

All dimensions, elevations shall be according to architectural drawings.
Structural components have been designed in accordance with the BCBC2018 .
Building Code

ALL reinforced concrete has been designed in accordance with CSA
A23.3 "Design of Concrete Structures" .
Foundation -32 MPa @ 28 days Class C-2
Garage grade slab -32 MPa @ 28 days Class C-2
Living area grade slab -28 MPa @ 28 days Class C-2
All mixes shall be with slump between 3" to 4" and max. aggregate size of 3/4"

ALL reinforced bars to conform to CSA G30.18-M / ASTM A615, welded wire mesh to ASTM A185.

Cover to reinforcement:

Underside of footing - 3"

Slab cast against vapour barrier - 1 1/2"

Foundation and retaining wall

in contact of soil - 2"

Top of grade slab - 1 1/4"

Splice length of rebar:

10M - 18" 15M - 24" 20M - 36"

All wood structure has been designed in accordance with CAN/ CSA -086

"Engineering Design in Wood".

All new joists and built - up beams to be fir or kiln dry SPF #2 or better, U.N.O.

provide 2x2 cross bridging or solid blocking for joists @ 7' o.c. max.

All microlam beams (ML) and paralam beams (PSL) to be grade 2.0E.

micro LVL beams to be grade 1.8E.

All plates and studs to be SPF #2 or better , no finger joints studs allowed at

exterior wall and shear walls.

Basement bearing wall to be 2x6 @ 16" o.c.

All built - up posts to one row of 3" nails @ 8" o.c. for 2x4s and two rows of 3"

nails @ 8" o.c. for 2x6s.

Built - up beams to be laminated with 3 rows of 3" nails @ 12" o.c. both sides.

For 10" deep beams 2-4 rows for 12" DP BM Provide double blocking at joist at

joists running parallel to exterior wall.

Provide double blocking at floor system below built - up posts for load transfer.

All exterior wall and roof sheathing to be 3/4" exterior grade ply. All floor

sheathing to be min. 5/8" T&G or U.N.O.

All exterior sheathing and shear wall plies to be nailed with 2" nails @ 6" o.c. at

intermediate studs, 4" o.c. at ply's perimeters and top and bottom plates.

Flush mount joists or beams to be mounted on approved hangers. With

appropriate nails or Simpson scrws.

Pre - fab engineered roof trusses to be fabricated in accordance with

CAN/CSA - 086 " Engineering Design in Wood".

Truss supplier to submit truss shop drawings and layout plans to the

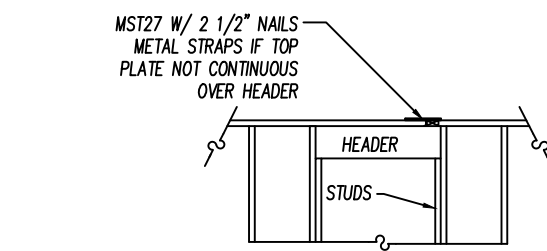
Engineer for approval.

Any changes obtain prior approval from the engineer.

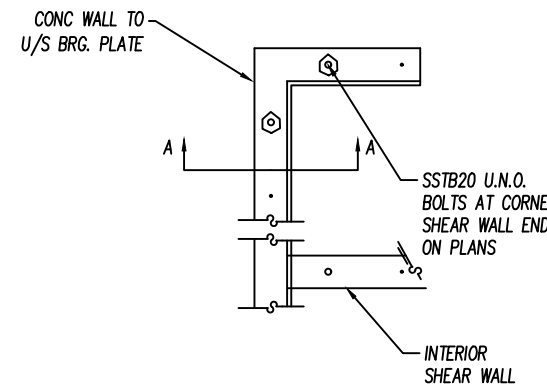
Truss supplier to provide BC registered professional engineer sign and seal

drawing and is responsible to inspect and approved the installed trusses.

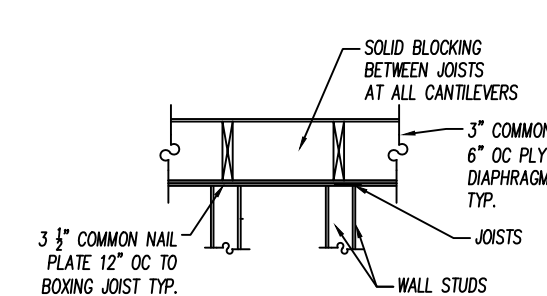
Trusses shall be installed according to the supplier specifications and drawings.



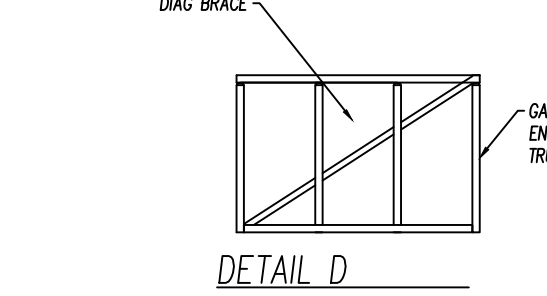
DETAIL A



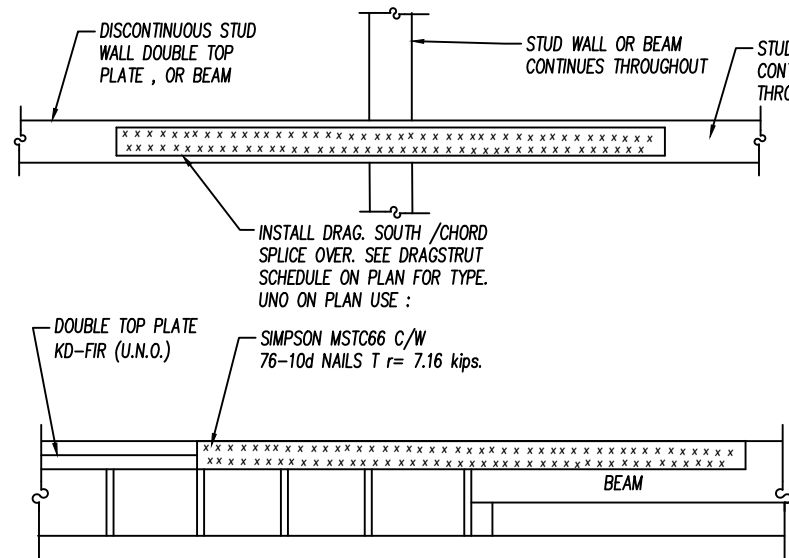
DETAIL B



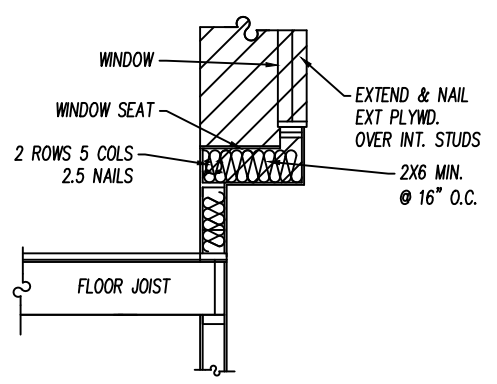
DETAIL C



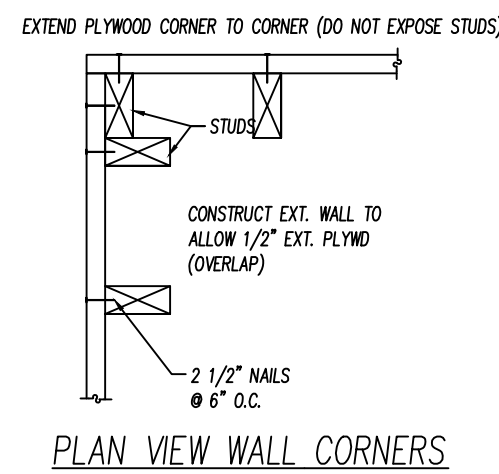
DETAIL D



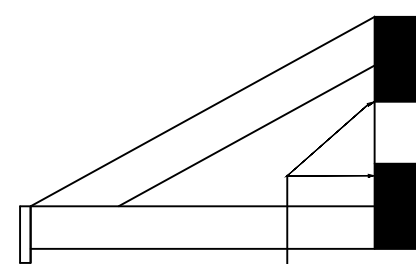
SPLICE DETAIL: AT DISCONTINUATION



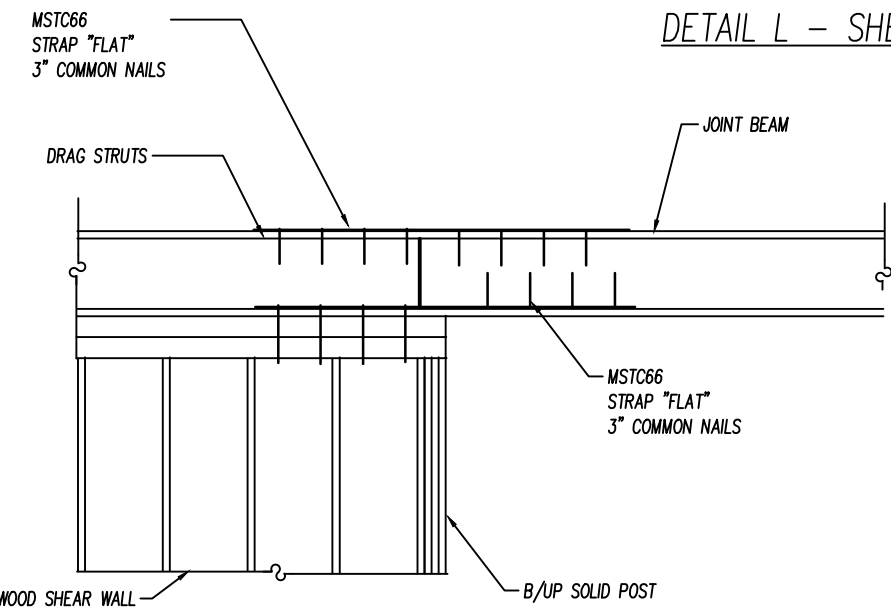
BOX/BAY WINDOW DETAIL (NTS)



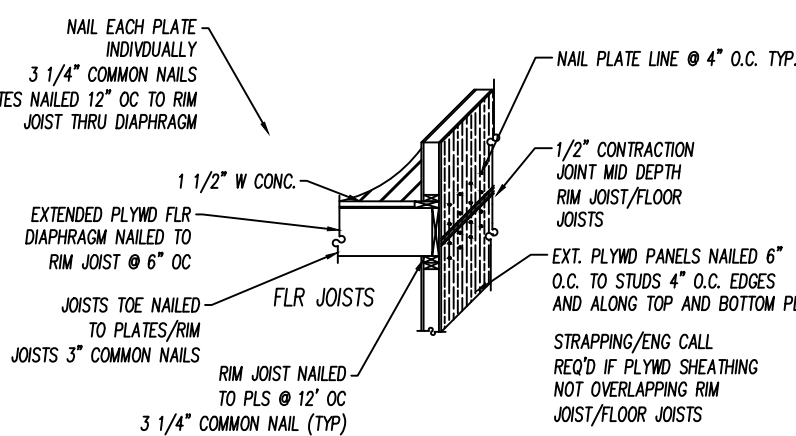
PLAN VIEW WALL CORNERS



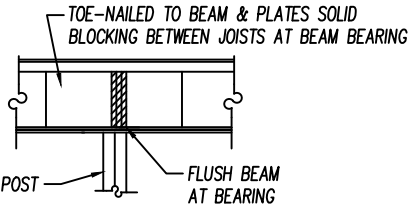
DETAIL R



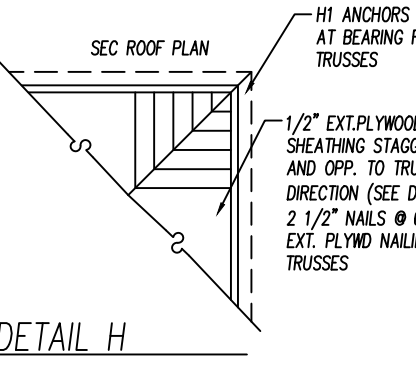
DETAIL L - SHEAR WALL < 4' WIDTH



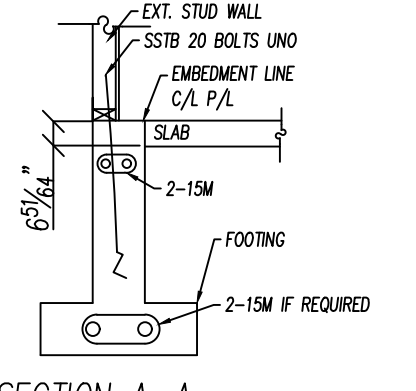
DETAIL F - TYPICAL EXT. STUD SHEATHING



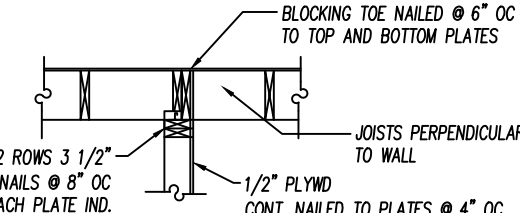
DETAIL G



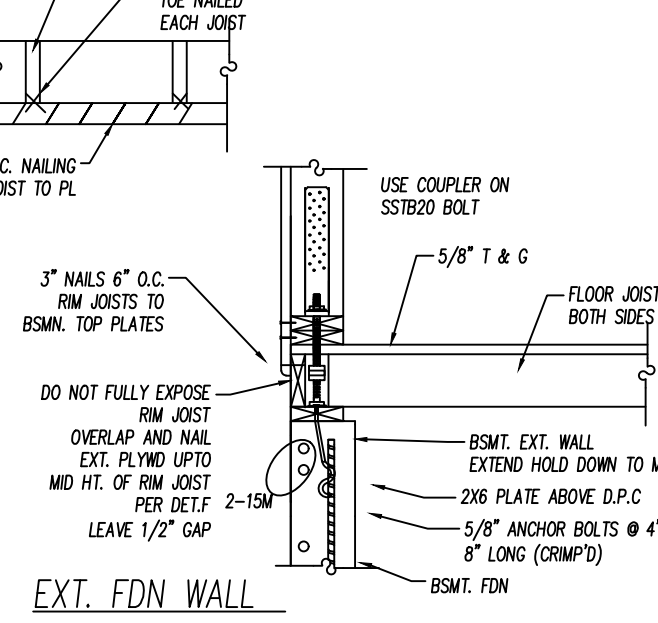
DETAIL H



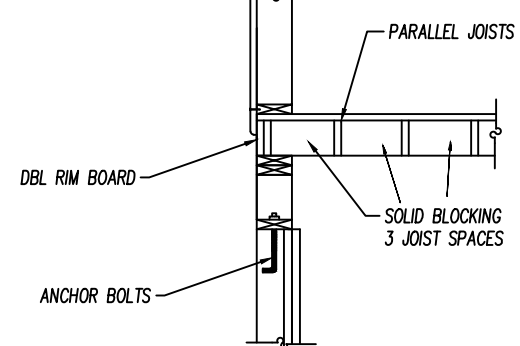
SECTION A-A



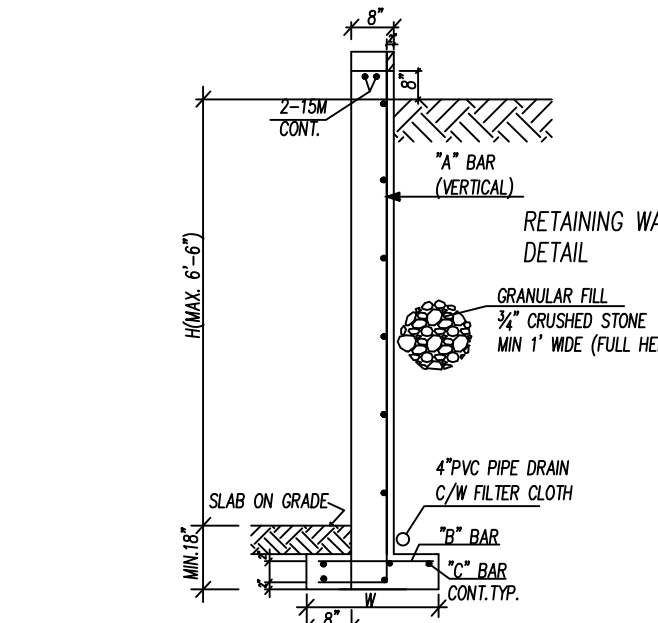
DETAIL E2



EXT. FDN WALL



SHEAR WALL DETAIL #1 (NTS)



DETAIL L - SHEAR WALL < 4' WIDTH



DETAIL L - SHEAR WALL < 4' WIDTH



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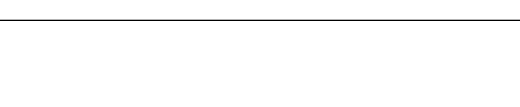
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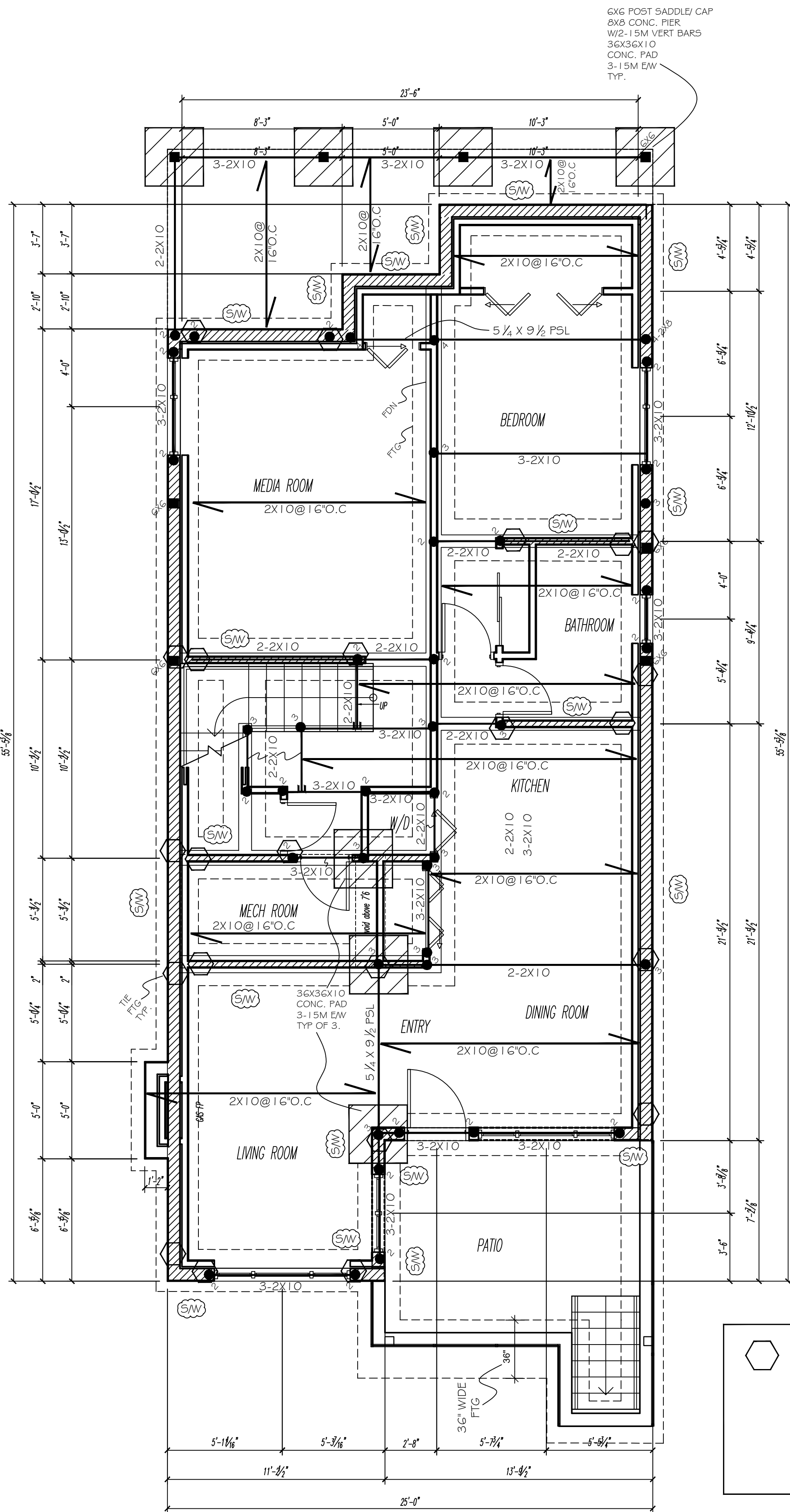
DETAIL L - SHEAR WALL < 4' WIDTH

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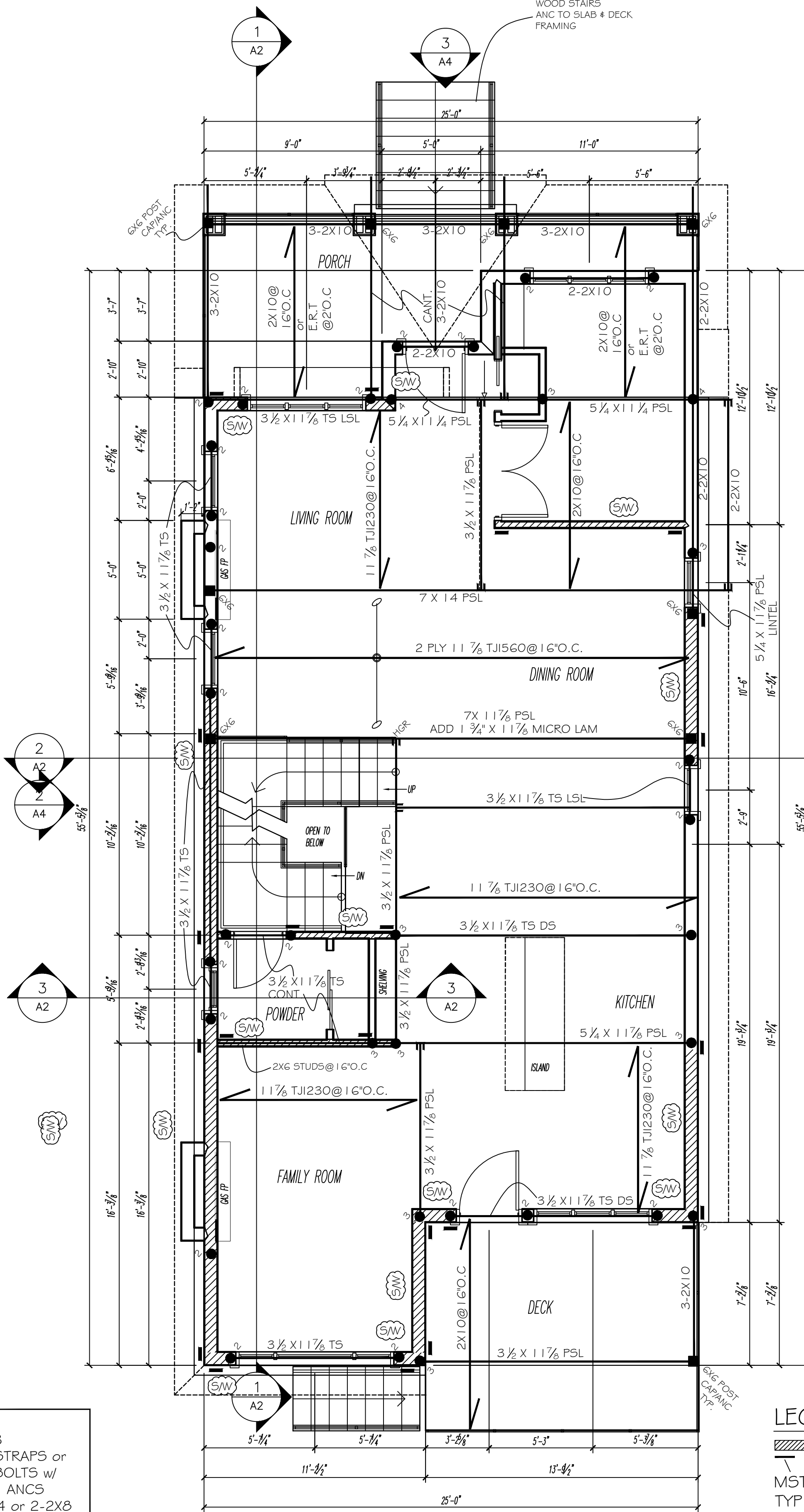
DETAIL L - SHEAR WALL



BASEMENT FLOOR PLAN

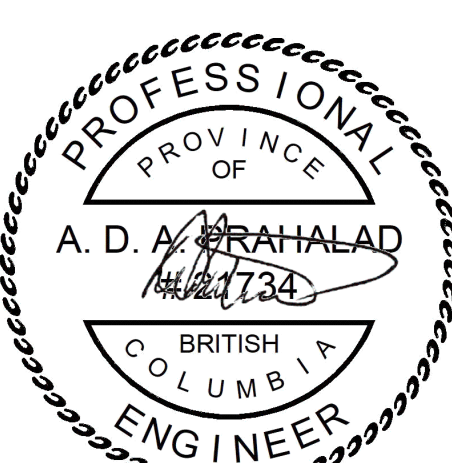
1/4" = 1'-0" 12/10 FT
7/6 FT SUE

○ : TYP OF 23
STHD I 4 STRAPS or
SSTB20 BOLTS w/
HTT5 H.D. ANCS
MIN 3-2X4 or 2-2X8
BUILT UP STUDS
SEE DET ① & ②
SHEET ⑤



MAIN FLOOR PLAN

1/4" = 1'-0" 12/10 FT



2021-12-08

LEGEND

- ▨ : INTERIOR & EXTERIOR
1/2" PLYWOOD SHEAR WALLS
SEE DET ①, ②, ③
SHEET ⑤
- MST 48
TYP.

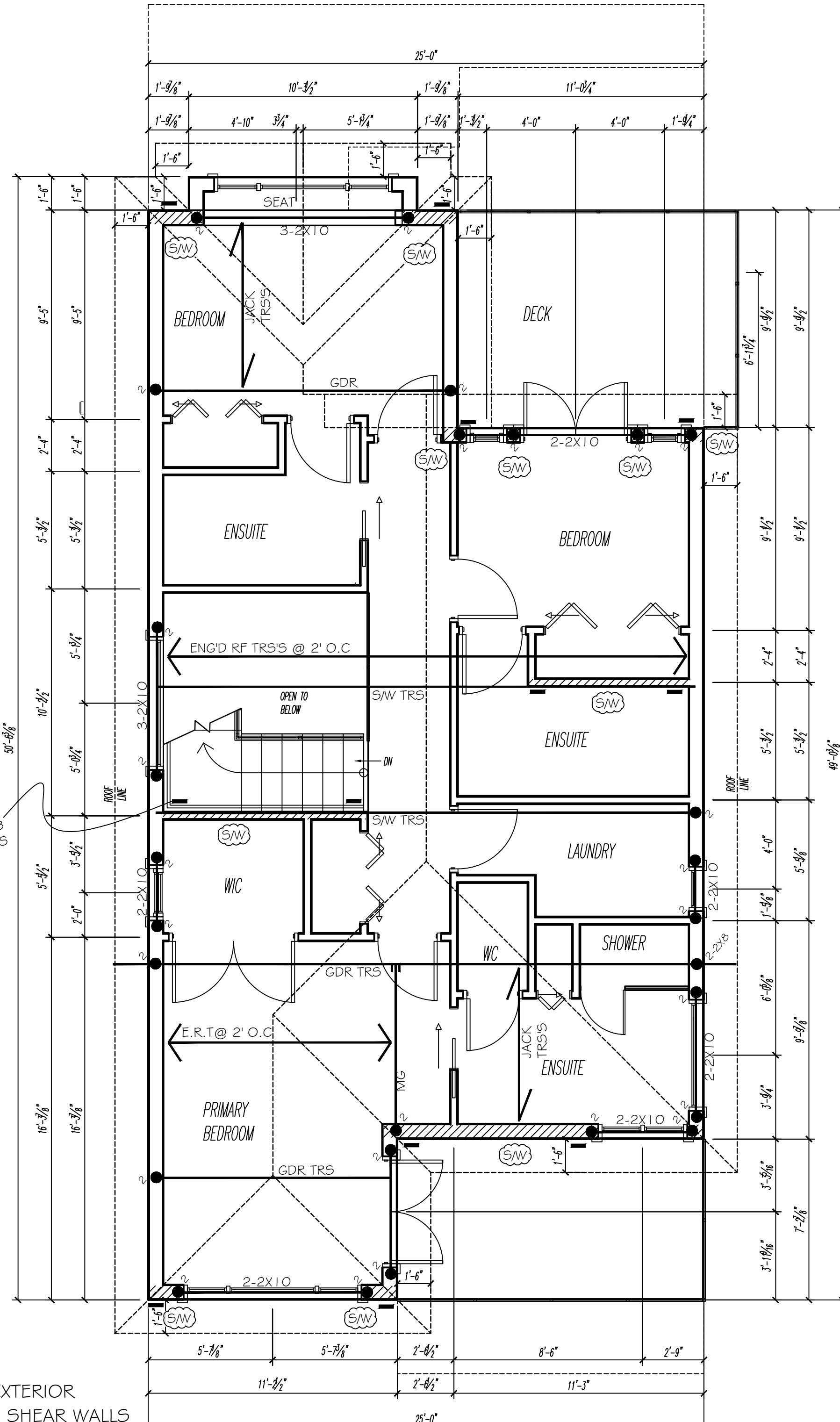
'GLUE & NAIL' PLYWOOD
SUBFLOOR TO JOISTS

'GLUE' JOIST HANGER SEATS
(USE APPROVED ADHESIVE)

REFER TO MANUF. SPECS

NOTE: ALL EXTERIOR WALLS ARE
SHEAR WALLS
SEE DET ①

- GDR TRS = GIRDER TRUSS BY MANUF.
- S/W TRS = SPECIAL WEBS VERTICAL SHEAR WALL
DRAG STRUT TRUSS per MANUF.
ALIGNED FLUSH EDGE OF WALL FOR
PLYWOOD CONTINUITY
- PSL = PARALLEL STRAND
LUMBER BEAM
- TS = TIMBER STRAND
LSL BEAM



UPPER FLOOR PLAN

1/4" = 1'-0" 10/17 FT

PROJECT: 619 E 22ND ST., CITY OF NORTH VANCOUVER		DRG TITLE: STRUCTURAL	
OWNER:		DRAWING NUMBER: S2	
BUILDER:		DATE:	

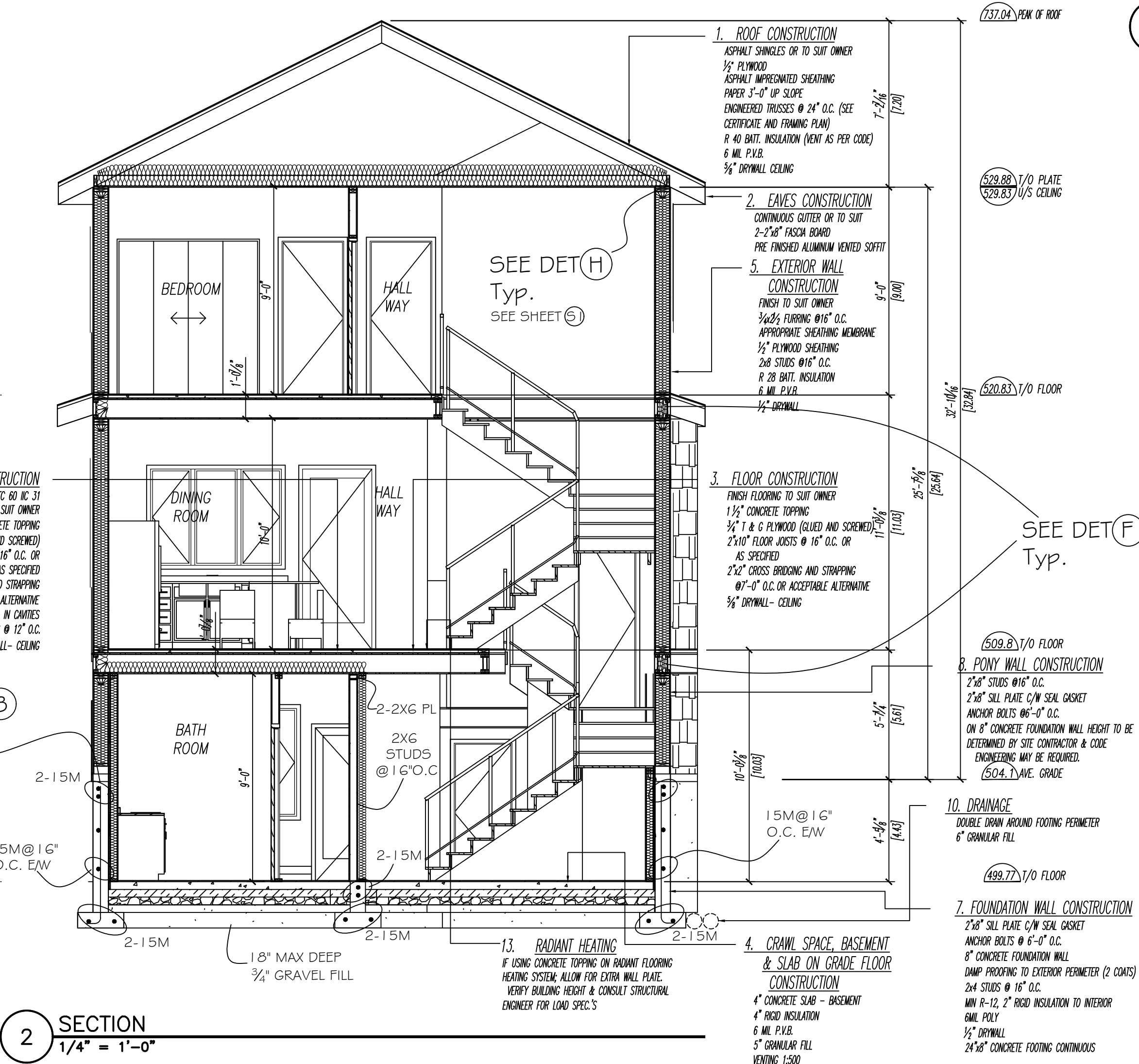
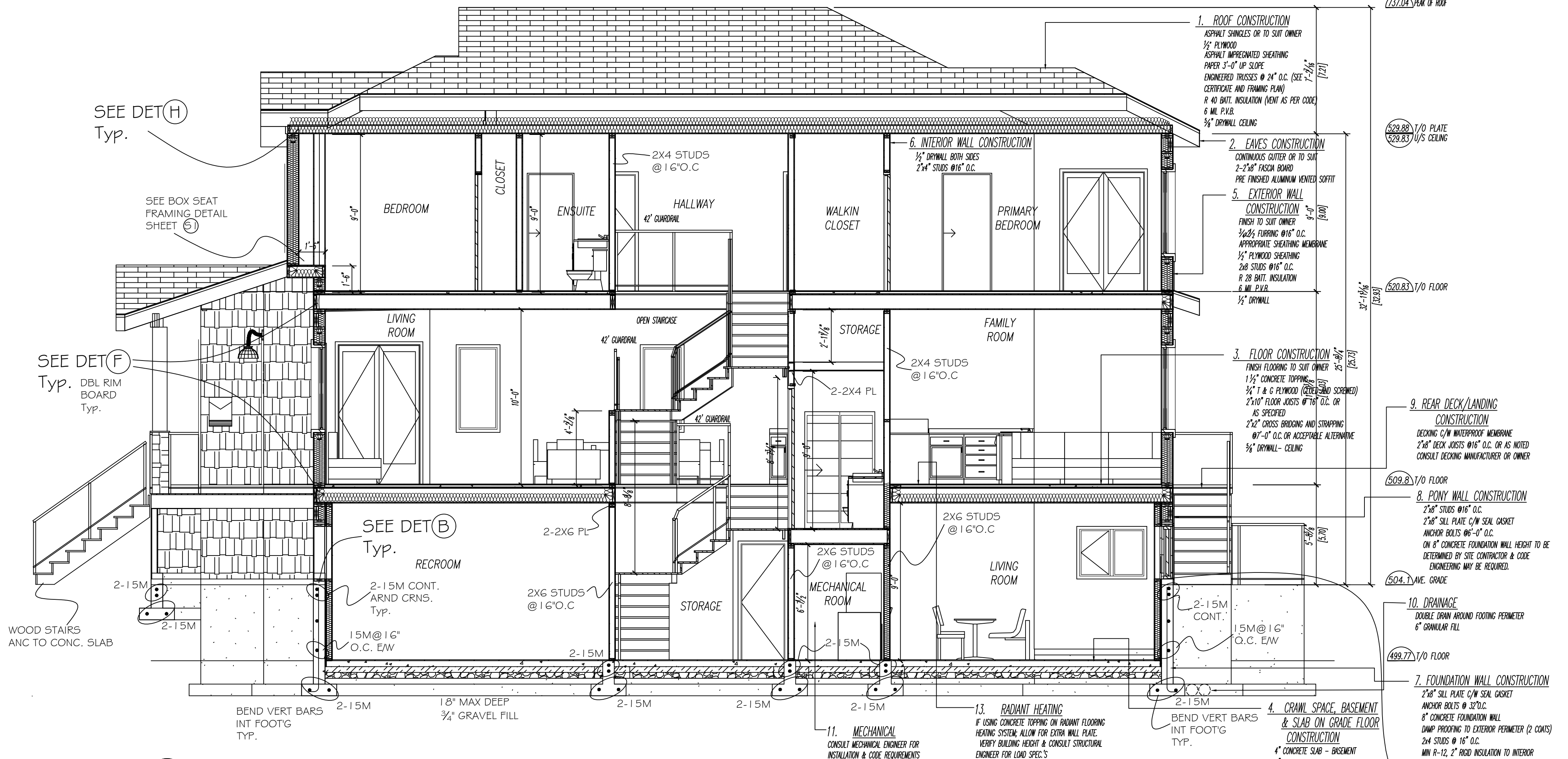
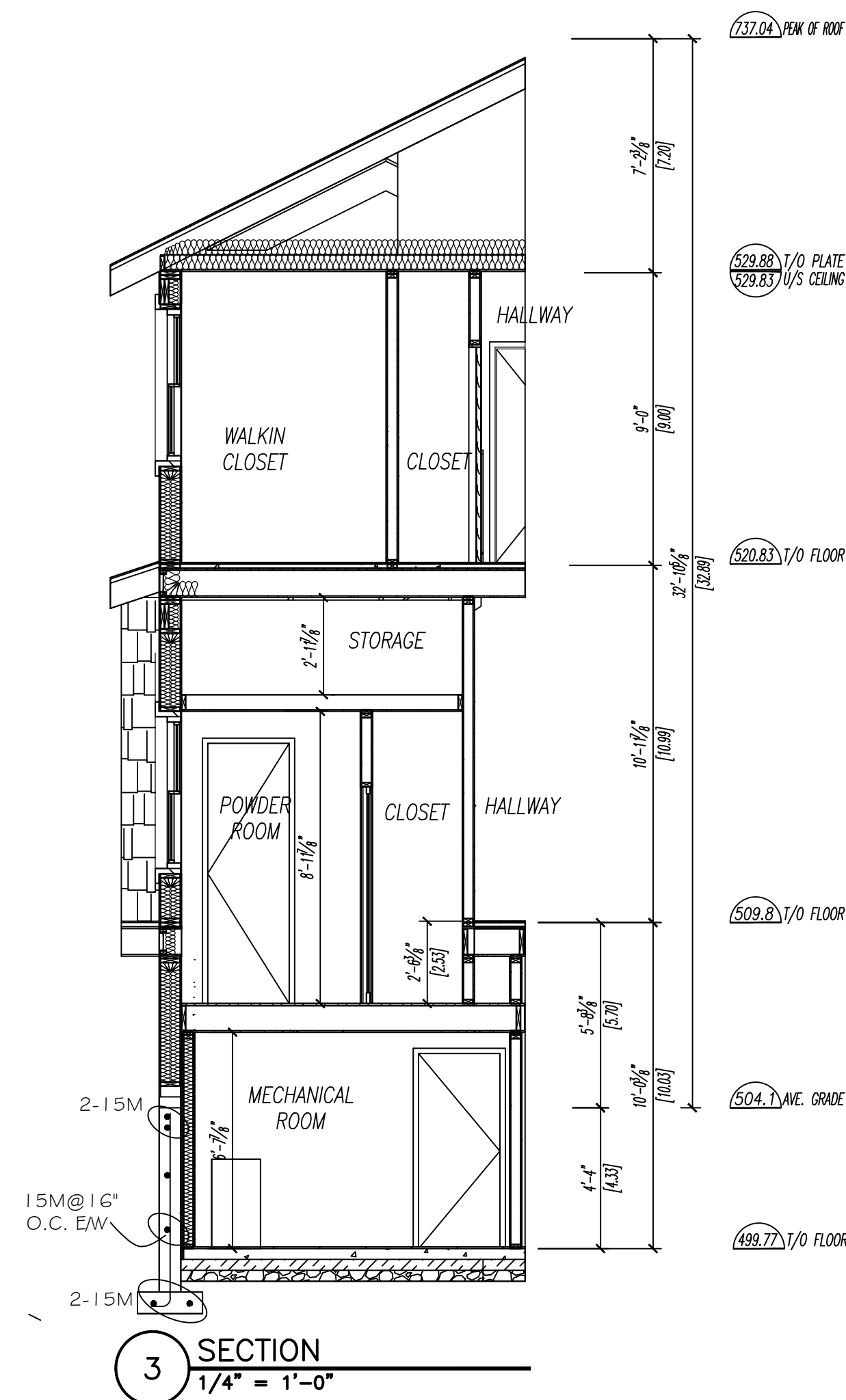
SUMMIT
ENGINEERING CORP.
STRUCTURAL SEISMIC AND GEOTECHNICAL CONSULTANTS

PERMIT #: 1002380

200-4620 Sidney St.
Vancouver, B.C.
Canada V5N 5N8

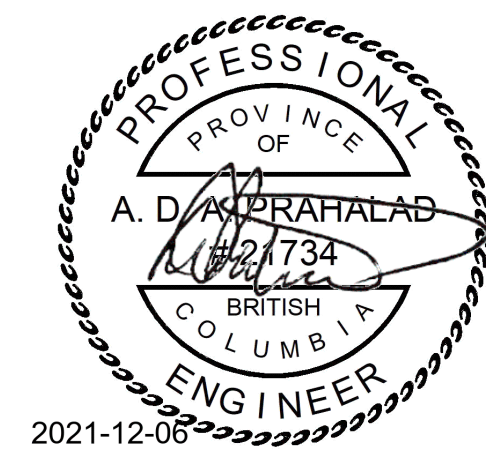
BUS: 604 431 6468
FAX: 604 431 6468
CELL: 604 831 1431

summitengr@hotmail.com

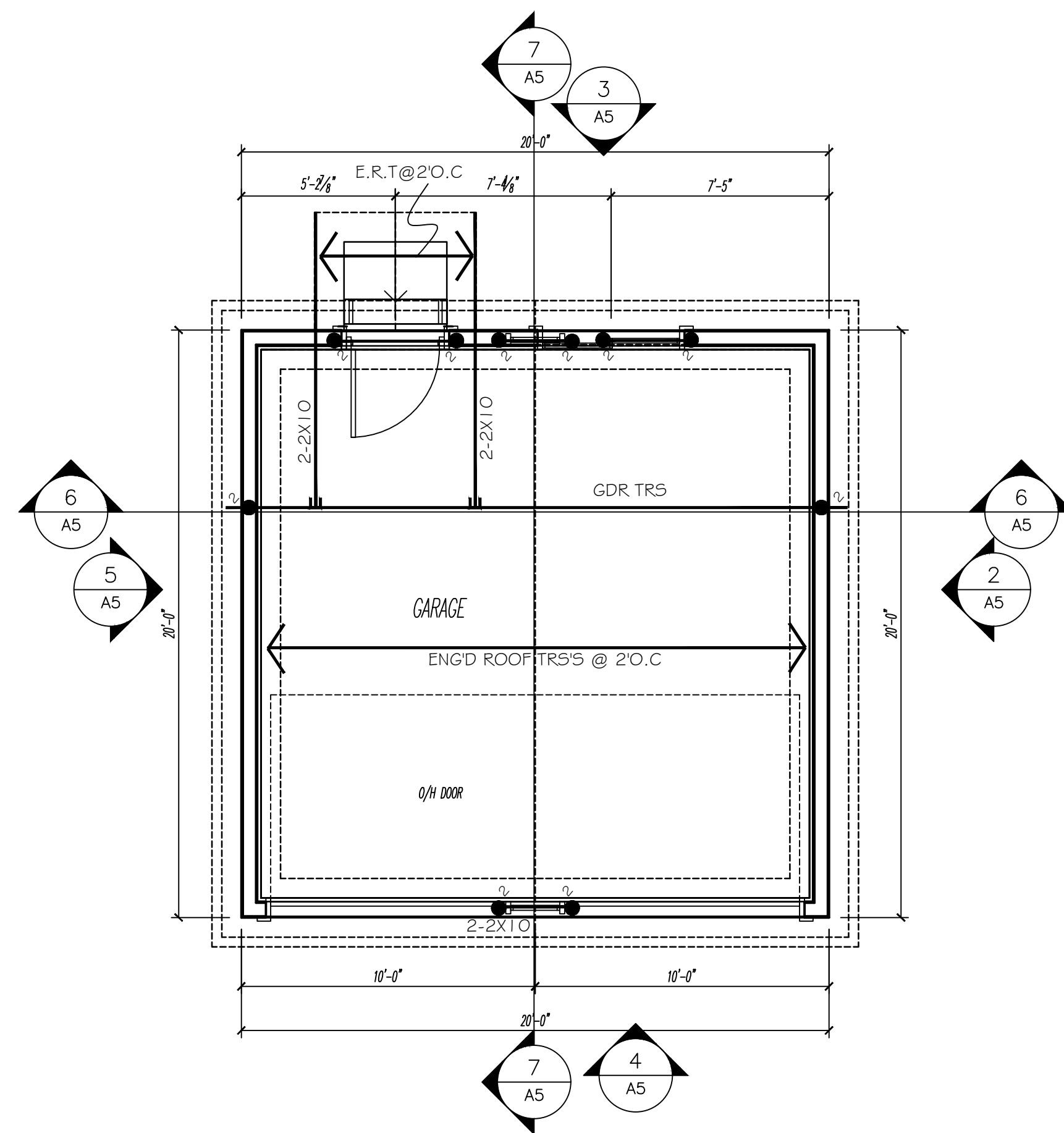


SECTION NOTES

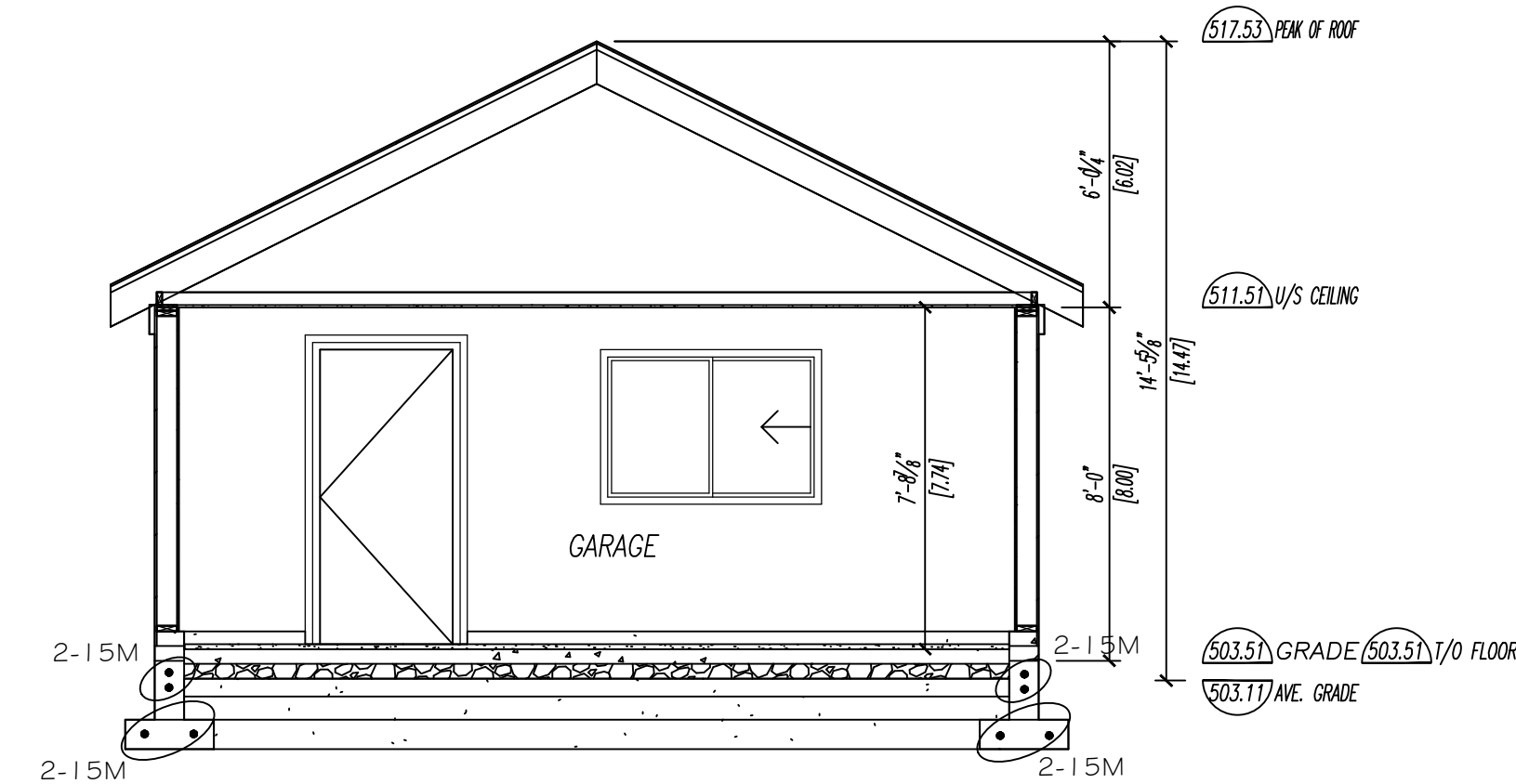
- 1. ROOF CONSTRUCTION**
ASPHALT SHINGLES OR TO SUIT OWNER
1/2" PLYWOOD
ASPHALT IMPREGNATED SHEATHING
PAPER 3'-0" UP SLOPE
ENGINEERED TRUSSES @ 24" O.C. (SEE CERTIFICATE AND FRAMING PLAN)
R 40 BATT. INSULATION (VENT AS PER CODE)
6 MIL P.V.B.
3/4" DRYWALL CEILING
- 2. EAVES CONSTRUCTION**
CONTINUOUS GUTTER OR TO SUIT
2-2"x8" FASCIA BOARD
PRE FINISHED ALUMINUM VENTED SOFFIT
- 3. FLOOR CONSTRUCTION**
FINISH FLOORING TO SUIT OWNER
1 1/2" CONCRETE TOPPING
3/4" T & G PLYWOOD (GLUED AND SCAFFOLD)
2"x10" FLOOR JOISTS @ 16" O.C. OR AS SPECIFIED
2"x2" CROSS BRIDGING AND STRAPPING
0.7'-0" O.C. OR ACCEPTABLE ALTERNATIVE
3/8" DRYWALL - CEILING
- 4. CRAWL SPACE, BASEMENT & SLAB ON GRADE FLOOR CONSTRUCTION**
3" SWM CONT. - CRAWL SPACE
3/4" CONCRETE SLAB - BASEMENT
6 MIL P.V.B.
5" GRANULAR FILL
VENTING 1:500
- 5. EXTERIOR WALL CONSTRUCTION**
FINISH TO SUIT OWNER
3/4"x8 1/2" FLOORING @ 16" O.C.
APPROPRIATE SHEATHING MEMBRANE
1/2" PLYWOOD SHEATHING
2x6 STUDS @ 16" O.C.
R 20 BATT. INSULATION
6 MIL P.V.B.
1/2" DRYWALL
- 6. INTERIOR WALL CONSTRUCTION**
1/2" DRYWALL BOTH SIDES
2"x4" STUDS @ 16" O.C.
- 7. FOUNDATION WALL CONSTRUCTION**
2"x6" SILL PLATE C/W SEAL GASKET
ANCHOR BOLTS @ 6'-0" O.C.
8" CONCRETE FOUNDATION WALL 1
DAMP PROOFING TO EXTERIOR PERIMETER (2 COATS)
MIN R-12, 2" RIGID INSULATION TO INTERIOR
24"x8" CONCRETE FOOTING CONTINUOUS
- 8. PONY WALL CONSTRUCTION**
2"x6" STUDS @ 16" O.C.
2"x6" SILL PLATE C/W SEAL GASKET
ANCHOR BOLTS @ 6'-0" O.C.
ON 8" CONCRETE FOUNDATION WALL HEIGHT TO BE DETERMINED BY SITE CONTRACTOR & CODE
ENGINEERING MAY BE REQUIRED.
- 9. REAR DECK/LANDING CONSTRUCTION**
DECKING C/W WATERPROOF MEMBRANE
2"x6" DECK JOISTS @ 16" O.C. OR AS NOTED
CONSULT DECKING MANUFACTURER OR OWNER
- 10. DRAINAGE**
DOUBLE DRAIN AROUND FOOTING PERIMETER
6" GRANULAR FILL
- 11. MECHANICAL**
CONSULT MECHANICAL ENGINEER FOR INSTALLATION & CODE REQUIREMENTS
- 12. SPRINKLER**
ENTIRE BUILDING TO CODE REQUIREMENTS CONSULT AUTHORIZED SPRINKLER SUPPLIER OR INSTALLER
- 13. RADIANT HEATING**
IF USING CONCRETE TOPPING ON RADIANT FLOORING HEATING SYSTEM ALLOW FOR EXTRA WALL PLATE. VERIFY BUILDING HEIGHT & CONSULT STRUCTURAL ENGINEER FOR LOAD SPEC'S



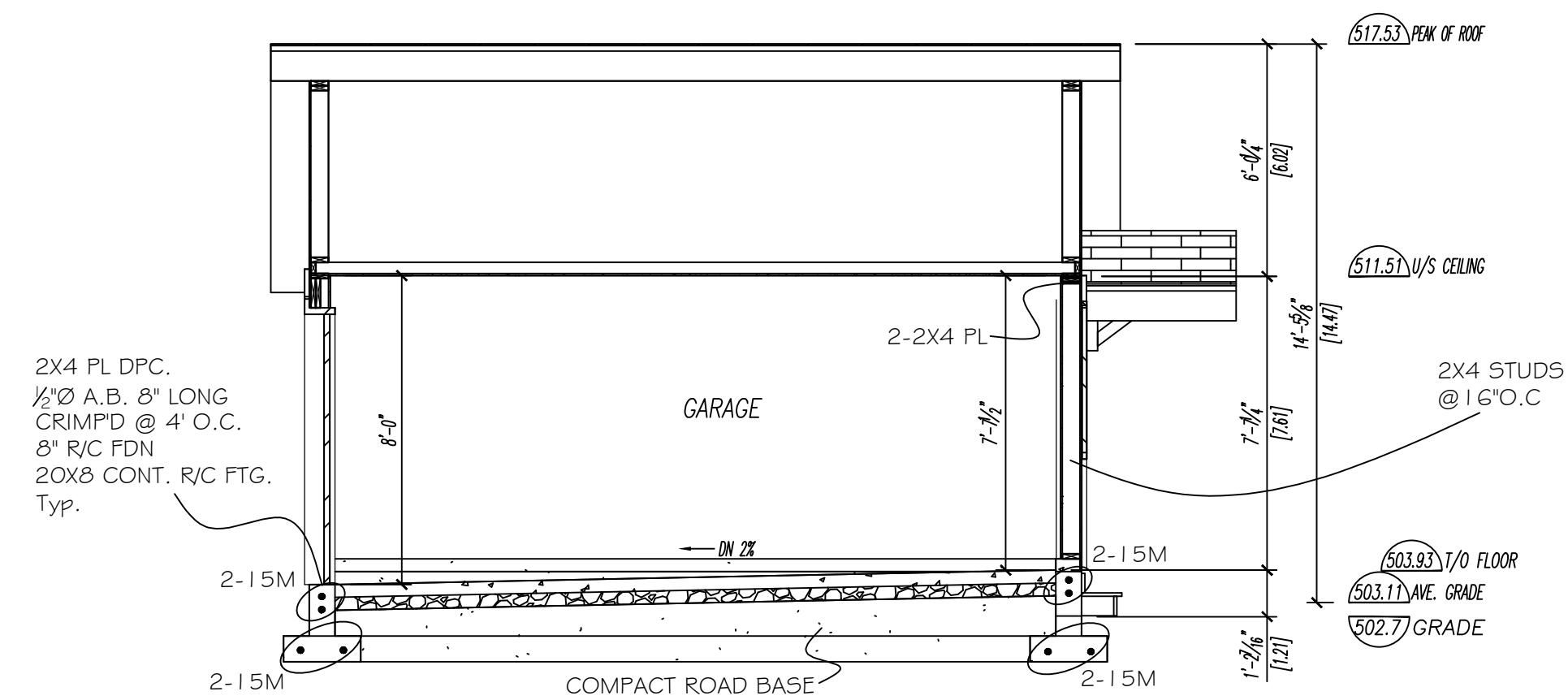
PROJECT: 619 E 22ND ST., CITY OF NORTH VANCOUVER		DRG TITLE: STRUCTURAL	
SUMMIT ENGINEERING CORP. STRUCTURAL SEISMIC AND GEOTECHNICAL CONSULTANTS PERMIT #: 1002380 200-4620 Sidney St. Vancouver, B.C. Canada V5N 5N8 summitengr@hotmail.com		OWNER:	
		BUILDER:	DRAWING NUMBER: S3
		DATE:	



FLOOR & FOUNDATION PLAN
1/4" = 1'-0"



6 SECTION
1/4" = 1'-0"



7 SECTION
1/4" = 1'-0"



2021-12-06

PROJECT: 619 E 22ND ST., CITY OF NORTH VANCOUVER		DRG TITLE: STRUCTURAL	
SUMMIT ENGINEERING CORP. STRUCTURAL SEISMIC AND GEOTECHNICAL CONSULTANTS PERMIT #: 1002380 200-4620 Sidney St. Vancouver, B.C. Canada V5N 5N8 BUS: 604 431 6468 FAX: 604 431 6468 CELL: 604 631 1431 summitengr@hotmail.com		OWNER:	
		BUILDER:	DRAWING NUMBER: S4
		DATE:	