTIONS OF THIS BUILDING, INCLUDING BRACING TO RESIST SEISMIC LOADS ARE DESIGNED IN ACCORDANCE WITH PART 4 OF BCBC 2018.

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**PROJECT TITLE:**  
NEW SINGLE FAMILY RESIDENCE AT:  
LOT 2 - 24850 106 AVENUE,  
MAPLE RIDGE, B.C.

**DRAWING TITLE:**  
GENERAL NOTES  
SITE PLAN  
ZONING SUMMARY  
KEY PLANS

DESIGNED BY:	CMC
CHECKED BY:	CMC
DRAWN BY:	GD
PROJECT NO:	C19110-2
DATE:	02.06.2020
SCALE:	AS SHOWN
DRAWING NO:	

NO.	DESCRIPTION	DATE
1	ISSUED FOR BLDG. PERMIT	02.06.2020



207, 3003 ST. JOHN'S STREET  
FORT MOODY, BC V3H 2C4  
TELEPHONE: 604.469.3723  
FACSIMILE: 604.469.3707  
E-MAIL: SEL@SELENG.COM

**SEAL:**

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**PROJECT TITLE:**  
NEW SINGLE FAMILY RESIDENCE AT:  
LOT 2 - 24950 106 AVENUE,  
MAPLE RIDGE, B.C.

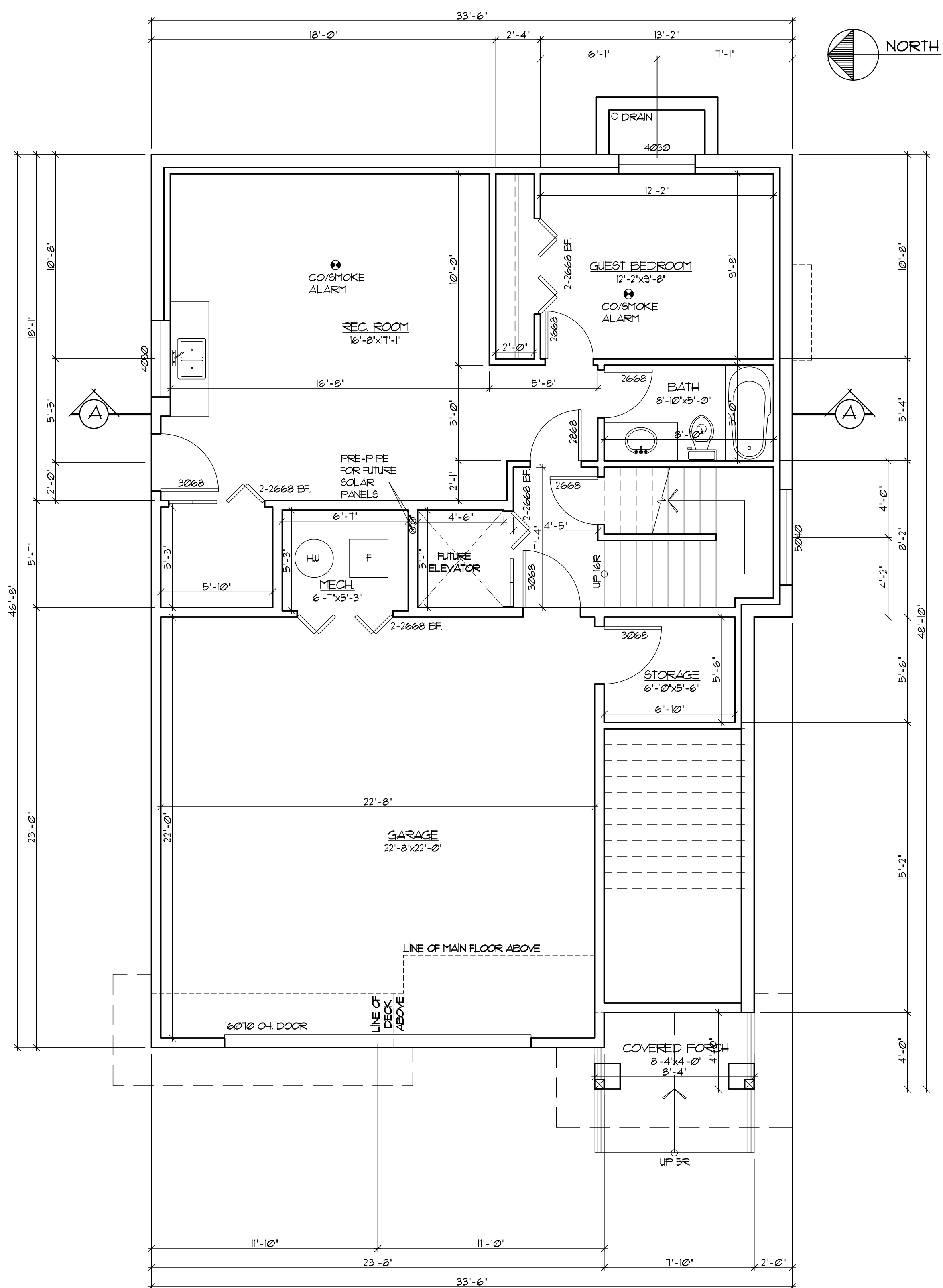
**DRAWING TITLE:**  
BASEMENT FLOOR PLAN  
MAIN FLOOR PLAN

DESIGNED BY: CMC  
CHECKED BY: CMC  
DRAWN BY: GD  
PROJECT NO: C19110-2  
DATE: 02.06.2020  
SCALE: AS SHOWN

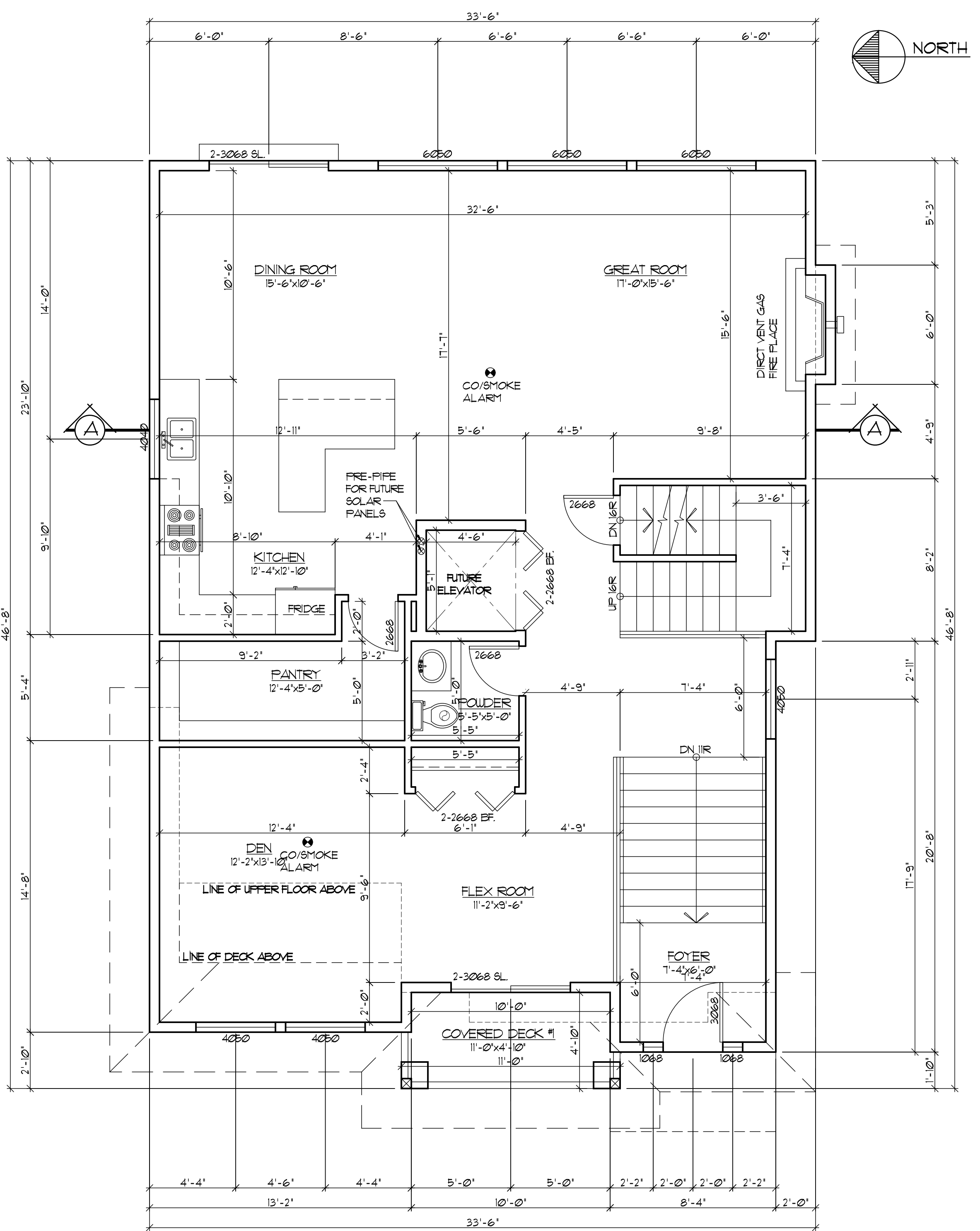
DRAWING NO:

# A-2

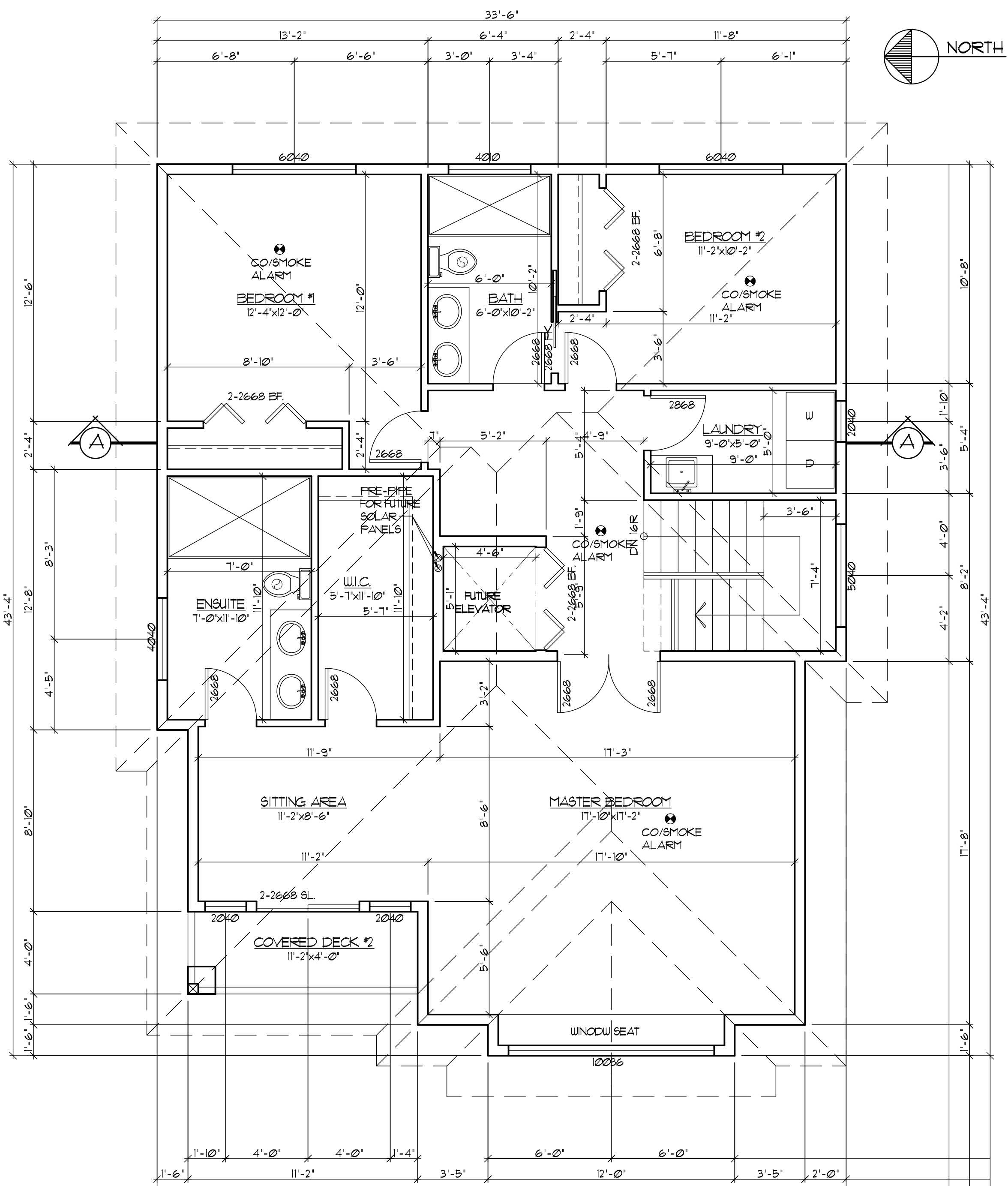
THESE DRAWINGS COMPLY TO THE 2018 BCBC



**BASEMENT FLOOR PLAN**  
SCALE: 1/4" = 1'-0"  
BASEMENT AREA: 151.49 SF.  
GARAGE AREA: 636.28 SF.



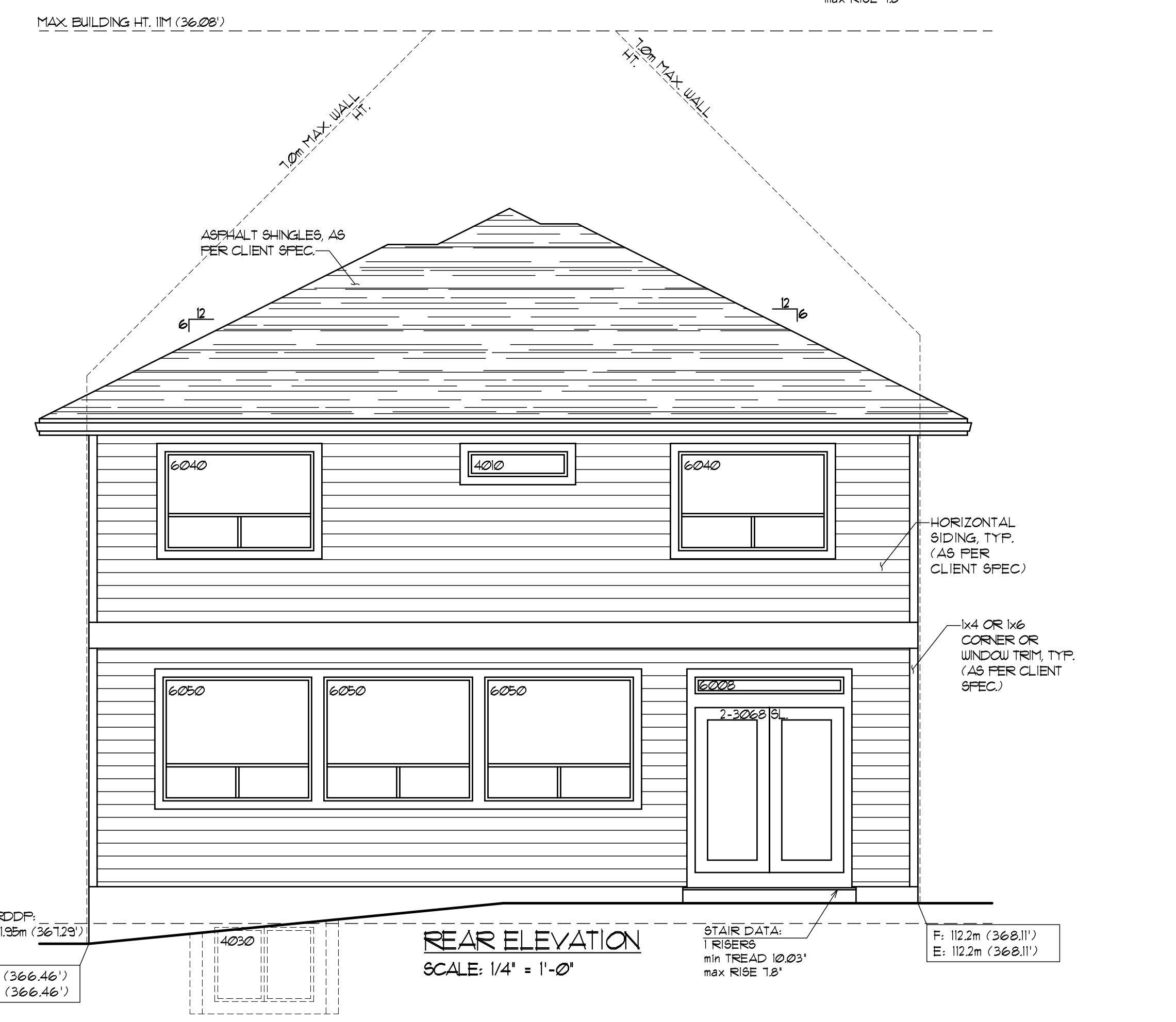
**MAIN FLOOR PLAN**  
SCALE: 1/4" = 1'-0"  
MAIN FLOOR AREA: 1417.41 SF.  
COVERED DECK #1 AREA: 50.66 SF.  
COVERED PORCH AREA: 32.41 SF.



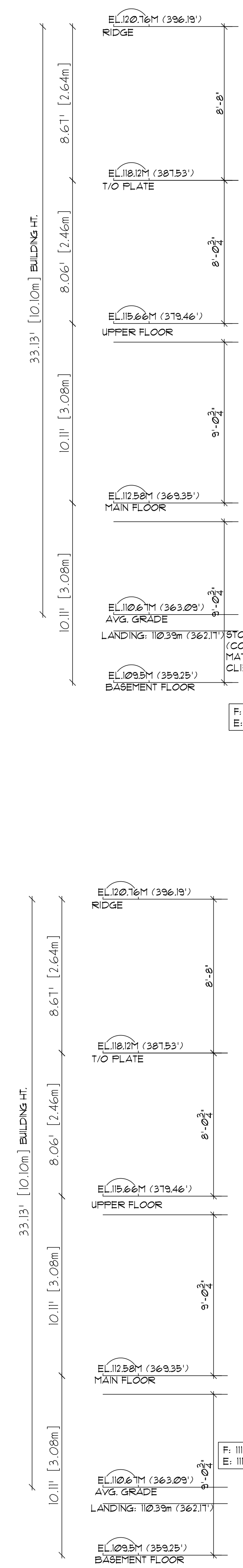
**UPPER FLOOR PLAN**  
 SCALE: 1/4" = 1'-0"  
 UPPER FLOOR AREA: 1219.38 SF.  
 COVERED DECK #2 AREA: 4466 SF.



**FRONT ELEVATION**  
 SCALE: 1/4" = 1'-0"



**REAR ELEVATION**  
 SCALE: 1/4" = 1'-0"



REVISIONS:	

**SEL Engineering Limited**  
 Consulting Engineers

1003 ST. JOHN'S STREET  
 FORT MOODY, BC V3H 3C4  
 TELEPHONE: 604.469.3123  
 FACSIMILE: 604.469.3101  
 E-MAIL: SEL@SELENG.COM

**SEAL:**

I, CHANGMO CHING, P. ENG, HAVE REVIEWED AND CONFIRMED THAT ALL STRUCTURAL MEMBERS AND CONNECTIONS OF THIS BUILDING, INCLUDING BRACING TO RESIST SEISMIC LOADS ARE DESIGNED IN ACCORDANCE WITH PART 4 OF BCBC 2018.

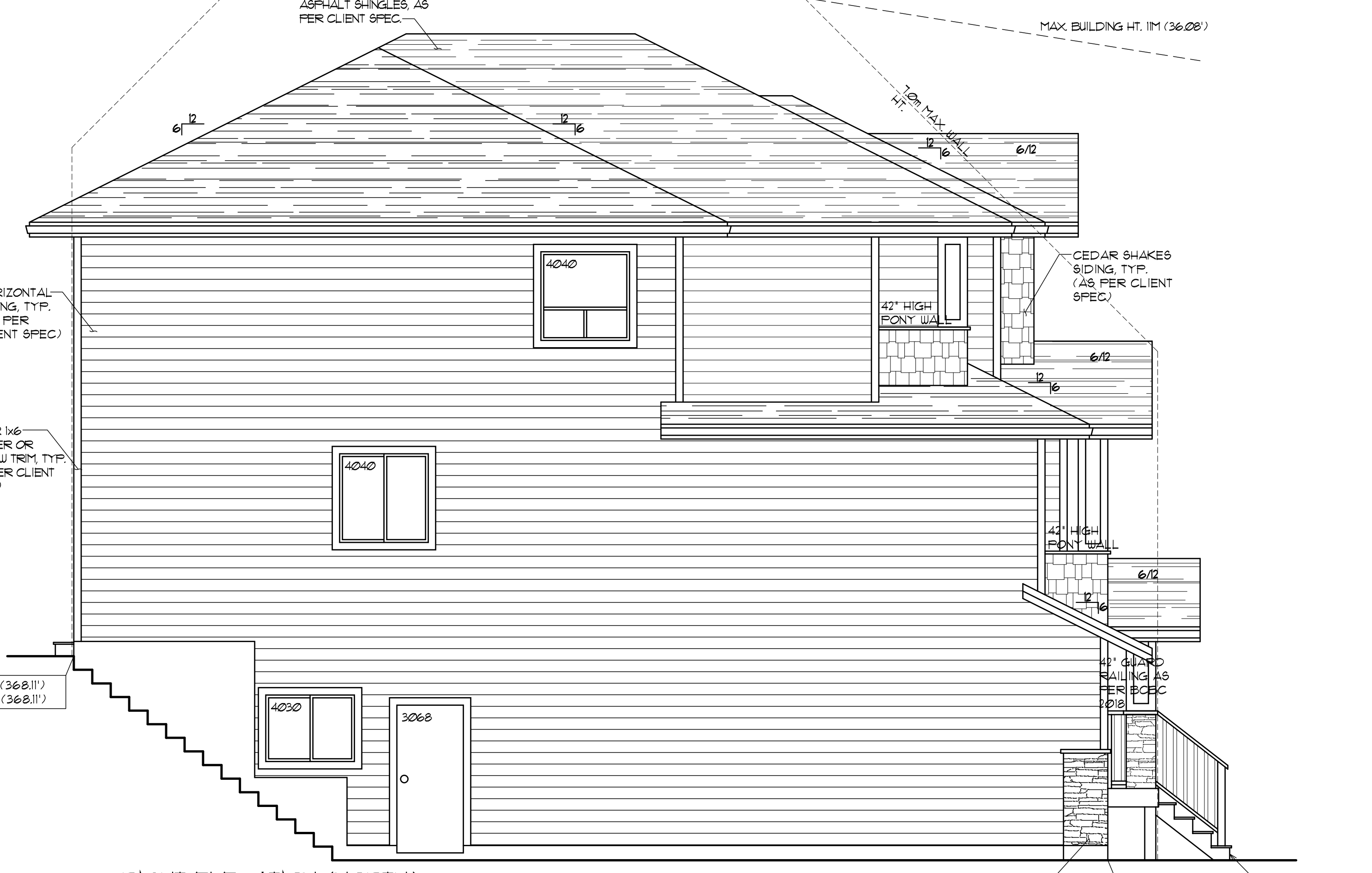
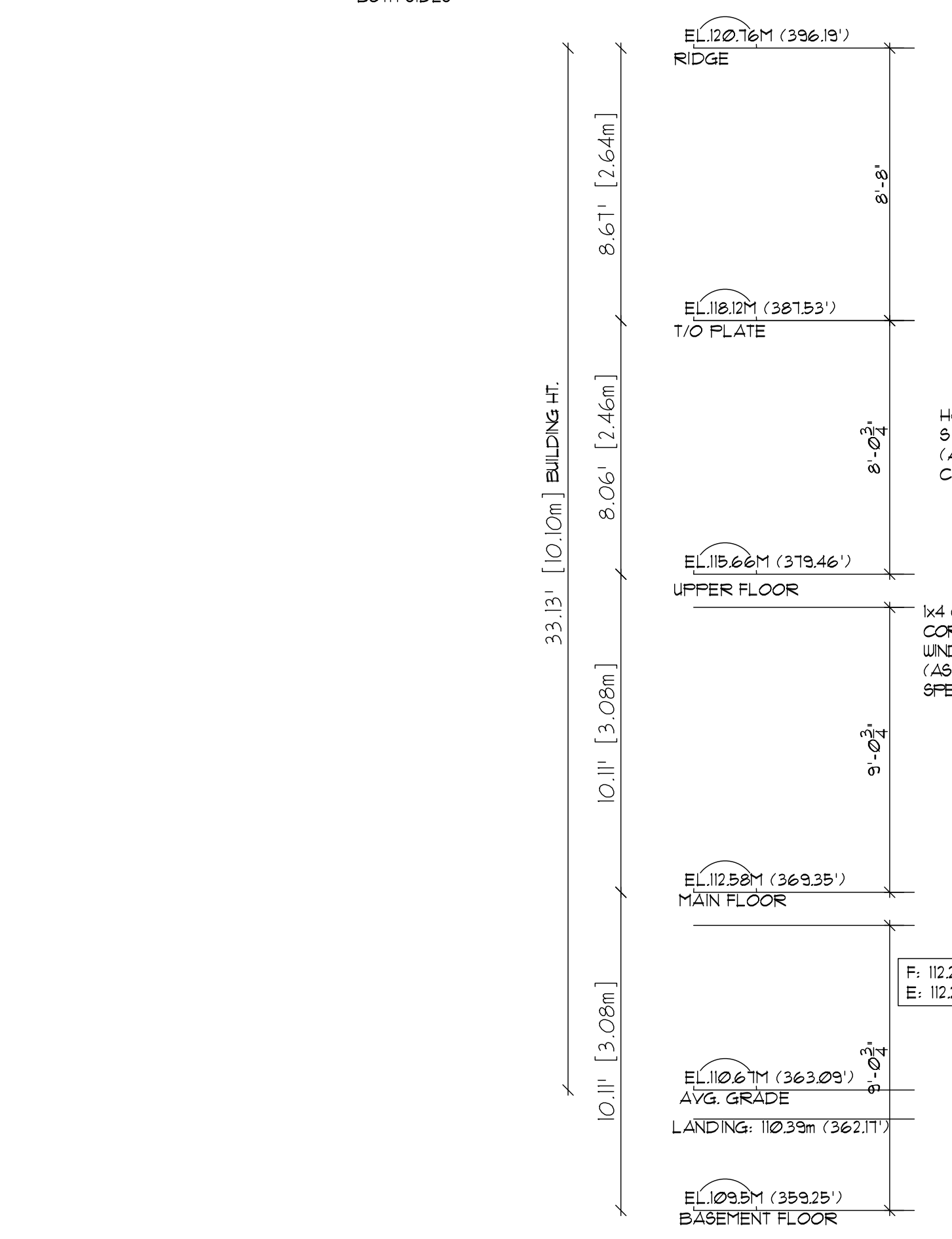
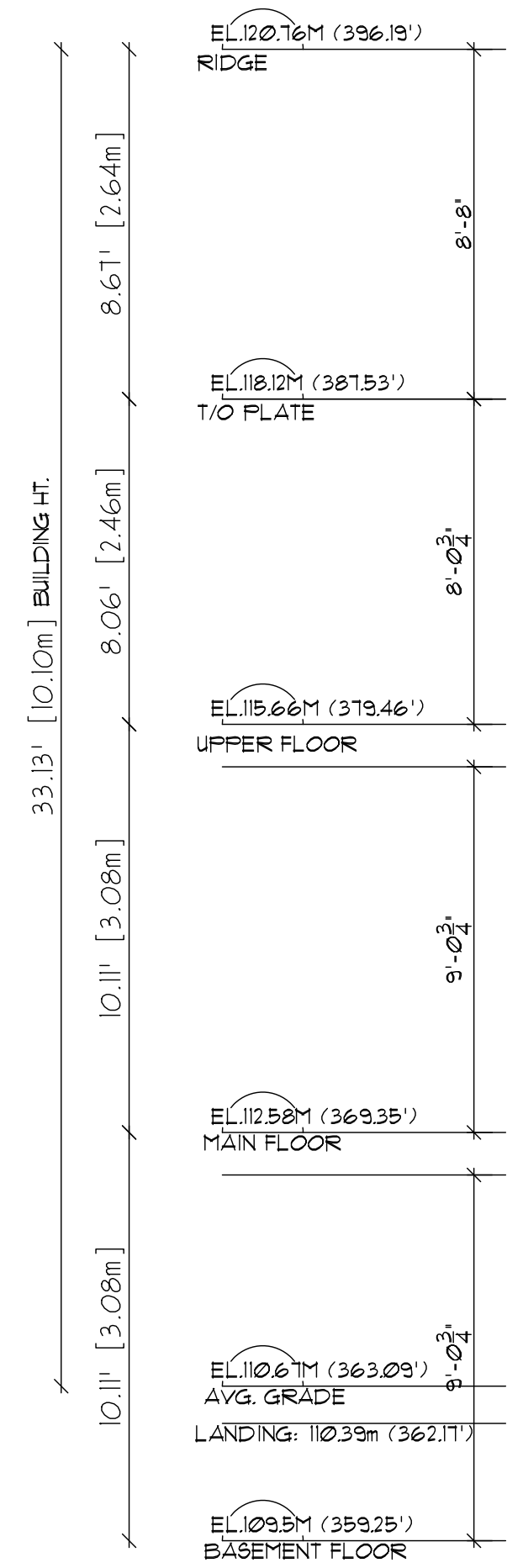
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**PROJECT TITLE:**  
 NEW SINGLE FAMILY RESIDENCE AT:  
 LOT 2 - 24850 106 AVENUE,  
 MAPLE RIDGE, BC.

**DRAWING TITLE:**  
 UPPER FLOOR PLAN  
 FRONT ELEVATION  
 REAR ELEVATION

DESIGNED BY:	CMC
CHECKED BY:	CMC
DRAWN BY:	GD
PROJECT NO:	C19110-2
DATE:	02.06.2020
SCALE:	AS SHOWN

**DRAWING NO:**  
**A-3**



STAIR DATA:  
5 EQUAL RISERS  
min TREAD 10/32"  
max RISE 18"  
1" NOSING  
34" HANDRAIL  
BOTH SIDES

STAIR DATA:  
5 EQUAL RISERS  
min TREAD 10/32"  
max RISE 18"  
1" NOSING  
34" HANDRAIL  
BOTH SIDES

THESE DRAWINGS COMPLY TO THE 2018 BCBC

NO.	DESCRIPTION	DATE

**SEL Engineering Limited**  
Consulting Engineers

9201, 3003 ST. JOHN'S STREET  
FORT MOODY, BC V2H 2C4  
TELEPHONE: 604.469.3723  
FACSIMILE: 604.469.3701  
E-MAIL: SEL@SELENG.COM

SEAL:

I CHANGMO CHING, P. ENG. HAVE REVIEWED AND CONFIRMED THAT ALL STRUCTURAL MEMBERS AND CONNECTIONS OF THIS BUILDING, INCLUDING BRACING TO RESIST SEISMIC LOADS ARE DESIGNED IN ACCORDANCE WITH PART 4 OF BCBC 2018

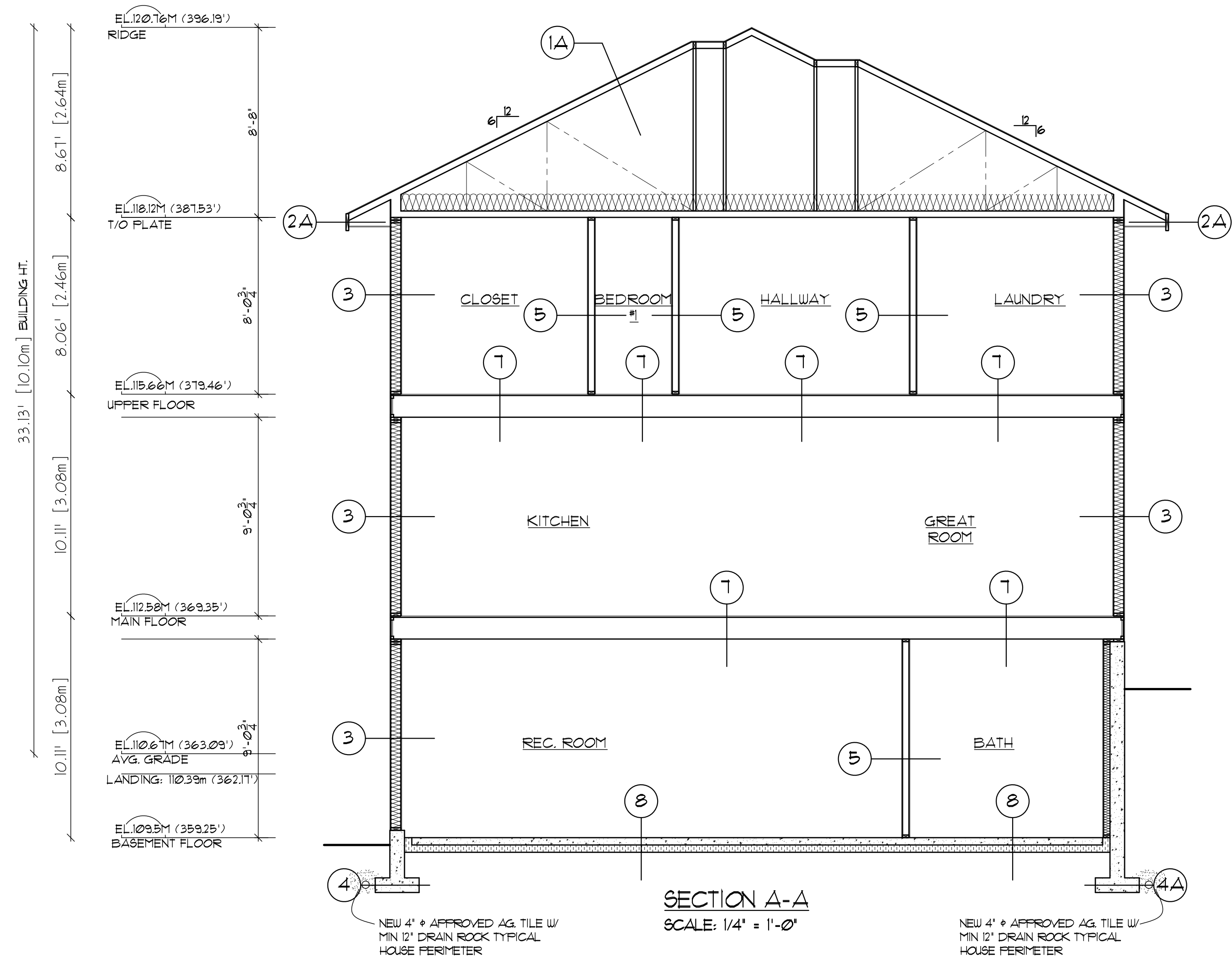
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PROJECT TITLE:  
NEW SINGLE FAMILY RESIDENCE AT:  
LOT 2 - 24850 106 AVENUE,  
MAPLE RIDGE, B.C.

DRAWING TITLE:  
LEFT ELEVATION  
RIGHT ELEVATION

DESIGNED BY: CMC  
CHECKED BY: CMC  
DRAWN BY: GD  
PROJECT NO: C19110-2  
DATE: 02.06.2020  
SCALE: AS SHOWN

DRAWING NO:  
**A-4**



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

**BUILDING SPEC.**

1A	TYPICAL TRUSS ROOF (CEILING & BELOW ATTICS:)	Ef. RSI Value	Ef. R Value:
	INTERIOR AIR FILM	0.11	0.62
	1/2" THK GYPSUM WALL BOARD	0.08	0.45
	6 MIL POLY VB.		
	PRE-FAB 2x4 TRUSSES @ 24" O.C.	1.41	8.33
	R-40 FIBERGLASS INSULATION	5.12	32.45
	1/2" OSB SHEATHING W/CLIPS		
	#5 ROOFING FELT		
	ASPHALT SHINGLES		
	TOTAL VALUE:	7.83	41.85
	MIN. VALUE:	6.91	39.2

2A	TYPICAL EAVE OVERHANG	Ef. RSI Value	Ef. R Value:
	APPROVED GUTTER		
	1x6 OR 2x10 LAYERED WOOD FASCIA BRGS		
	VENTED ALUMINUM OR VINYL SOFFIT OR V-GROOVED 1x6 CEDAR SOFFIT		
	C/W VENT STRIP/REQ'D @ LARGE AREAS		

2B	TYPICAL GABLE OVERHANG	Ef. RSI Value	Ef. R Value:
	1x6 & 2x10 OR 2x12 LAYERED BARGE BOARDS RAISED 2"		
	VENTED ALUMINUM OR VINYL SOFFIT OR V-GROOVED 1x6 CEDAR SOFFIT		
	C/W VENT STRIP/REQ'D @ LARGE AREAS		

3	TYPICAL EXTERIOR WALLS (ABOVE GRADE WALL:)	Ef. RSI Value	Ef. R Value:
	INTERIOR AIR FILM	0.12	0.68
	1/2" THK GYPSUM WALL BOARD	0.08	0.45
	6 MIL POLY VB.		
	2x6 STUDS @ 16" O.C. c/w		
	R-20 MIN. FIBERGLASS INSULATION	2.34	13.31
	1/2" PLYWOOD SHEATHING	0.14	0.791
	BUILDING PAPER	0.011	0.06
	RAINSCREEN TO CODE		
	1/2" PLYWOOD STRAPPING @ 16" o/c	0.15	0.82
	VINYL SIDING	0.017	0.096
	EXTERIOR AIR FILM	0.03	0.17
	TOTAL VALUE:	2.89	16.38
	MIN. VALUE:	2.78	15.8

4	TYPICAL EXTERIOR FND. WALL FOOTING	Ef. RSI Value	Ef. R Value:
	4" PERIMETER DRAIN		
	6" MIN DRAIN ROCK		
	24x8" CONCRETE STRIP FOOTING		
	8" ENG'D CONC. FOUNDATION WALL		
	ASPHALT EMULSION		

4A	TYPICAL FOUNDATION WALL (BELOW GRADE:)	Ef. RSI Value	Ef. R Value:
	INTERIOR AIR FILM	0.12	0.68
	1/2" THK GYPROC TO WARM SIDE	0.08	0.45
	6 MIL POLY VAPOR BARRIER		
	R-14 F.G. BATT INSULATION	1.80	10.233
	2x4 STRAPPING @ 24" O.C.		
	8" ENG'D CONC. FOUNDATION WALL	0.08	0.46
	DAMP PROOFING		
	EXTERIOR AIR FILM		
	TOTAL VALUE:	2.08	11.83
	MIN. VALUE:	1.99	11.3

5	TYPICAL INTERIOR WALLS	Ef. RSI Value	Ef. R Value:
	GYPSUM WALL BOARD BOTH SIDES		
	2x4 OR 2x6 STUDS @ 16" O.C.		

6	TYPICAL BEARING WALL	Ef. RSI Value	Ef. R Value:
	2x6 OR 2x4 STUDS @ 16" O.C.		
	6" CONCRETE CURB		
	24x8" CONCRETE STRIP FOOTING		

7	TYPICAL FLOOR	Ef. RSI Value	Ef. R Value:
	FINISH FLOORING		
	1/8" T&G PLYWOOD SHEATHING (GLUED & NAILED)		
	1188" DP ENG'D FLOOR JOISTS @ 12" OR 16" o/c		
	GYPSUM WALL BOARD		

8	TYPICAL BASEMENT FLOOR (BASEMENT CONC. S.O.G. (UNHEATED:))	Ef. RSI Value	Ef. R Value:
	4" CONCRETE SLAB	0.004	0.023
	6 MIL POLY VB.		
	3" RIGID INSULATION TYPE I (EXPANDED POLYSTYRENE)	1.981	11.263
	COMPACT GRANULAR FILL		
	TOTAL VALUE:	1.985	11.286
	MIN. VALUE:	1.96	11.13

9	TYPICAL GARAGE SLAB	Ef. RSI Value	Ef. R Value:
	4" CONCRETE SLAB		
	COMPACT GRANULAR FILL		
	1% MIN SLOPE TO ENTRY		

10	TYPICAL STAIRS	Ef. RSI Value	Ef. R Value:
	11" TREAD		
	10" RUN		
	1 1/2" x 4" RISE		
	PROVIDE HANDRAIL @ 32-36" @ STAIRS w/ 3 OR MORE RISERS		
	PROVIDE 6'-8" MIN. FINISHED HEADROOM		

11	TYPICAL DECK	Ef. RSI Value	Ef. R Value:
	DECK FINISH		
	ROOFING MEMBRANE		
	5/8" DECK SHEATHING		
	2x8 DECK JOISTS @ 12" OR 16" O/C		
	PERFORATED SOFFIT		

BCBC Climate Zone:4  
Address: Lot 2 - 24850 106 Avenue, Maple Ridge, BC

Opaque Building Assembly:	Minimum Effective RSI Value (as per 9.36):	Minimum Effective R
Ceiling Below Attics	6.91	39.2
Above Grade Walls	2.78	15.8
Floors Over Unheated Spaces 4.67		26.6
Unheated Floors Above Frost Line	1.96	11.1
Concrete Foundation wall:	1.99	11.3

Typical Assembly for Rim Joists:

Framing Factor as per Table A-9.36.2.4.(1)A: 9%

Layer:	Description:	Effective RSI Value (Table A-)	Effective R Value:
1	Interior air film	0.16	0.91
2	1/2" GWB	0.08	0.45
3	11.88" ENG'D joist @ 16" O/C spacing with R-20 fiberglass batt insulation between	2.32	13.17
4	1 1/2" X 11.875" TS Rim Joist	0.323	1.83
<b>Total:</b>		<b>2.89</b>	<b>16.40</b>

Note: Table A indicates Table A-9.36.2.4 (1) A

Typical Assembly for Window Seat:

Framing Factor as per Table A-9.36.2.4.(1)A: 9%

Layer:	Description:	Effective RSI Value (Table A-)	Effective R Value:
1	Interior air film	0.16	0.91
3	3/4" thick plywood	0.166	0.94
3.	11.88" ENG'D joist @ 16" O/C spacing with R-31 fiberglass batt insulation between	4.36	24.72
5	1/2" thick drywall	0.03	0.17
6	Exterior air film	0.08	0.45
<b>Total:</b>		<b>4.796</b>	<b>27.23</b>

Note: Table A indicates Table A-9.36.2.4 (1) A

REVISIONS:

NO.	DESCRIPTION	DATE

**SEL Engineering Limited**  
Consulting Engineers

201, 3003 ST. JOHNS STREET  
FORT MOODY, BC V3H 2C4  
TELEPHONE: 604.469.3123  
FACSIMILE: 604.469.3101  
E-MAIL: SEL@SELENG.COM

SEAL:

I, CHANGHO CHANG, P. ENG. HAVE REVIEWED AND CONFIRMED THAT ALL STRUCTURAL MEMBERS AND CONNECTIONS OF THIS BUILDING, INCLUDING BRACING TO RESIST SEISMIC LOADS ARE DESIGNED IN ACCORDANCE WITH PART 4 OF BCBC 2018.

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PROJECT TITLE:  
NEW SINGLE FAMILY RESIDENCE AT:  
LOT 2 - 24850 106 AVENUE,  
MAPLE RIDGE, B.C.

DRAWING TITLE:  
SECTION A-A

DESIGNED BY: CMC  
CHECKED BY: CMC  
DRAWN BY: GD  
PROJECT NO: C19110-2  
DATE: 02.06.2020  
SCALE: AS SHOWN  
DRAWING NO:

REVISIONS:

NO.	DESCRIPTION	DATE
1	ISSUED FOR BLDG. PERMIT	02.06.2020



1201, 3003 ST. JOHN'S STREET  
FORT MOODY, BC V3H 2C4  
TELEPHONE: 604.469.3723  
FACSIMILE: 604.469.3707  
E-MAIL: SEL@SELENG.COM

SEAL:

I, CHUNGMO CHUNG, P. ENG., HAVE REVIEWED AND CONFIRMED THAT ALL STRUCTURAL MEMBERS AND CONNECTIONS OF THIS BUILDING INCLUDING BRACING TO RESIST SEISMIC LOADS ARE DESIGNED IN ACCORDANCE WITH PART 4 OF BCBC 2018

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PROJECT TITLE:  
NEW SINGLE FAMILY RESIDENCE AT:  
LOT 2 - 24850 106 AVENUE,  
MAPLE RIDGE, BC.

DRAWING TITLE:  
DETAILS

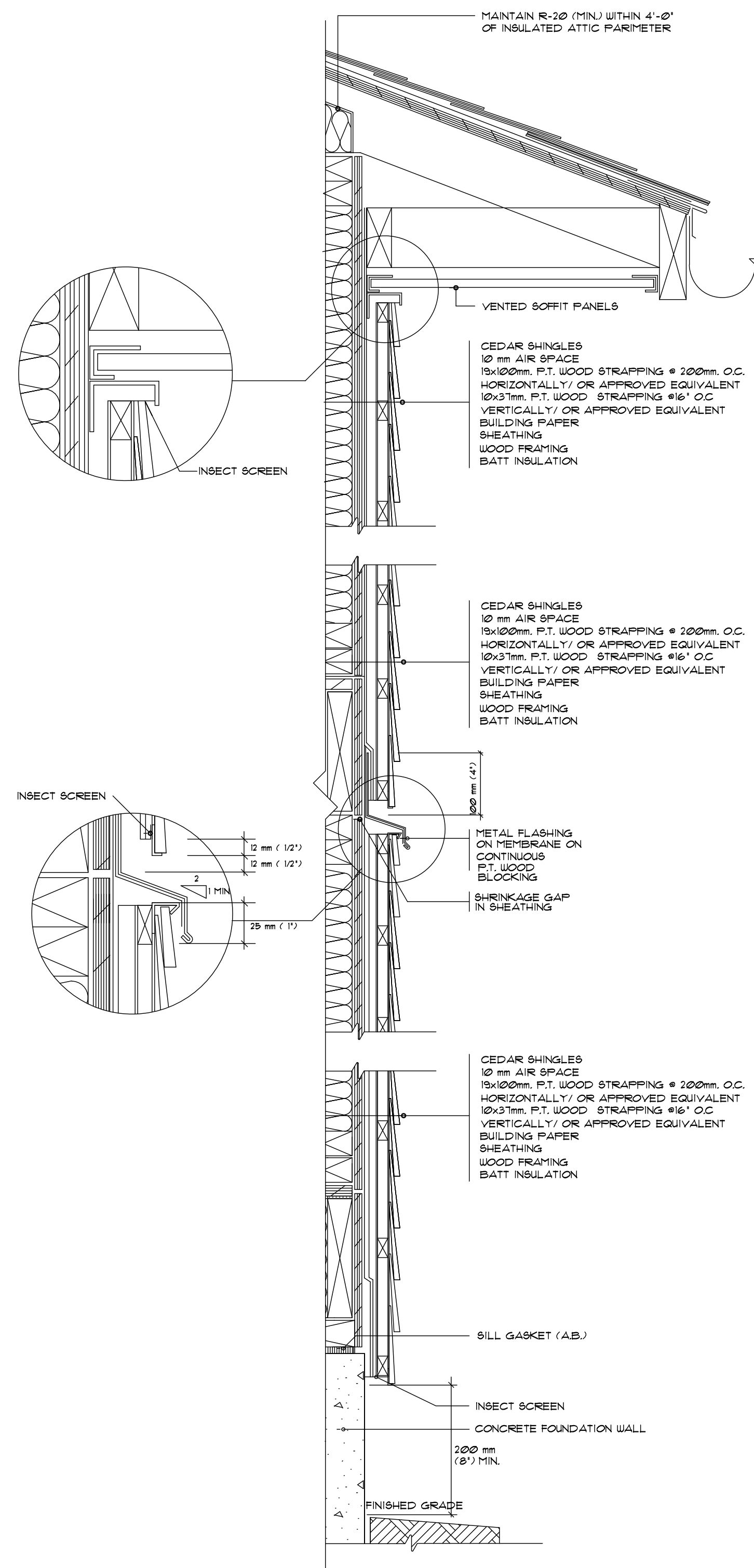
DESIGNED BY: CMC  
CHECKED BY: CMC  
DRAWN BY: GD  
PROJECT NO: C19110-2  
DATE: 02.06.2020  
SCALE: AS SHOWN  
DRAWING NO:

This premises is to be built to meet the 2018 B.C. Building Code. The detail page is to clarify the construction method to be used to meet the code requirements, in particular to building envelope issues and methods. To include but not limited to the following sections of the code referring to building envelope systems.

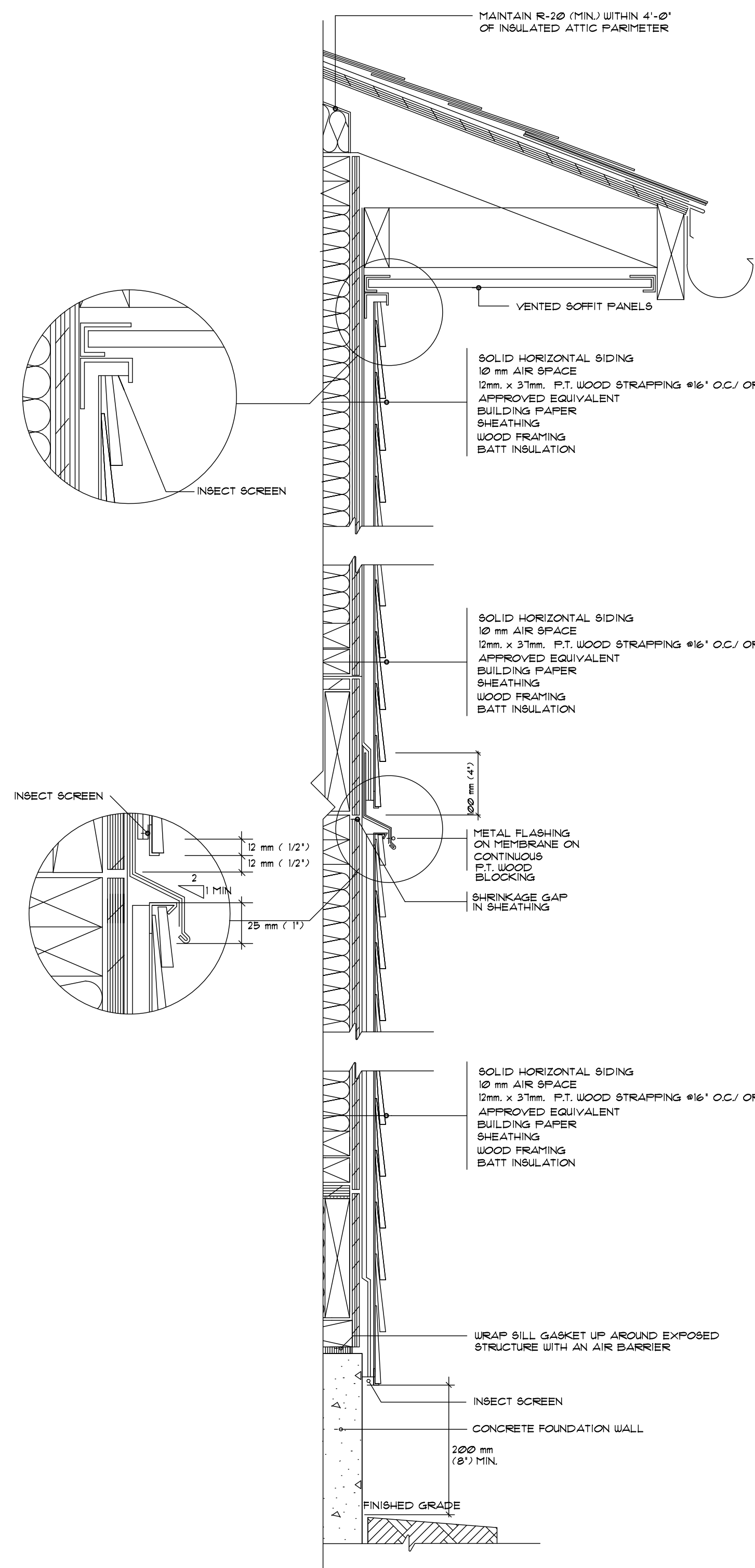
- Section 9.21 Cladding
- 9.21.2-Required Protection from Precipitation
- 9.21.3-Second Plane of Protection
- 9.21.4-Caulking
- 9.21.5-Attachment of Cladding
- 9.21.7-Wood Shingles and Shakes
- 9.21.8-Asbestos-Cement Shingles & Sheet

Section 9.25 Heat Transfer, Air Leakage and Condensation Control

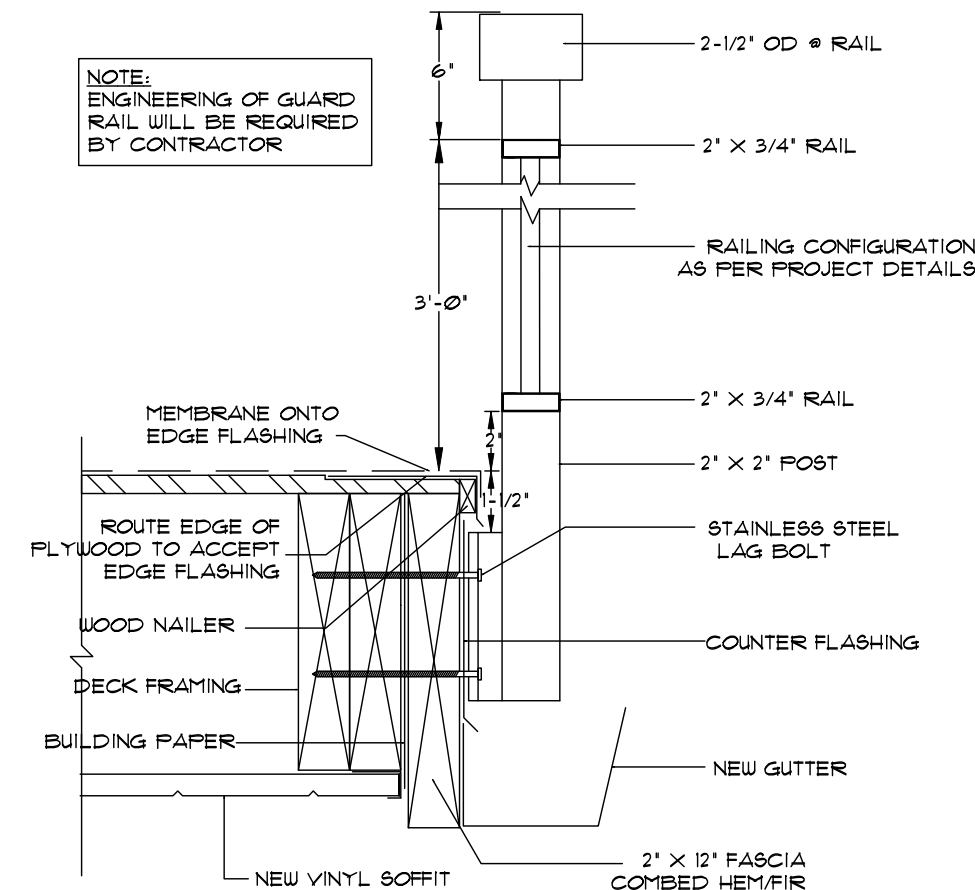
Section 9.23 Wood Frame Construction



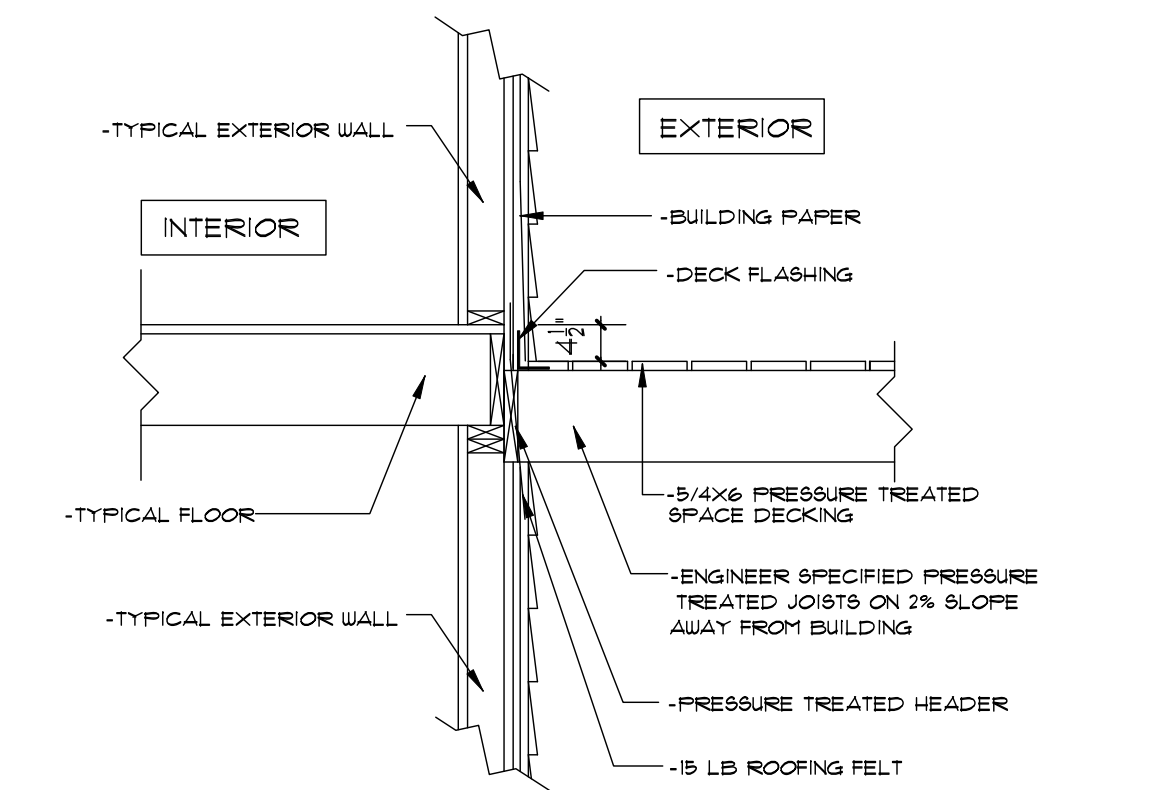
EXTERIOR WALL DETAIL W/  
CEDAR WALL SHINGLES



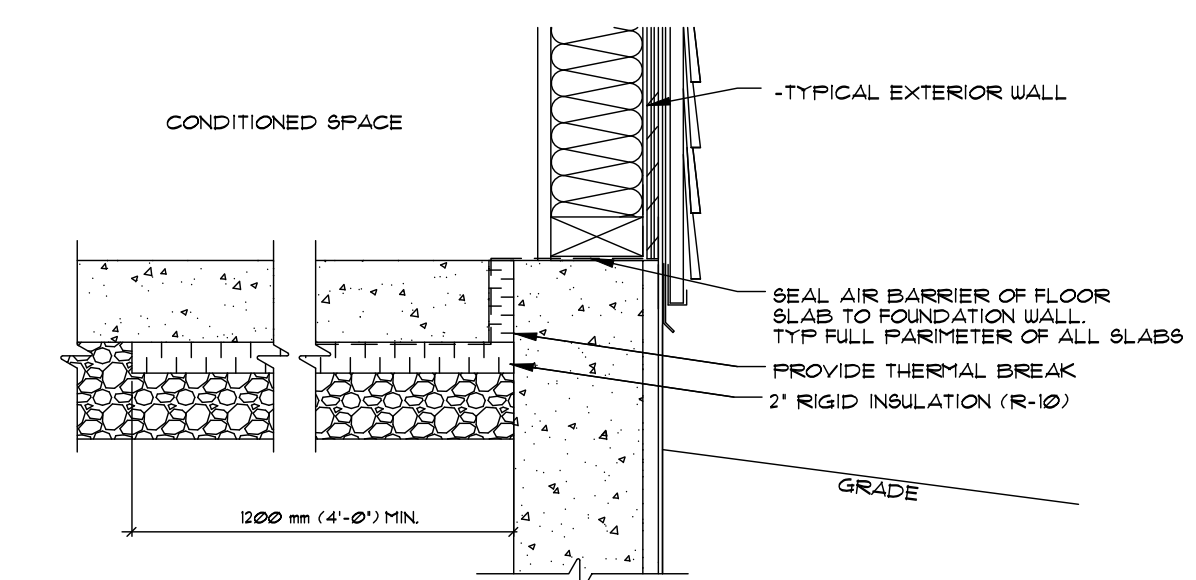
EXTERIOR WALL DETAIL W/  
SOLID HORIZONTAL SIDING



TYPICAL EXTERIOR DECK RAILING CONNECTION  
SCALE: N.T.S.



TYPICAL EXTERIOR DECK CONNECTION  
SCALE: N.T.S.



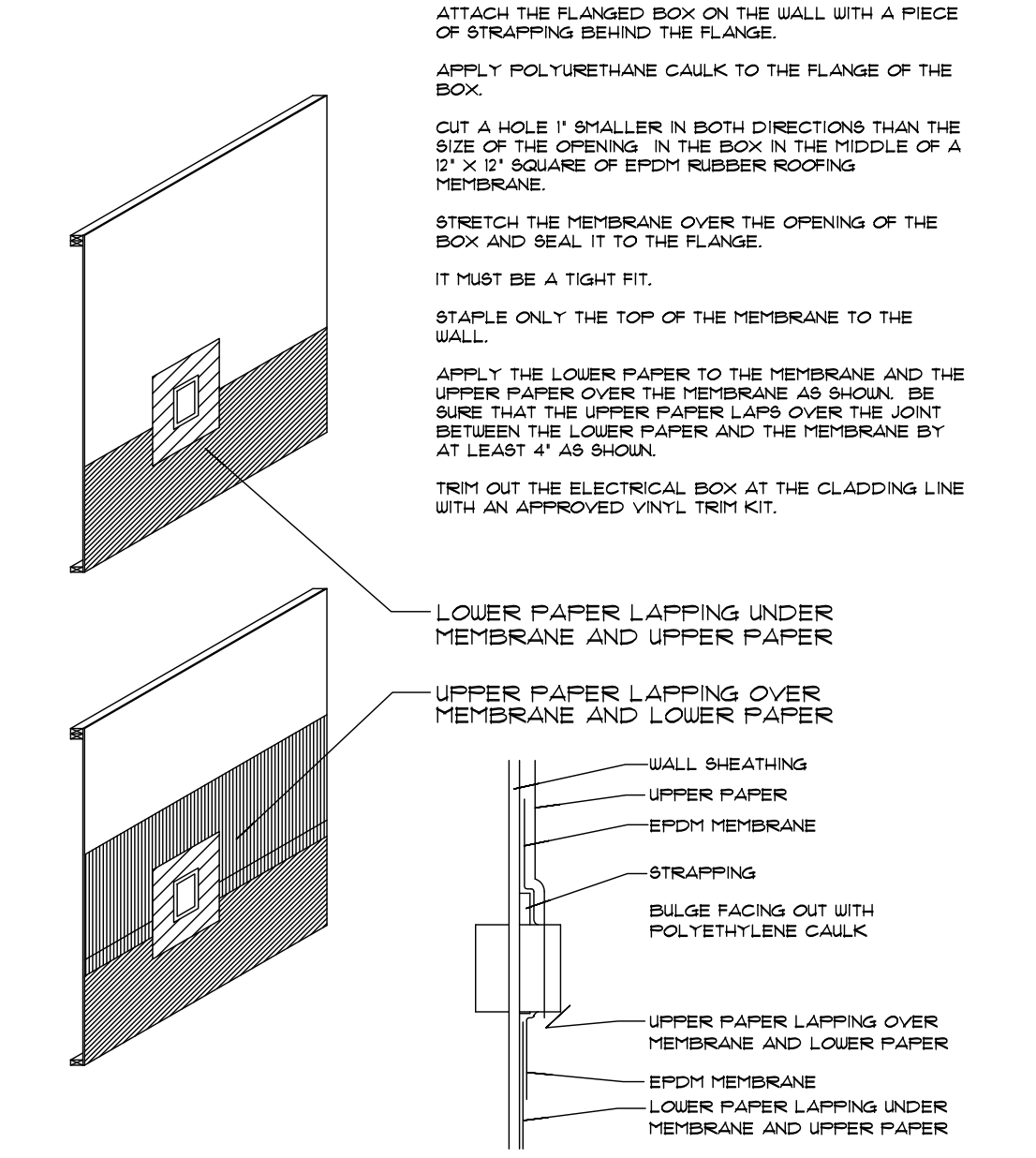
TYPICAL INSULATION OF SLABS ABOVE FROST LINE  
SCALE: N.T.S.

This premises is to be built to meet the 2018 B.C. Building Code. The detail page is to clarify the construction method to be used to meet the code requirements, in particular to building envelope issues and methods. To include but not limited to the following sections of the code referring to building envelope systems.

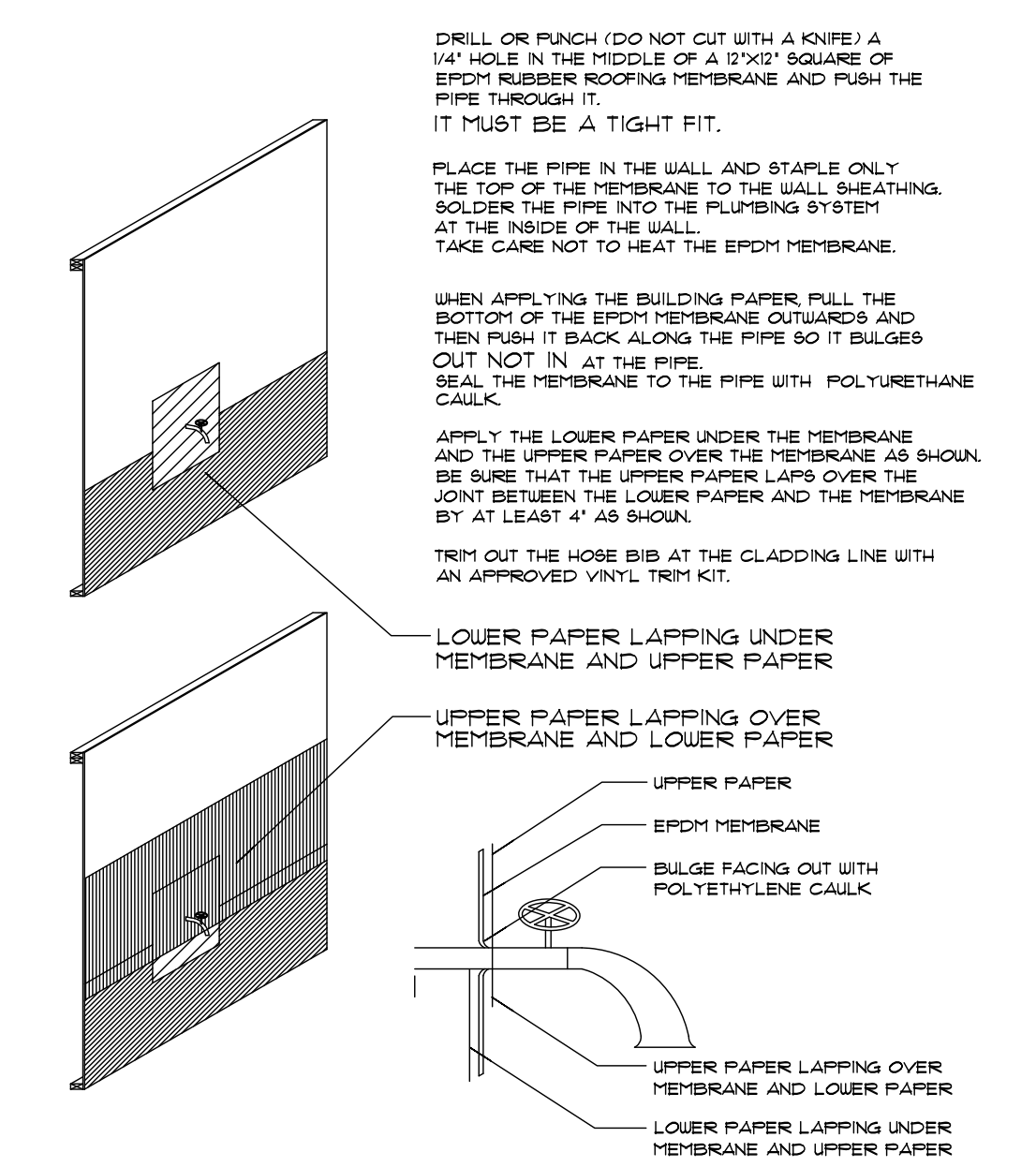
Section 9.21 Cladding  
 9.21.2-Required Protection from Precipitation  
 9.21.3-Second Plane of Protection  
 9.21.4-Caulking  
 9.21.5-Attachment of Cladding  
 9.21.7-Wood Shingles and Shakes  
 9.21.8-Asbestos-Cement Shingles & Sheet

Section 9.25 Heat Transfer, Air Leakage, and Condensation Control  
 Section 9.23 Wood Frame Construction  
 Section 9.36. Energy Efficiency

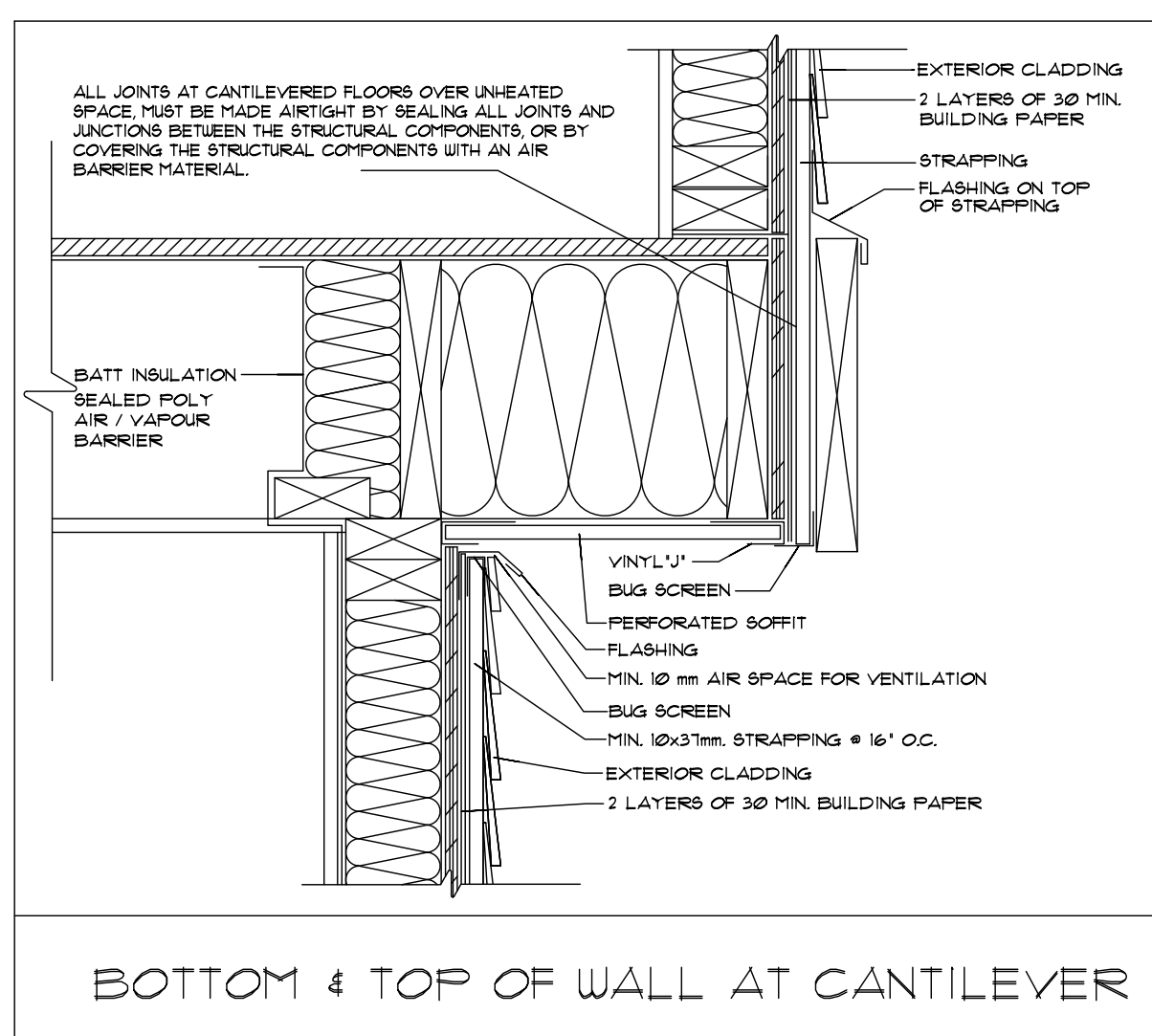
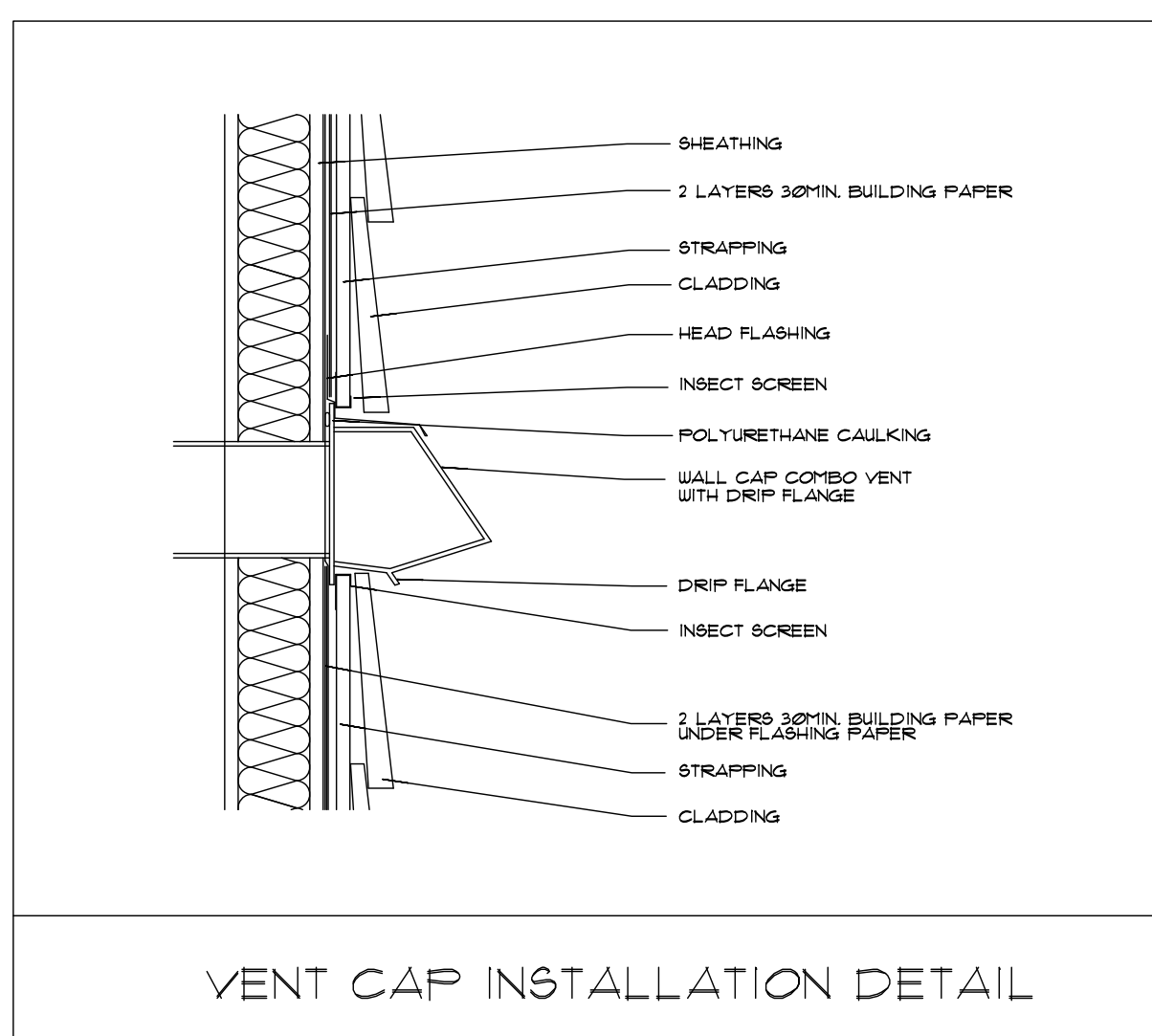
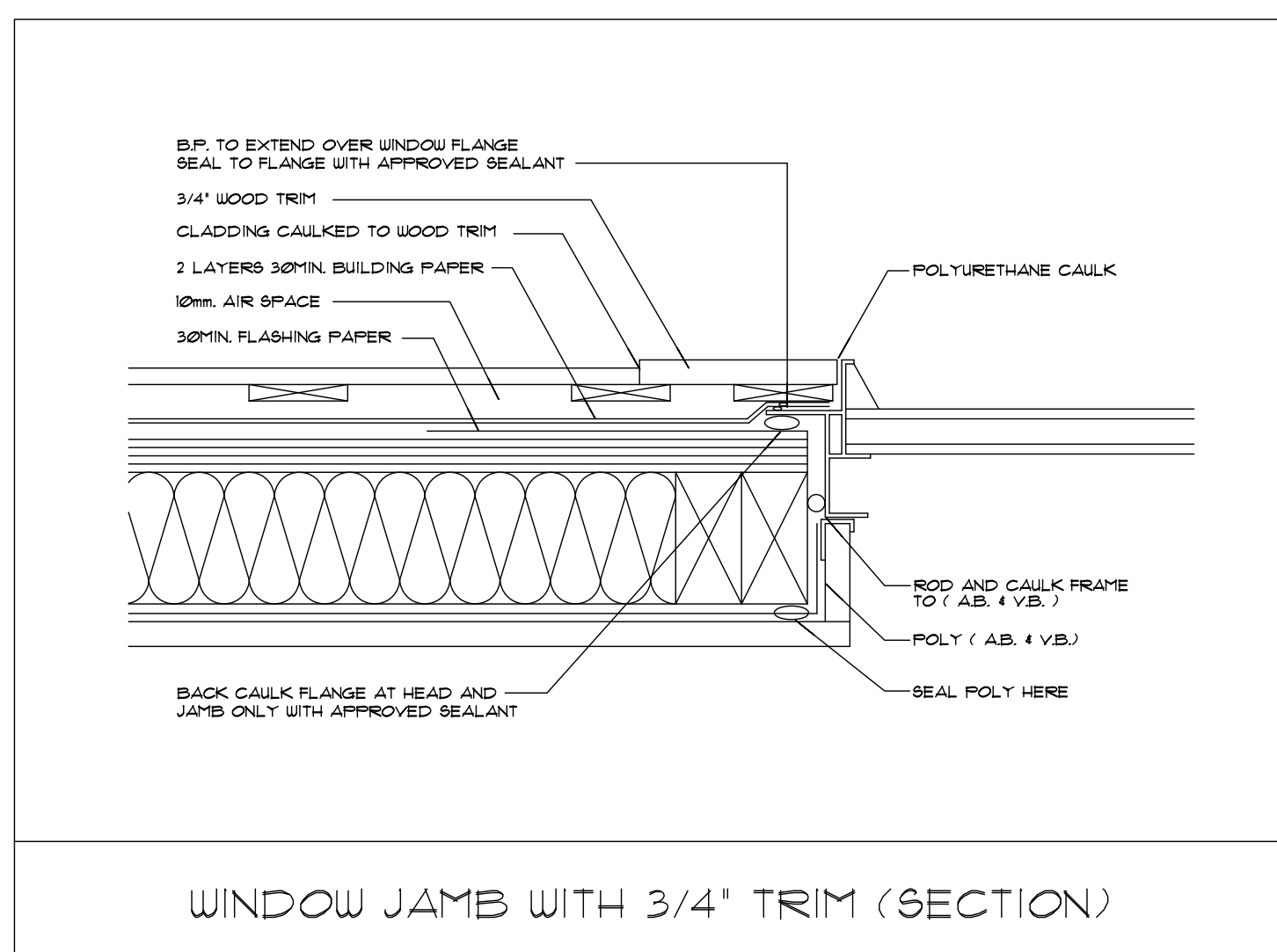
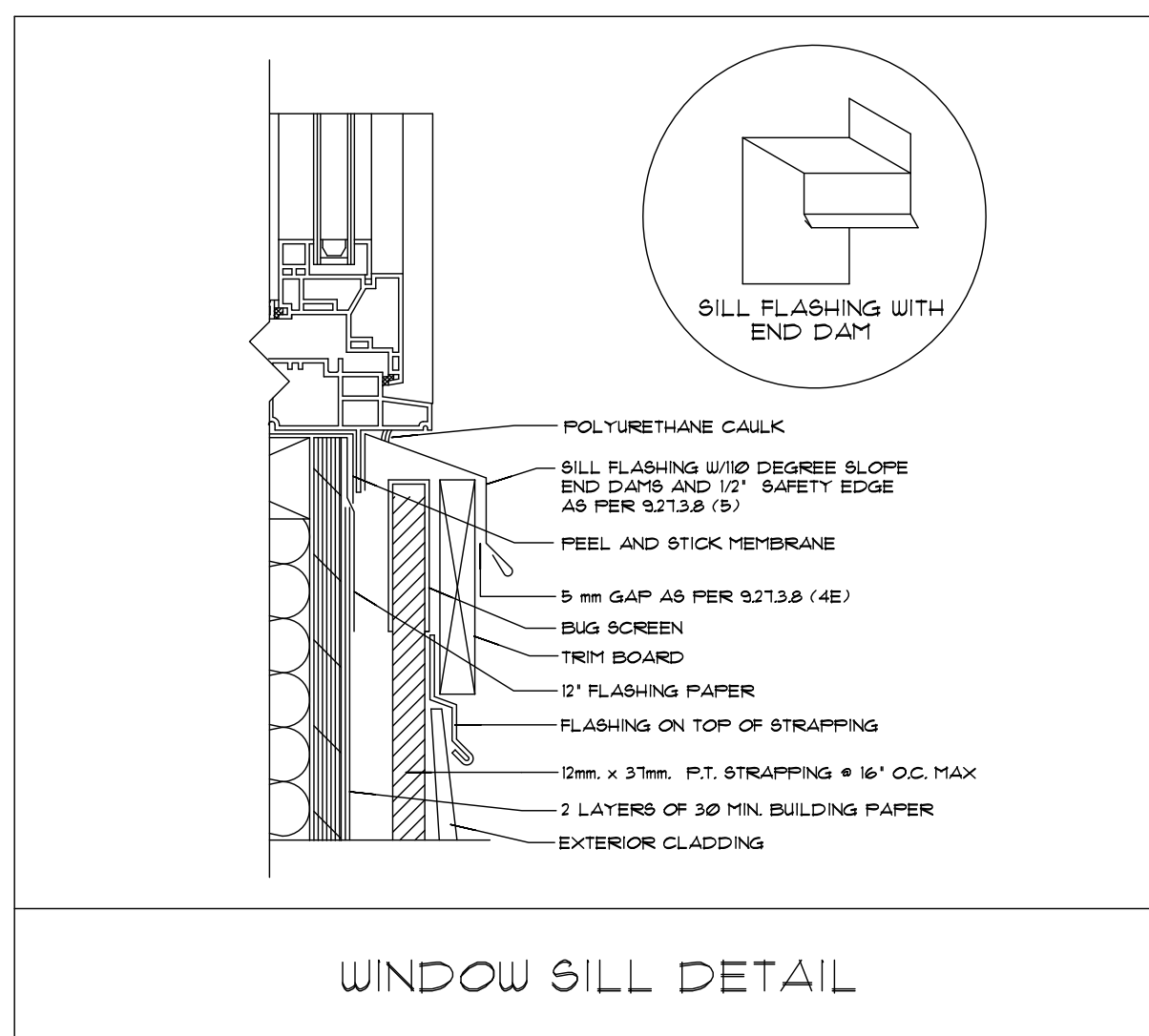
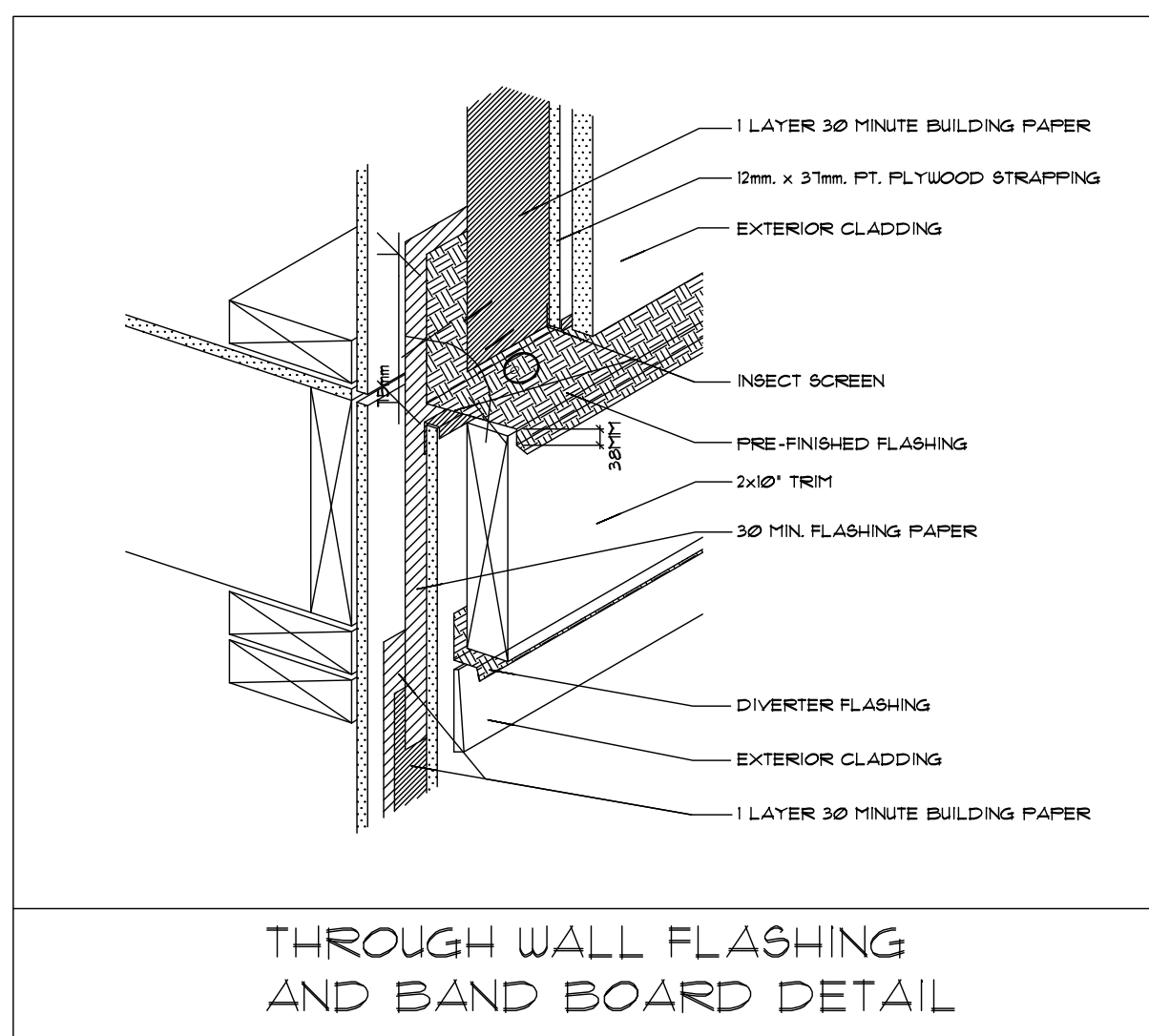
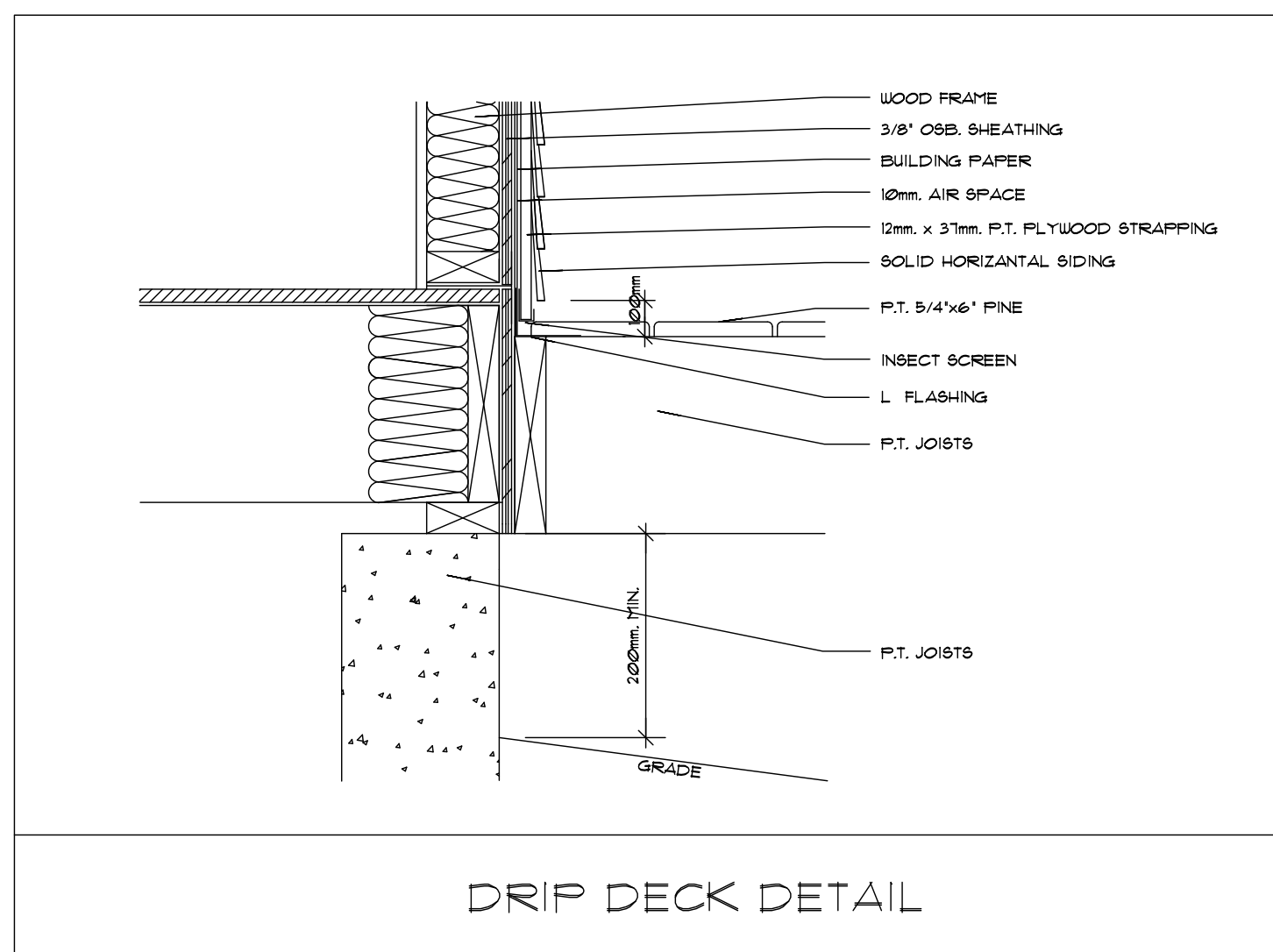
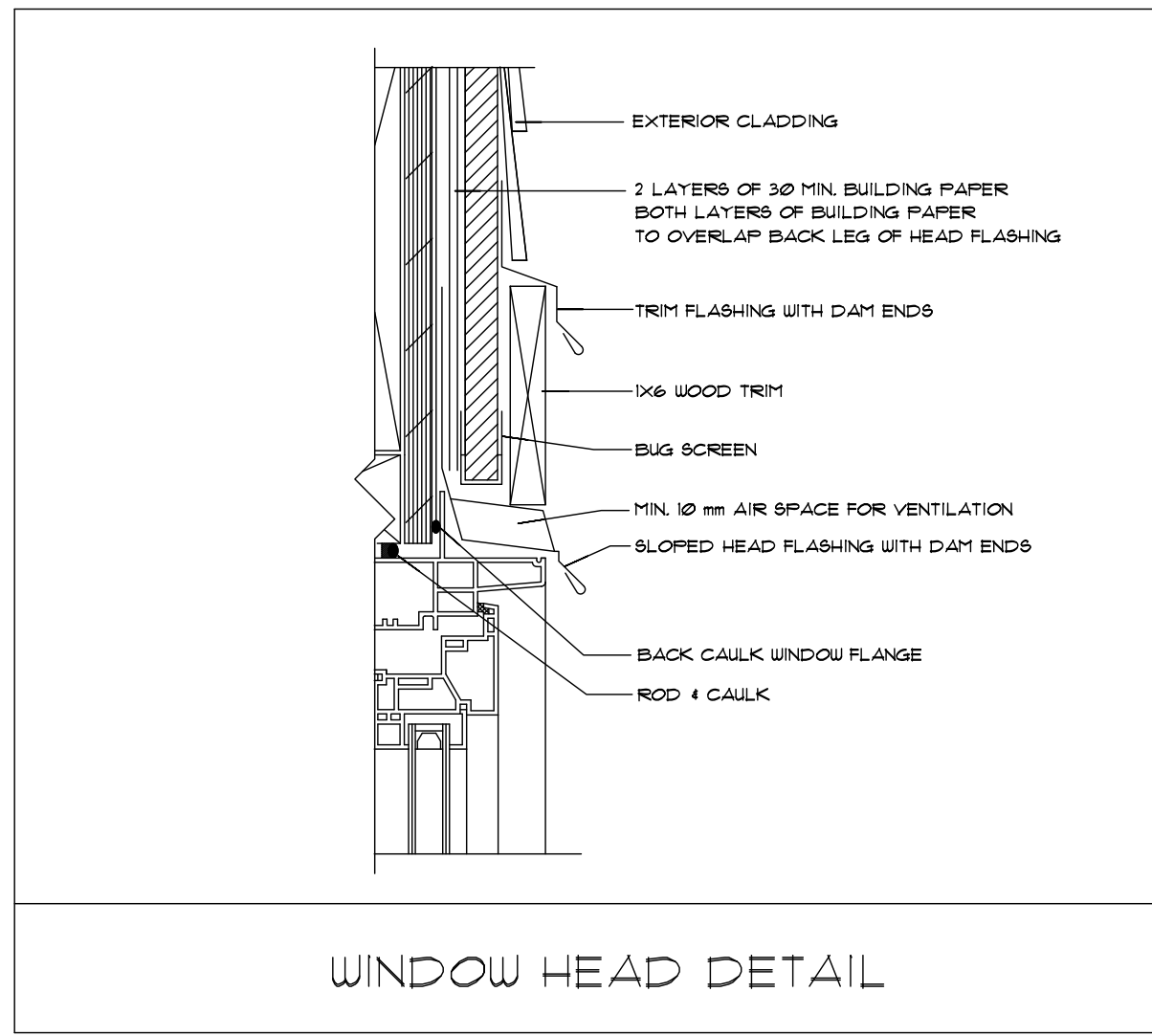
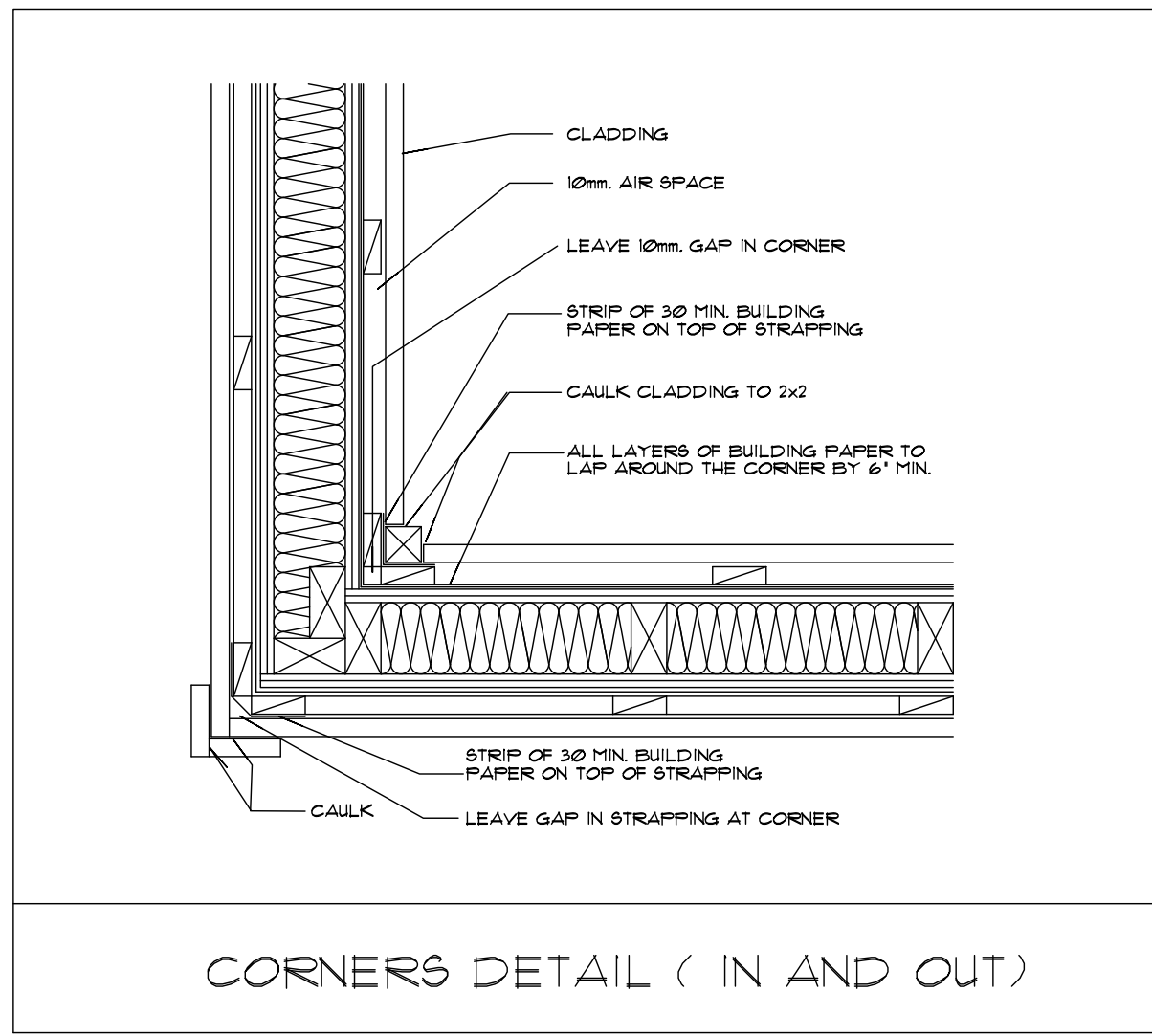
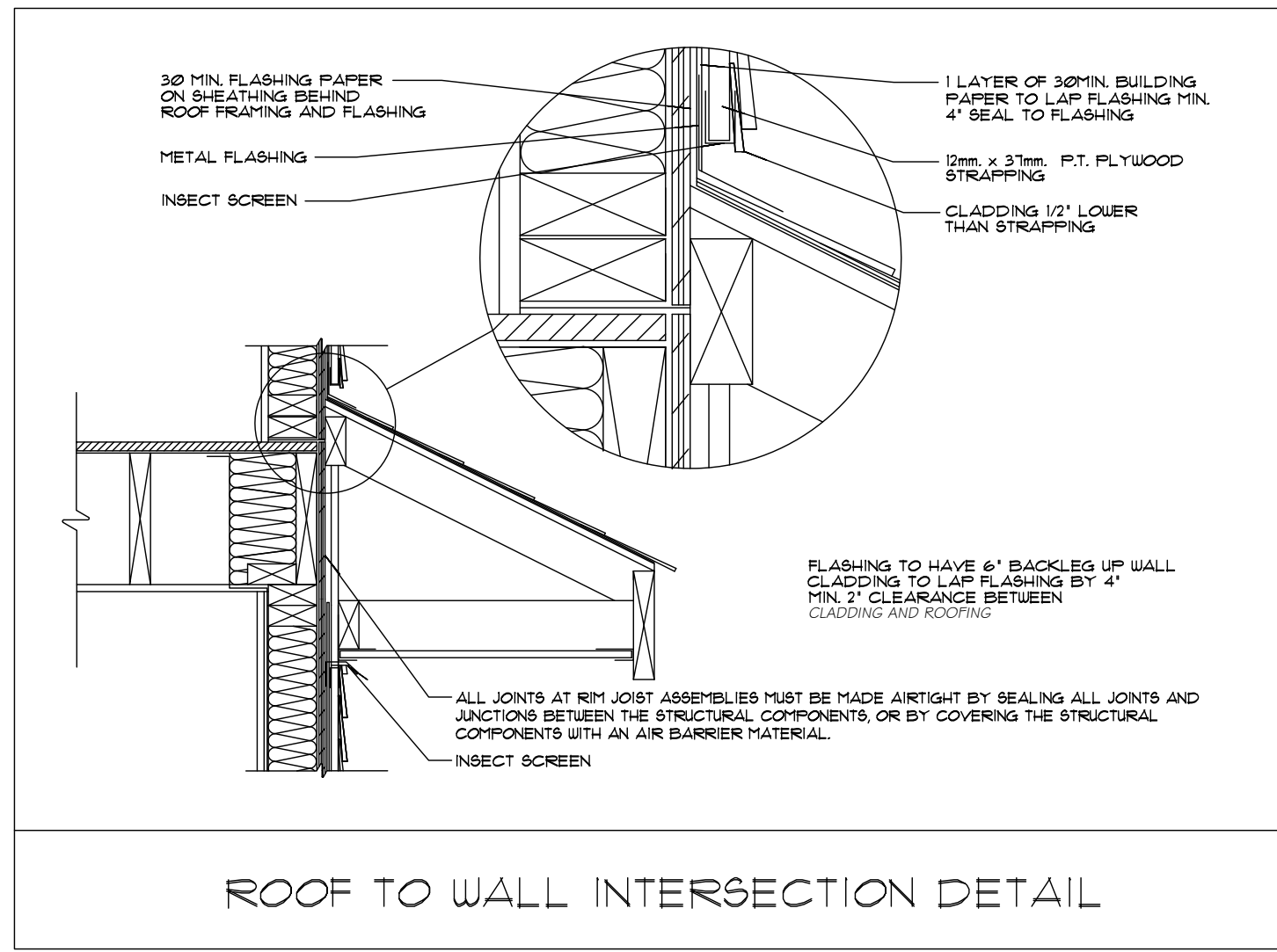
**ALL ELECTRICAL BOXES MUST HAVE GASKETS AND FLANGES**



TYP. INSTALLATION OF WALL PENETRATIONS



TYPICAL INSTALLATION OF HOSE BIB



REVISIONS:	

**SEL Engineering Limited**  
 Consulting Engineers

1201, 3003 ST. JOHN'S STREET  
 FORT MOODY, BC V3H 2C4  
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 E-MAIL: SEL@SELENG.COM

**SEAL:**

I, **CHUNGMO CHANG, P. ENG.**, HAVE REVIEWED AND CONFIRMED THAT ALL STRUCTURAL MEMBERS AND CONNECTIONS OF THIS BUILDING INCLUDING BRACING TO RESIST SEISMIC LOADS ARE DESIGNED IN ACCORDANCE WITH PART 4 OF BCBC 2018

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**PROJECT TITLE:**  
 NEW SINGLE FAMILY RESIDENCE AT:  
 LOT 2 - 24850 106 AVENUE,  
 MAPLE RIDGE, BC.

**DRAWING TITLE:**  
 DETAILS

**DESIGNED BY:** CMC  
**CHECKED BY:** CMC  
**DRAWN BY:** GD  
**PROJECT NO:** C19110-2  
**DATE:** 02.06.2020  
**SCALE:** AS SHOWN  
**DRAWING NO:**







REVISIONS:	
1	ISSUED FOR BLDG. PERMIT 02.11.2020

**SEL Engineering Limited**  
Consulting Engineers

#207, 3003 ST. JOHNS STREET  
FORT MOODY, BC V3H 2C4  
TELEPHONE: 604.469.3723  
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E-MAIL: SEL@SELENG.COM  
WEB: WWW.SELENG.COM

SEAL:

I, CHINGHO CHUNG, P. ENG. HAVE REVIEWED AND CONFIRMED THAT ALL STRUCTURAL MEMBERS AND CONNECTIONS OF THIS BUILDING, INCLUDING BRACING TO RESIST SEISMIC LOADS ARE DESIGNED IN ACCORDANCE WITH PART 4 OF BCBC 2018

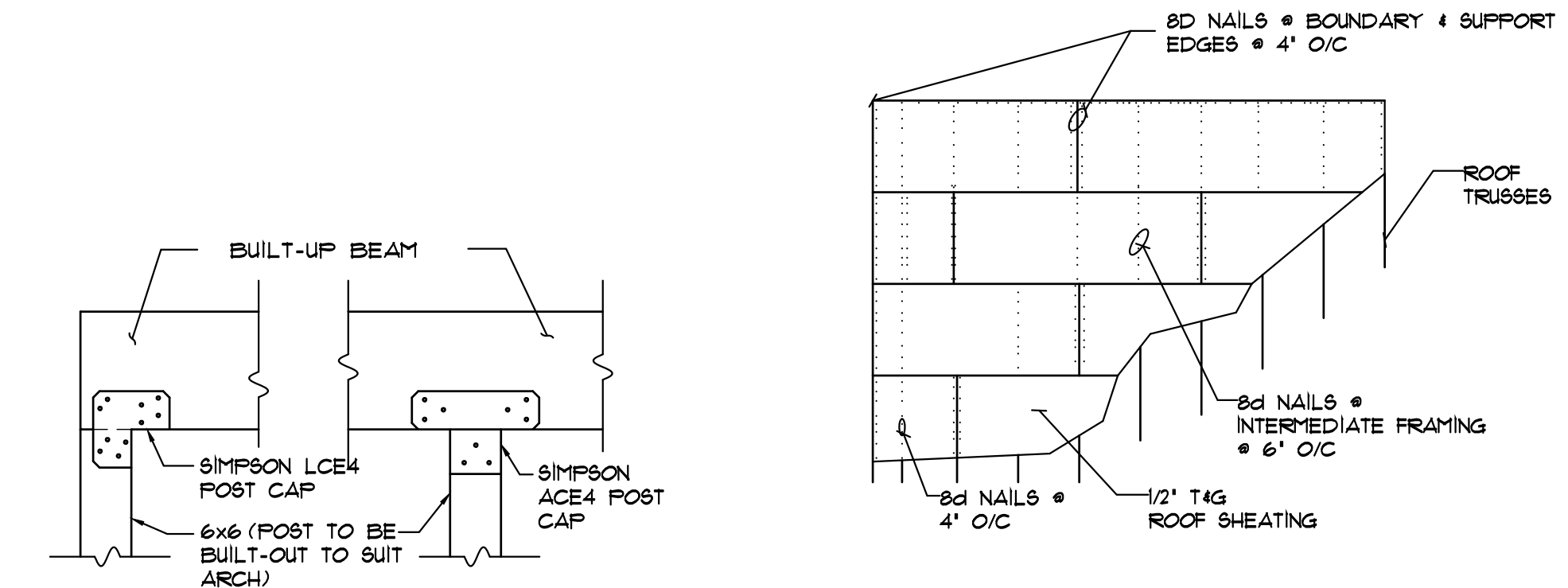
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PROJECT TITLE:  
NEW SINGLE-FAMILY RESIDENCE AT:  
LOT 2 - 24850 106TH AVENUE,  
MAPLE RIDGE, B.C.

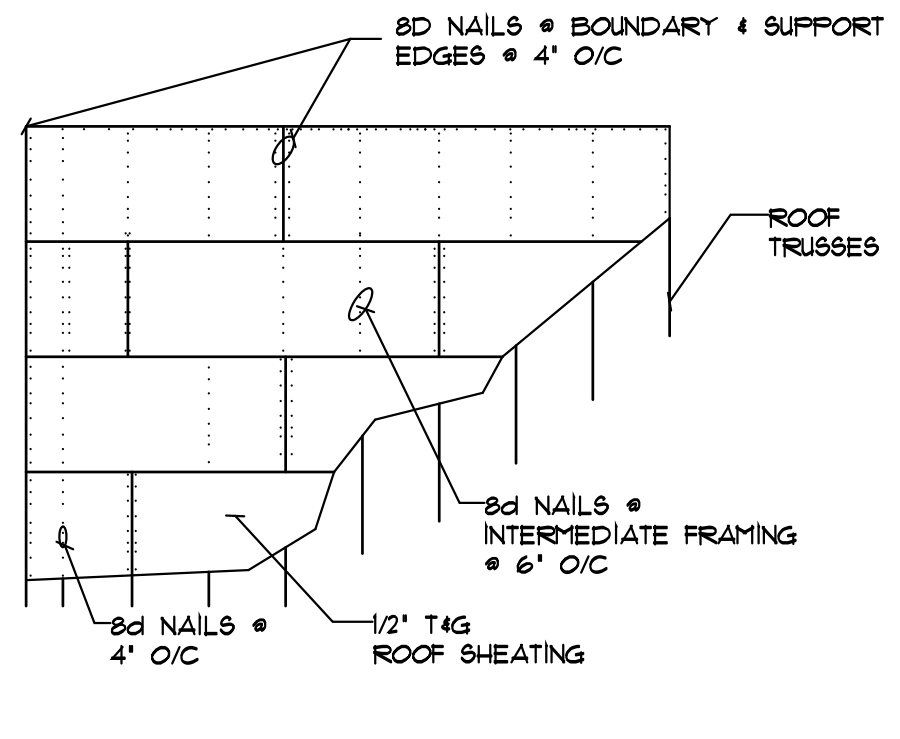
DRAWING TITLE:  
NOTES AND DETAILS

DESIGNED BY: CMC  
CHECKED BY: CMC  
DRAWN BY: SHS  
PROJECT NO: C19110-2  
DATE: 02.11.2020  
SCALE: AS SHOWN  
DRAWING NO:

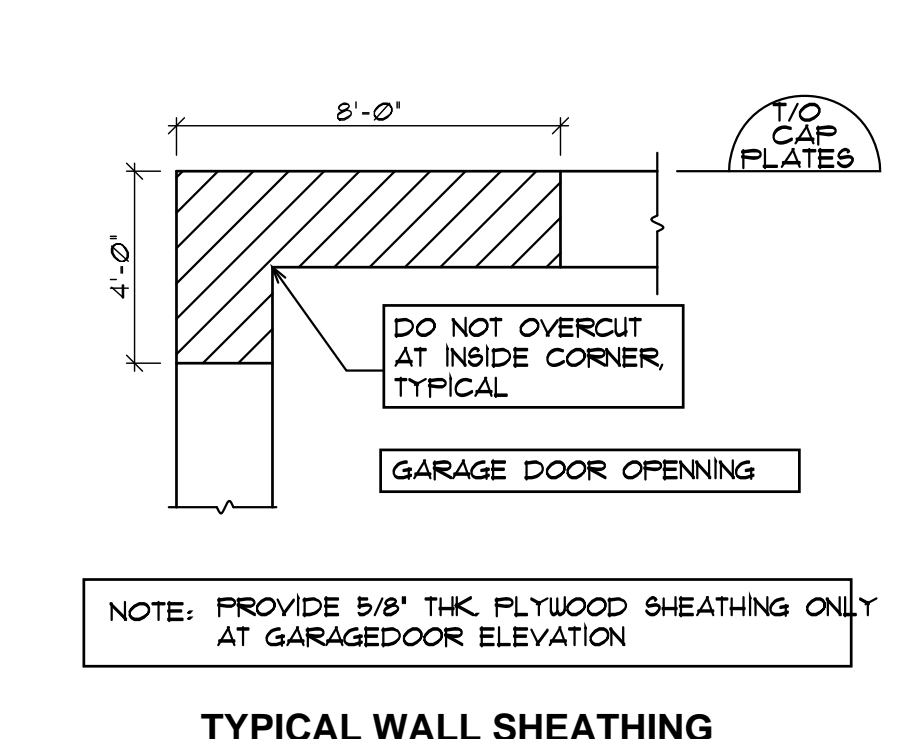
**S-2**



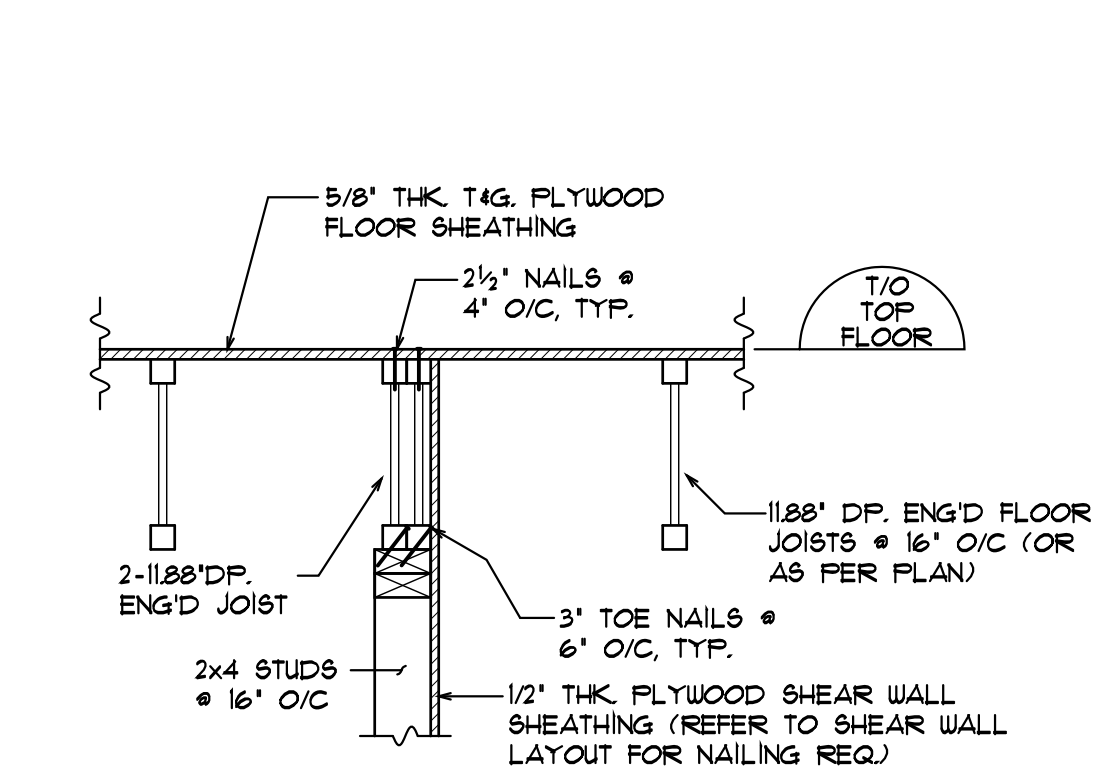
**8 TYPICAL BEAM/POST CONN. DETAIL**  
SCALE: 1" = 1'-0"



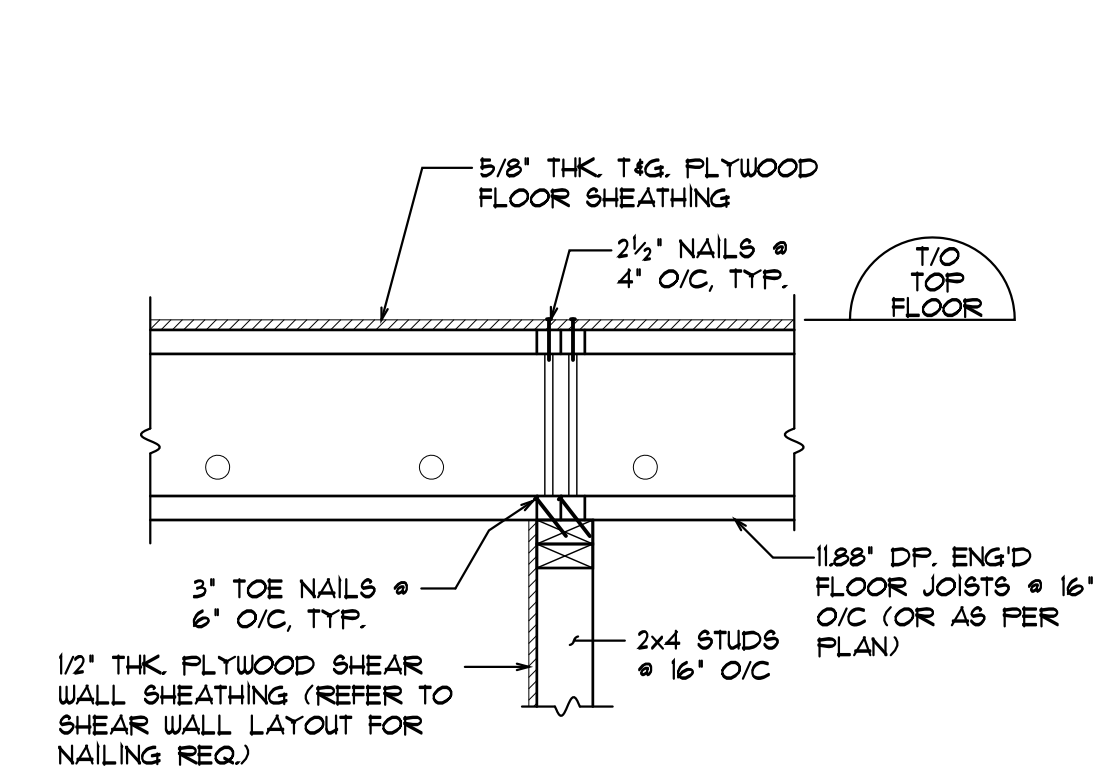
**9 TYP. ROOF DECK NAIL PATTERN**  
N.T.S.



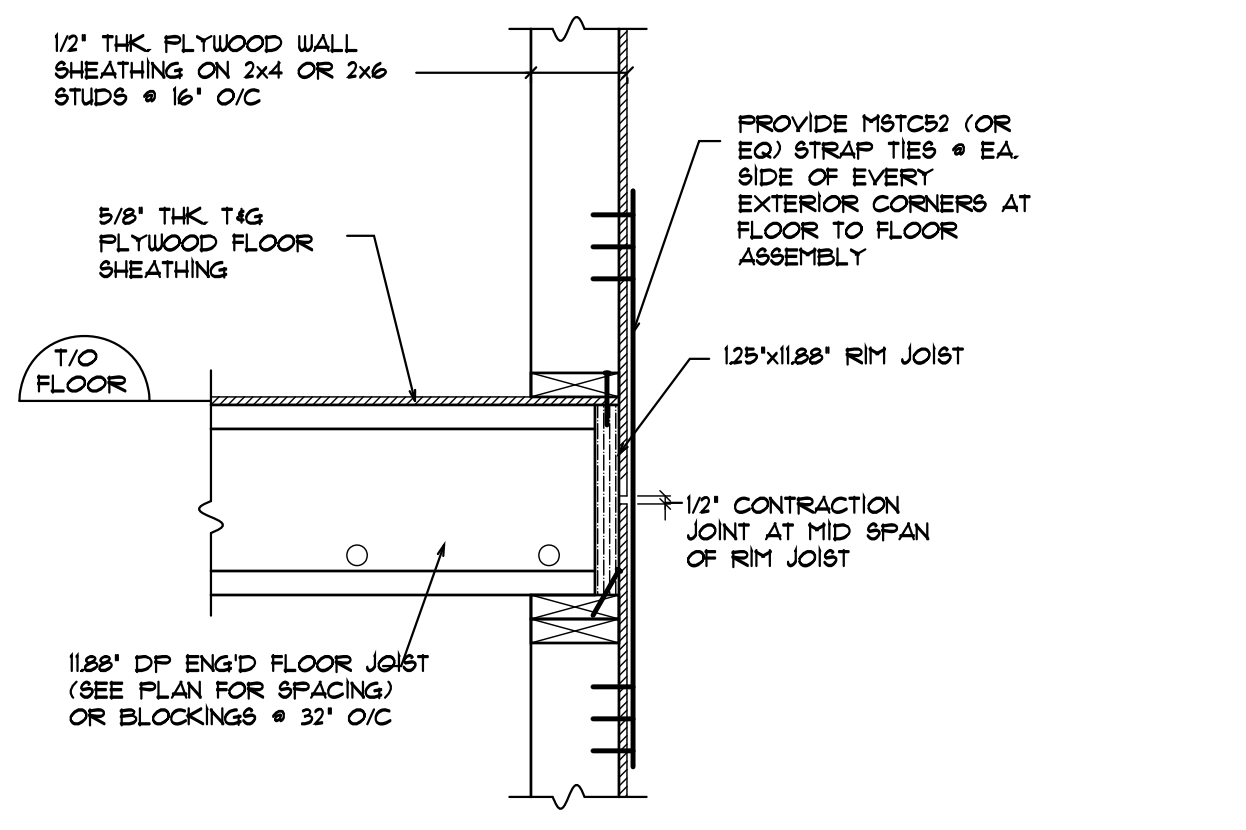
**10 TYPICAL WALL SHEATHING PATTERN AT GARAGE DOOR & FRONT/REAR WALL ELEV.**  
N.T.S.



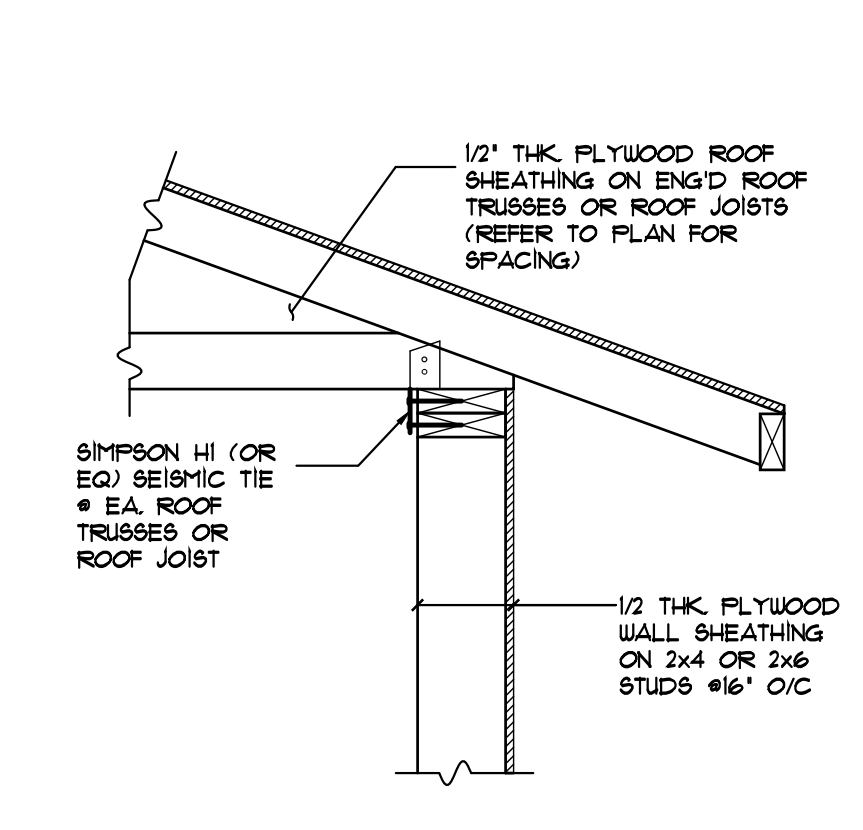
**11 TYP. SHEAR WALL DETAIL || TO JST.**  
SCALE: 1" = 1'-0"



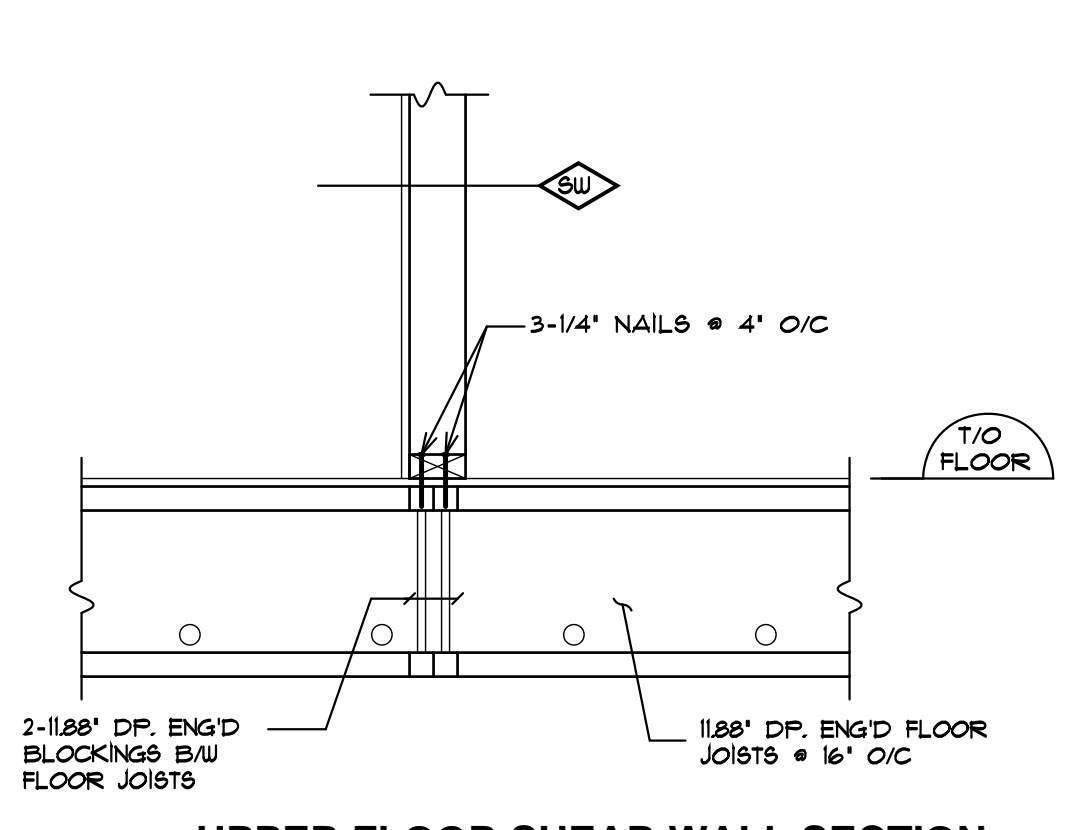
**12 TYP. SHEAR WALL DETAIL ⊥ TO JST.**  
SCALE: 1" = 1'-0"



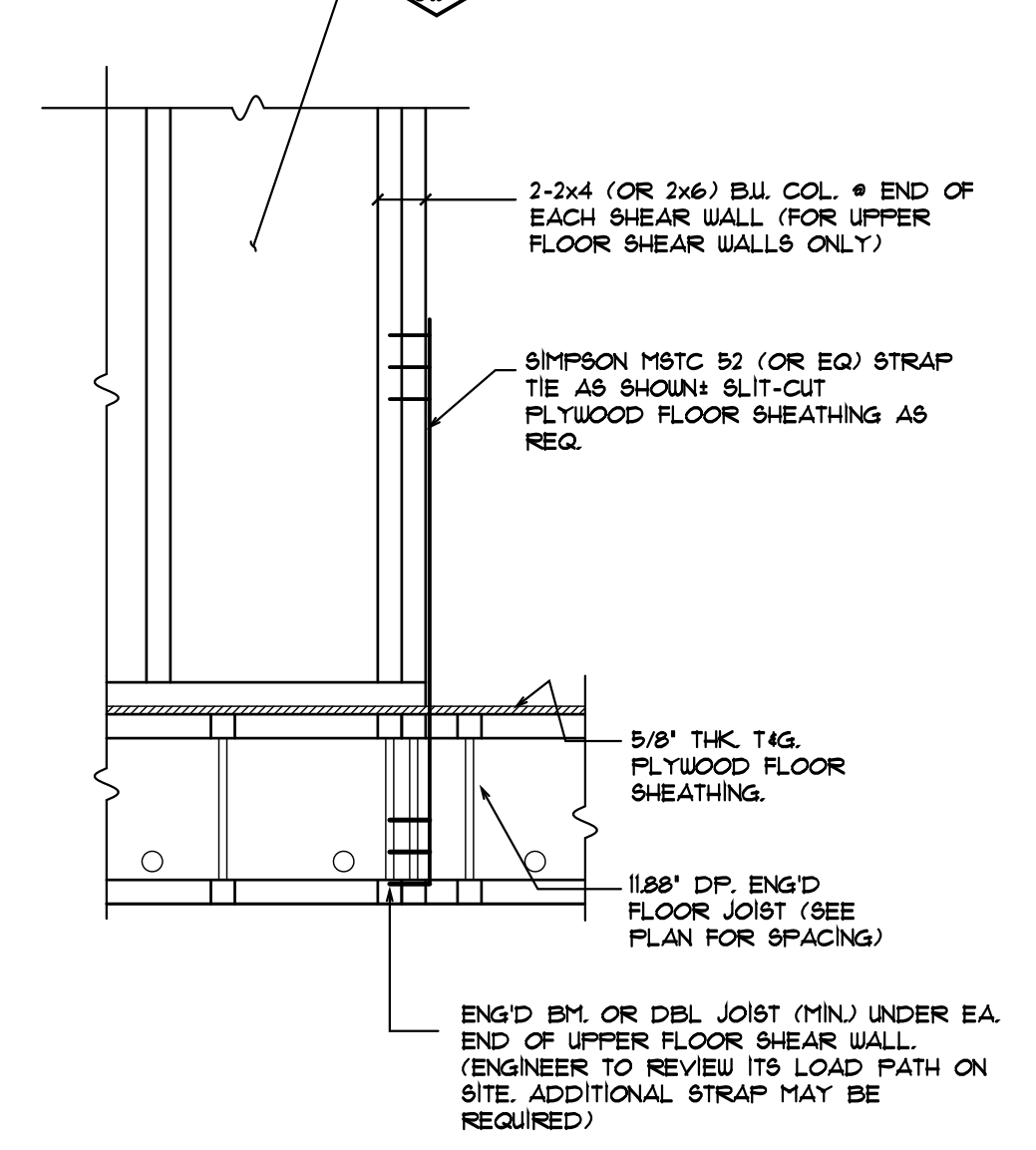
**4 TYP. EXT. WALL CORNER SECTION AT FLOOR ASSEMBLY**  
SCALE: 1" = 1'-0"



**5 EXT. ROOF/WALL CONN. DETAIL**  
SCALE: 1" = 1'-0"



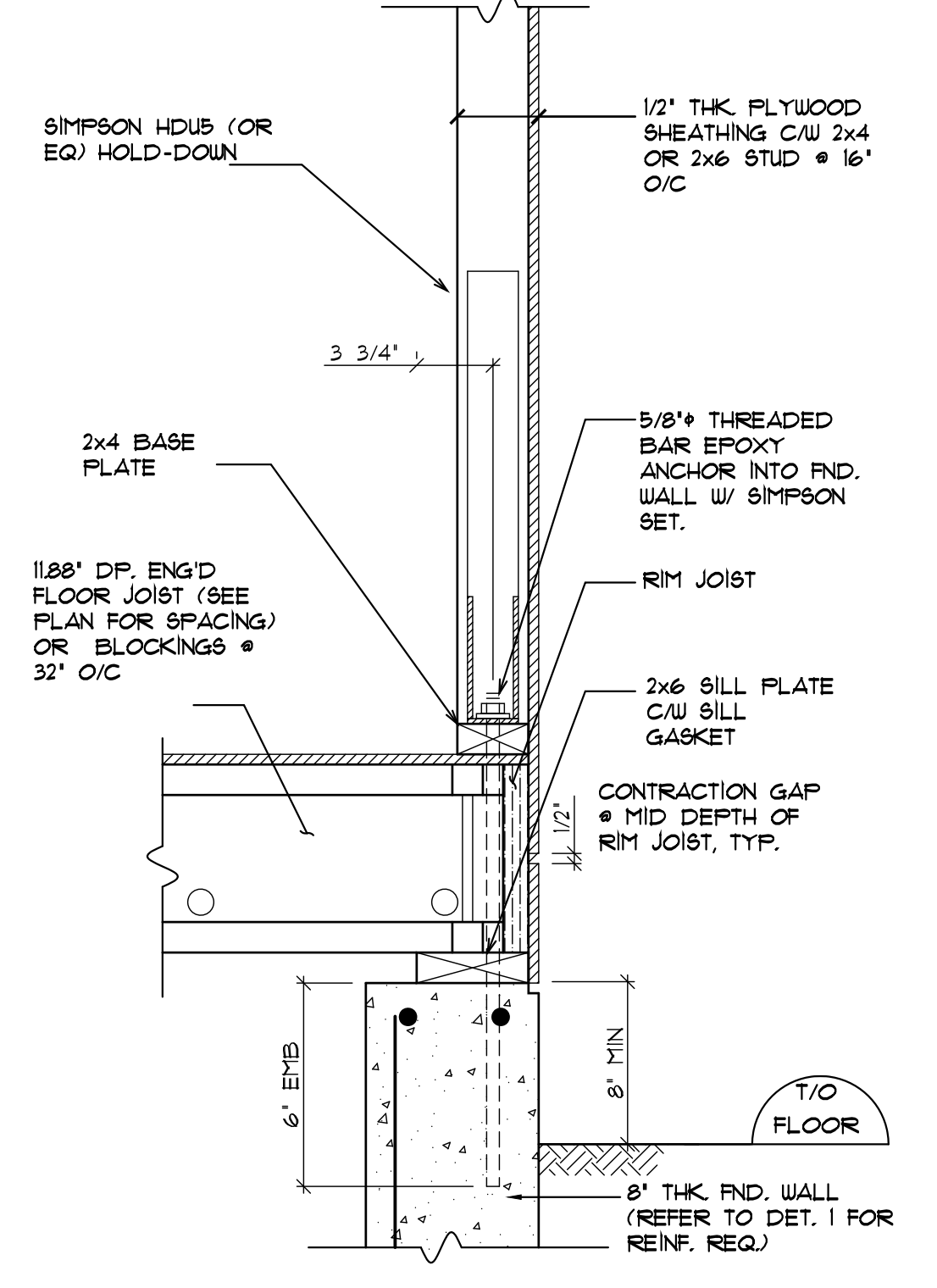
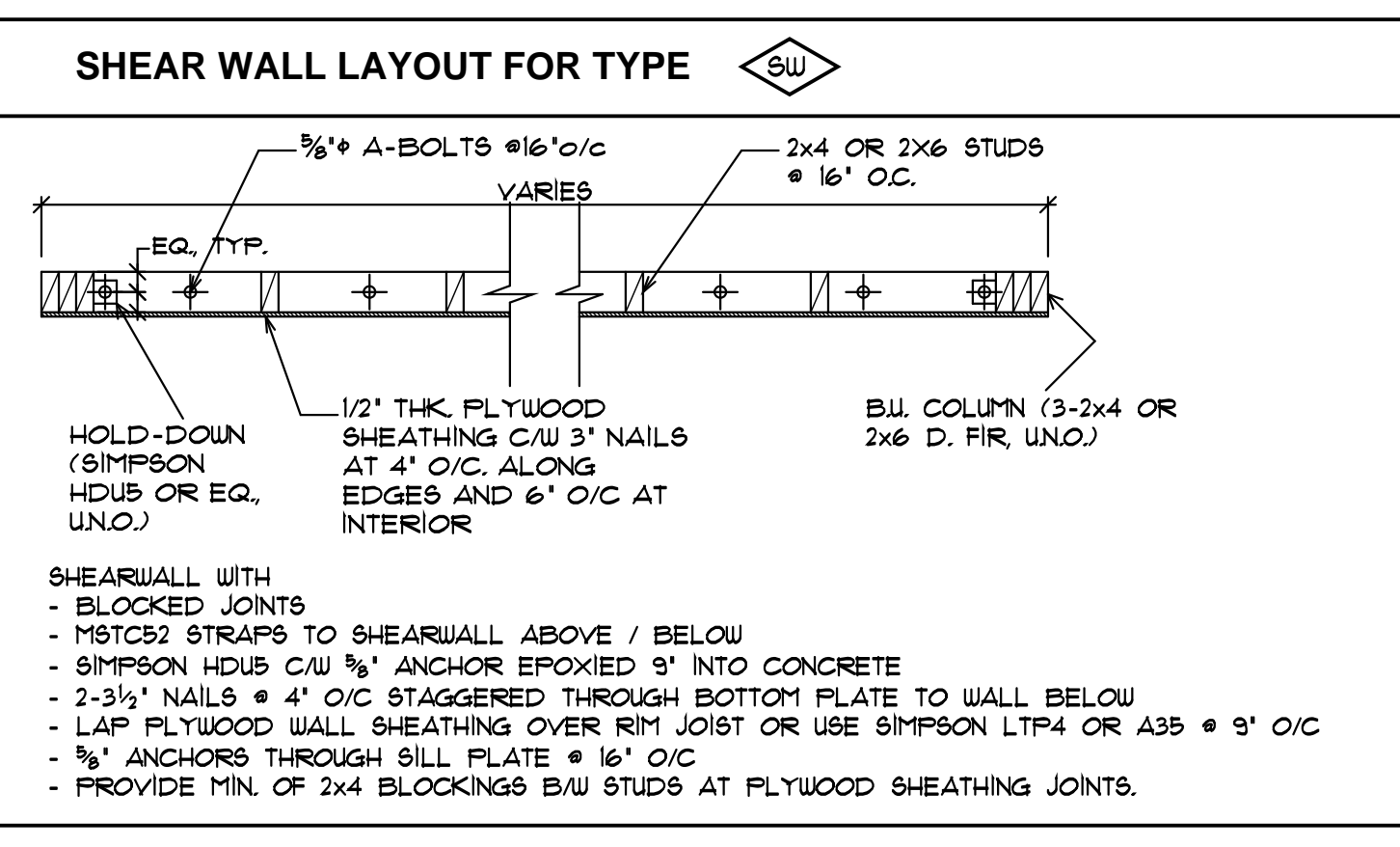
**6 UPPER FLOOR SHEAR WALL SECTION ⊥ AT BASE TO FLOOR JOIST**  
SCALE: 1" = 1'-0"



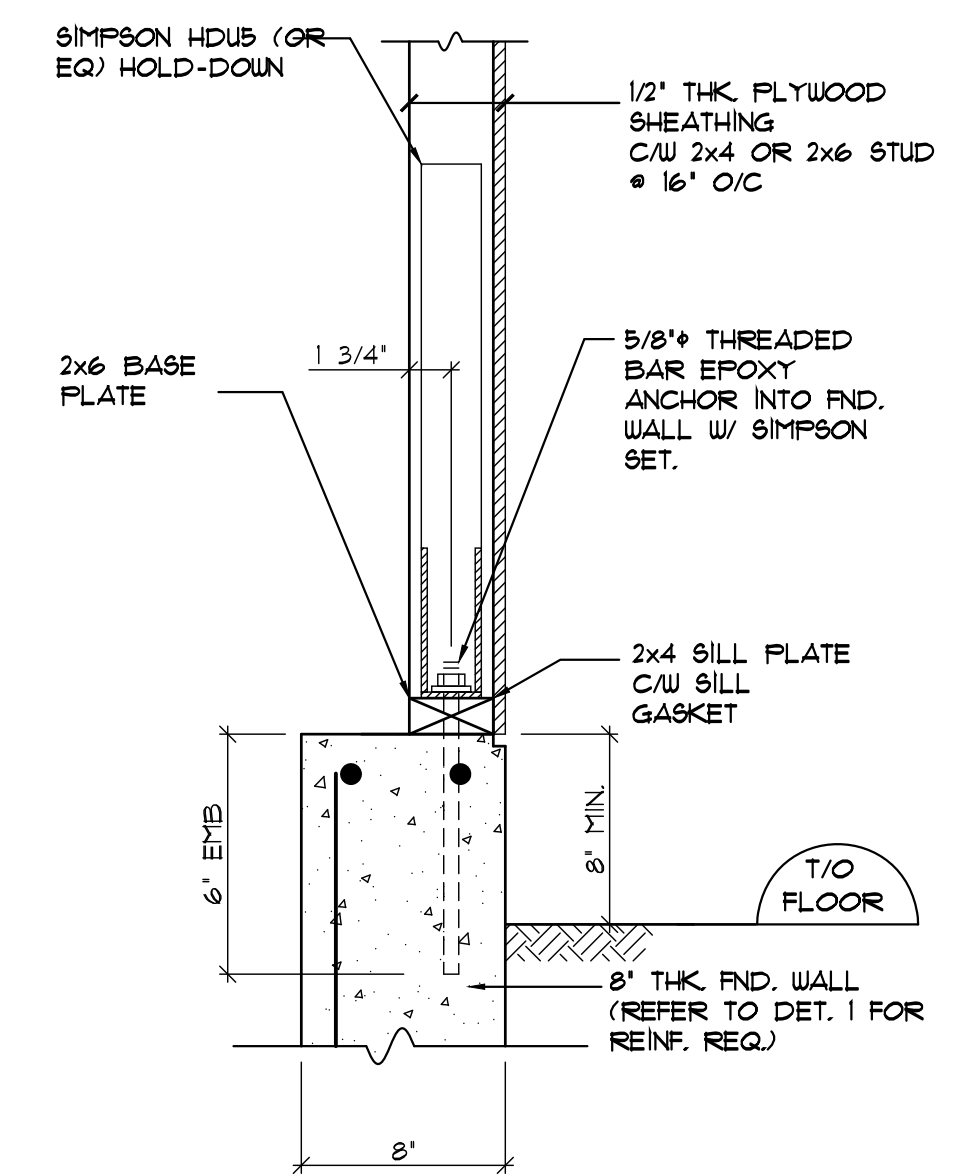
**7 UPPER FLOOR SHEAR WALL HOLD-DOWN DETAIL**  
SCALE: 1" = 1'-0"

**NOTE:** ALL SHEAR WALL SUPPORT BEAMS TO BE CONTINUOUSLY ANCHOR DOWN TO FND. WITH MIN. OF 3000# UPLIFT LOAD AT EACH END

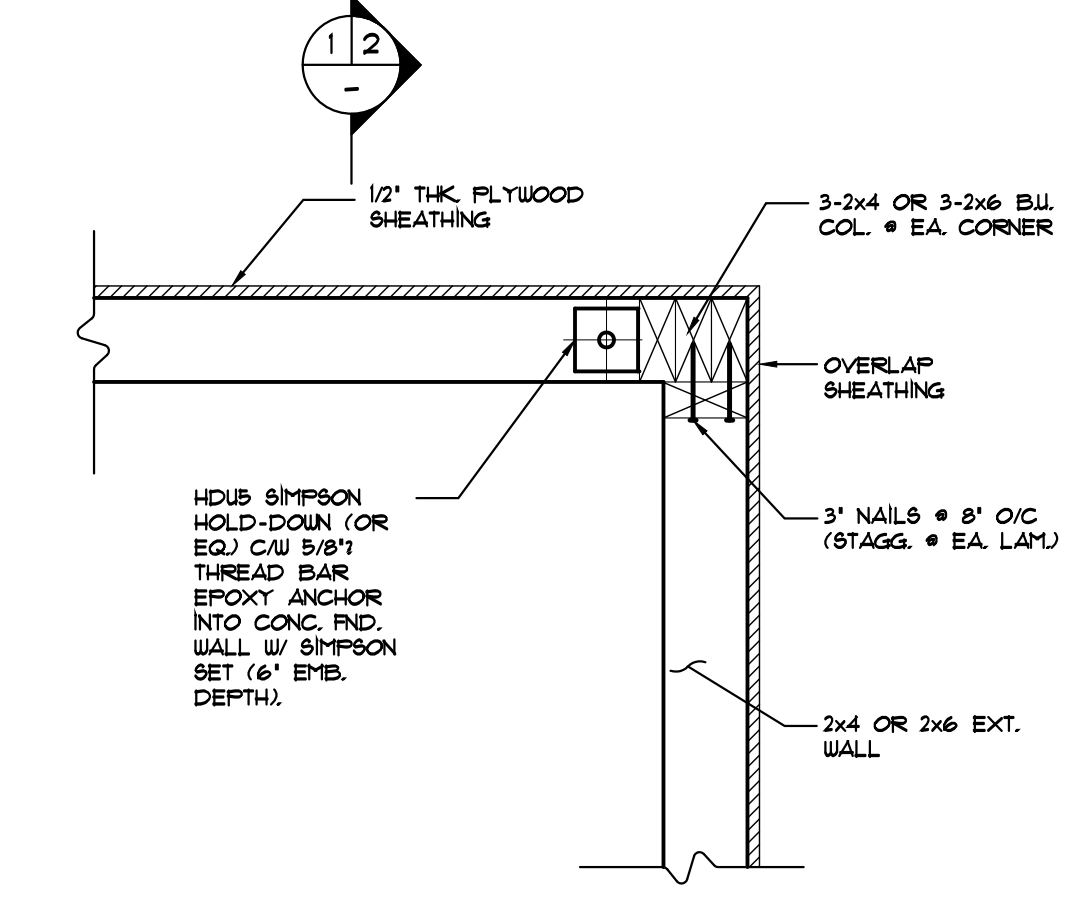
- IMPORTANT NOTES:**
- IT IS IMPERATIVE THAT THESE STRUCTURAL DUGS ARE TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DUGS AND THAT ALL DIMENSIONS MUST CONFORM TO THOSE DUGS.
  - ALL LINTELS WHERE UNSPECIFIED TO BE MIN. OF 2-2x10 No. 2 S-P-F OR BETTER.
  - ALL SHEAR WALL & EXTERIOR WALL CAP & TOP PLATES ARE TO BE FASTEN W/ 3" NAILS @ 4' O/C, STAGG. AND MUST BE OVERLAP AT SPLICE LOCATIONS WITH MIN DIMENSION OF 3'-0".
  - PROVIDE 2x4 BLOCKINGS @ EXTERIOR WALL STUDS ADJACENT TO EA. WINDOW OPENING. BLOCKINGS ARE TO BE SAME LEVEL AS PER WINDOW SILL PLATE.
  - EXTERIOR WALL SHEATHING ARE NOT BE SPLICED AT LINTEL OR BEAM JOINTS.
  - AT ALL SHEAR WALL IN PARALLEL DIRECTION TO ROOF TRUSSES MUST HAVE ADDITIONAL TRUSSES (IF REQUIRED) OVER TO TRANSFER ROOF SEISMIC LOADING.



**1 TYP. HOLD-DOWN DETAIL**  
SCALE: 1-1/2" = 1'-0"

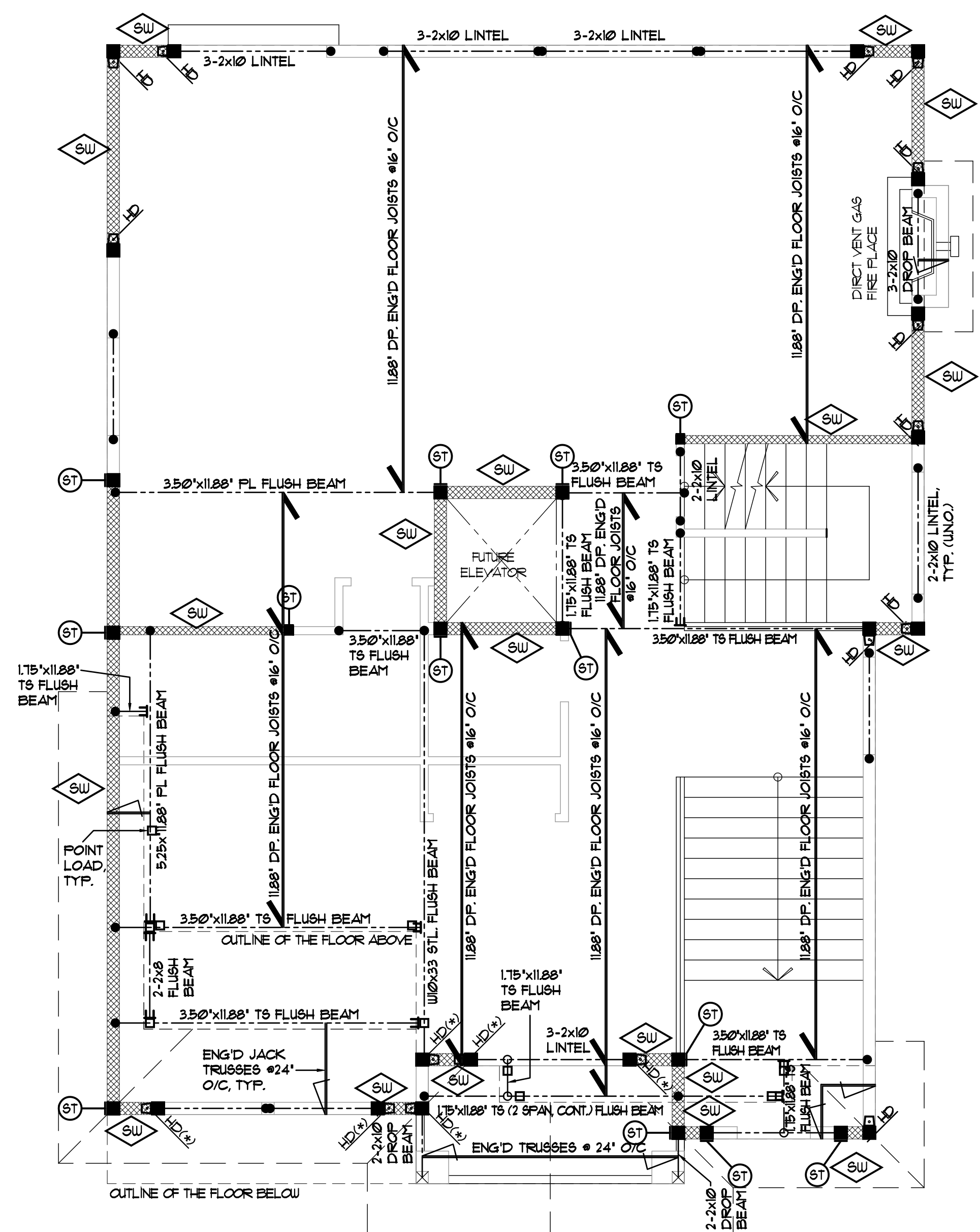
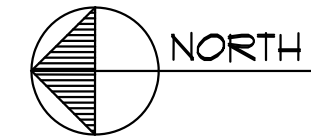


**2 TYP. HOLD-DOWN DETAIL AT EXT. FND. WALL**  
SCALE: 1-1/2" = 1'-0"



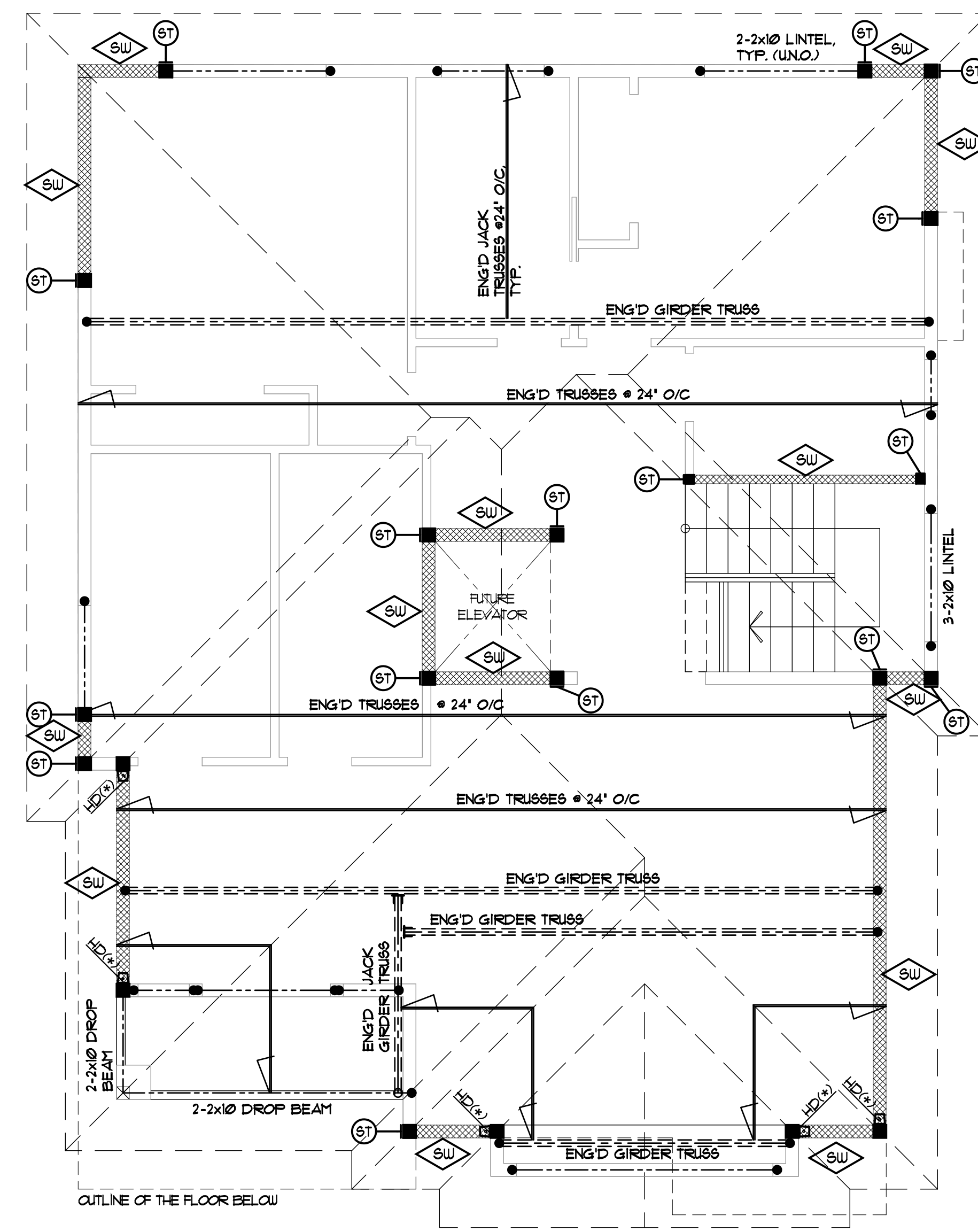
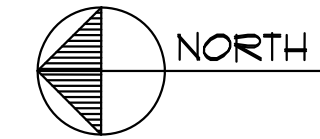
**3 TYP. CORNER HOLD-DOWN DETAIL (EXT. CORNER)**  
SCALE: 1-1/2" = 1'-0"





- : SIMPSON DRAG STRUT
- : SIMPSON M8TCB2 STRAP TIE
- : SIMPSON TIE DOWN STRAP
- : HOLD-DOWN (SIMPSON HDUBS OR EQ. UNO.)
- : PROVIDE 3/8" LAG SCREW W/ MIN. OF 6" PENETRATION LENGTH INTO BEAM BELOW (OR IN CASE OF STL BEAM PROVIDE WELDED 3/8" THREADED ROD FROM T/O FLANGE TO EXTEND INTO SHEAR WALL ABOVE)

UPPER FLOOR FRAMING PLAN  
SCALE: 1/4" = 1'-0"



- : SIMPSON DRAG STRUT
- : SIMPSON M8TCB2 STRAP TIE
- : SIMPSON TIE DOWN STRAP
- : HOLD-DOWN (SIMPSON HDUBS OR EQ. UNO.)
- : PROVIDE 3/8" LAG SCREW W/ MIN. OF 6" PENETRATION LENGTH INTO BEAM BELOW (OR IN CASE OF STL BEAM PROVIDE WELDED 3/8" THREADED ROD FROM T/O FLANGE TO EXTEND INTO SHEAR WALL ABOVE)

ROOF FRAMING PLAN  
SCALE: 1/4" = 1'-0"

**IMPORTANT NOTES:**

1. IT IS IMPERATIVE THAT THESE STRUCTURAL DWGS ARE TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DWGS AND THAT ALL DIMENSIONS MUST CONFORM TO THOSE DWGS.
2. ALL LINTELS WHERE UNSPECIFIED TO BE MIN. OF 2-2x10 No. 2 S-P-F OR BETTER.

**REVISIONS:**


1 ISSUED FOR BLDG. PERMIT 02.11.2020



#207, 3003 ST. JOHNS STREET  
FORT MOODY, BC V3H 2C4  
TELEPHONE: 604.469.3723  
FACSIMILE: 604.49.3707  
E-MAIL: SEL@SELENG.COM  
WEB: WWW.SELENG.COM

SEAL:

I, CHINGHO CHANG, P. ENG, HAVE REVIEWED AND CONFIRMED THAT ALL STRUCTURAL MEMBERS AND CONNECTIONS OF THIS BUILDING, INCLUDING BRACING TO RESIST SEISMIC LOADS ARE DESIGNED IN ACCORDANCE WITH PART 4 OF BCSC 209.

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PROJECT TITLE:  
NEW SINGLE-FAMILY RESIDENCE  
AT:  
LOT 2 - 24850 106TH AVENUE,  
MAPLE RIDGE, B.C.

DRAWING TITLE:  
UPPER FLOOR AND ROOF FRAMING  
PLANS

DESIGNED BY: CMC  
CHECKED BY: CMC  
DRAWN BY: SHS  
PROJECT NO: C19110-2  
DATE: 02.11.2020  
SCALE: AS SHOWN  
DRAWING NO:

**S-4**