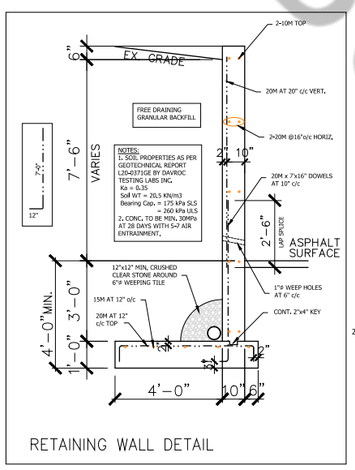
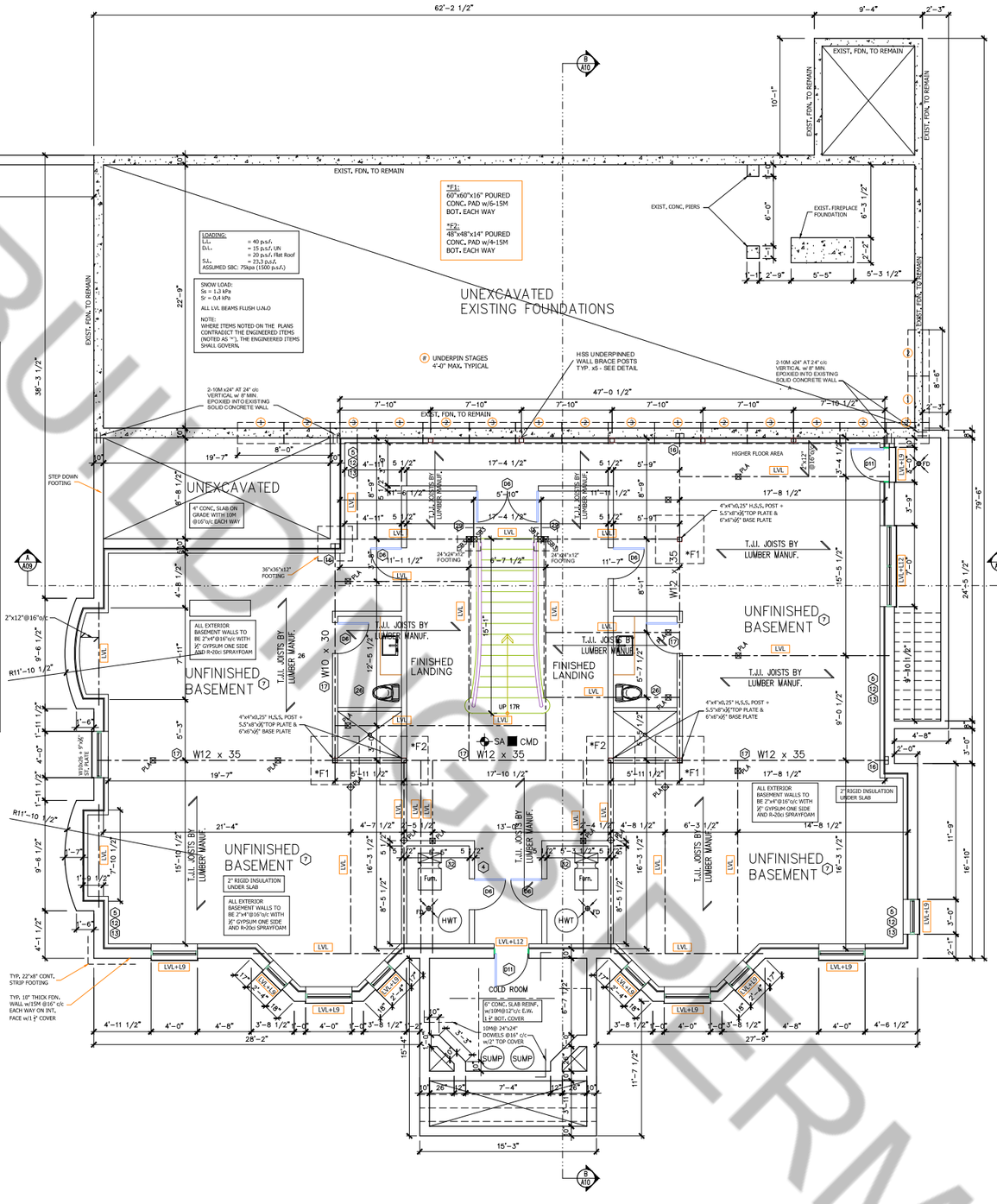
8951 MISSISSAUGA ROAD, BRAMPTON, ONTARIO.





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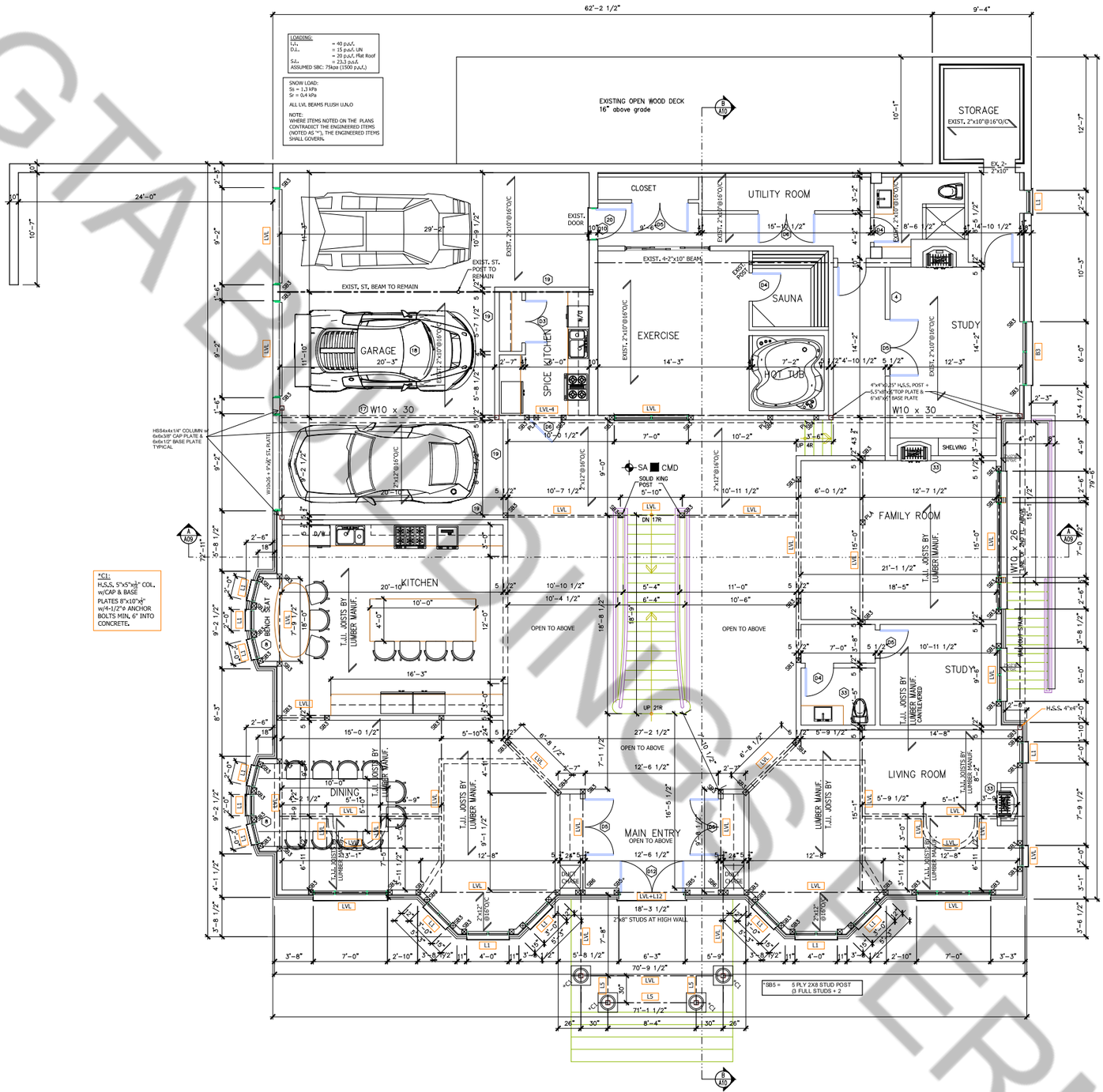
REVIEWED UNDER THE 2012 O.B.C. AS AMENDED

OWNER:
Sangha Residence
8951 Mississauga Rd.
Brampton, ON
416-525-8411

PROJECT:
NEW SINGLE FAMILY DWELLING

SHEET TITLE:
BASEMENT PLAN

SCALE: 3/16"=1'-0"
DATE: SEP./2020
DRAWN BY: PV
CHECKED BY: PV
PROJECT NO:
SHEET NO: A01



LICENSED PROFESSIONAL ENGINEER
C.D. Rosenburg
100012893
GDR#20-59
10/4/2020
PROVINCE OF ONTARIO
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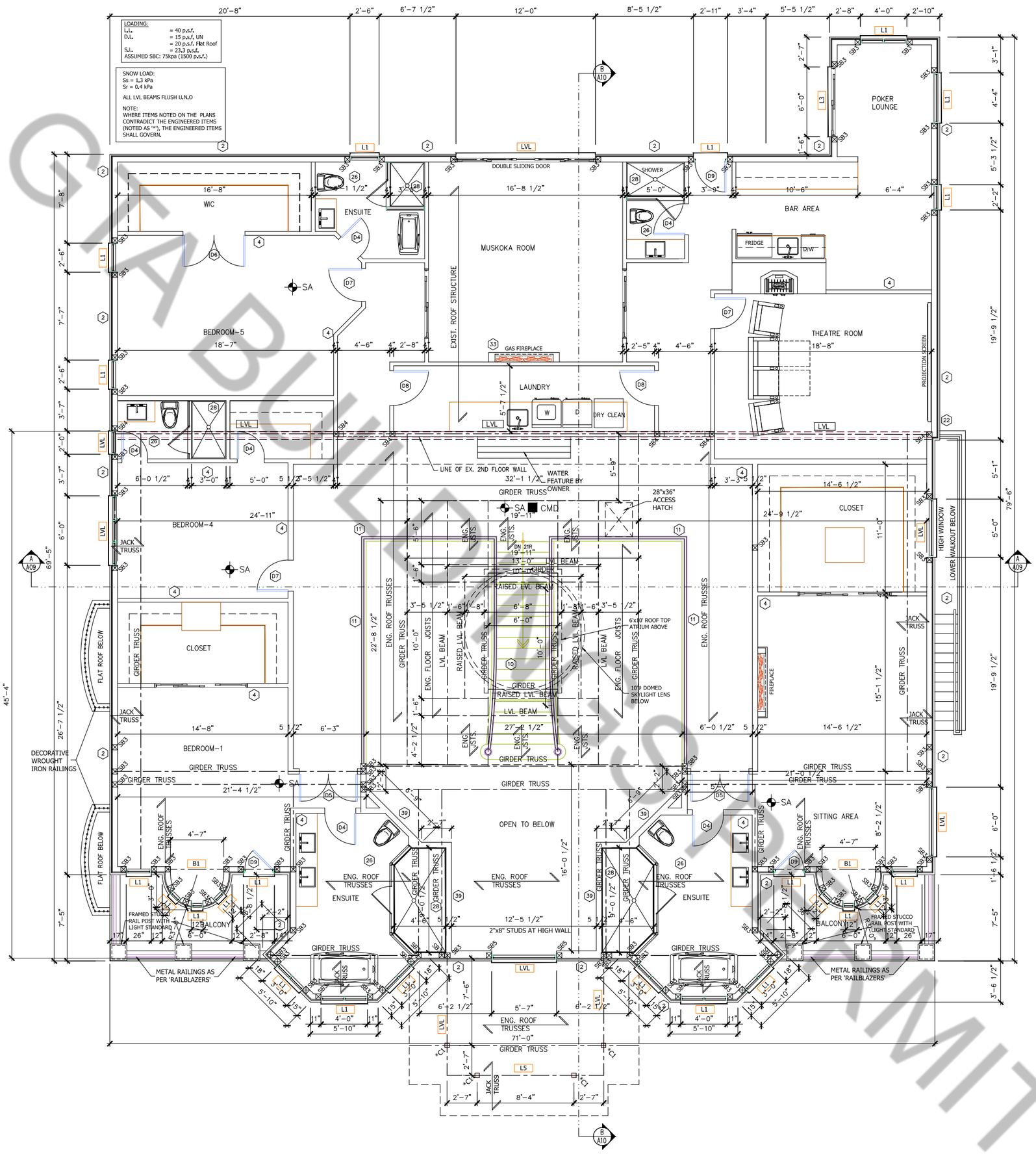
OWNER:
Sangha Residence
8951 Mississauga Rd.
Brampton, ON
416-525-8411

PROJECT:
NEW SINGLE FAMILY DWELLING

SHEET TITLE:
GROUND FLOOR PLAN

SCALE:	DATE:
3/16"=1'-0"	SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A02



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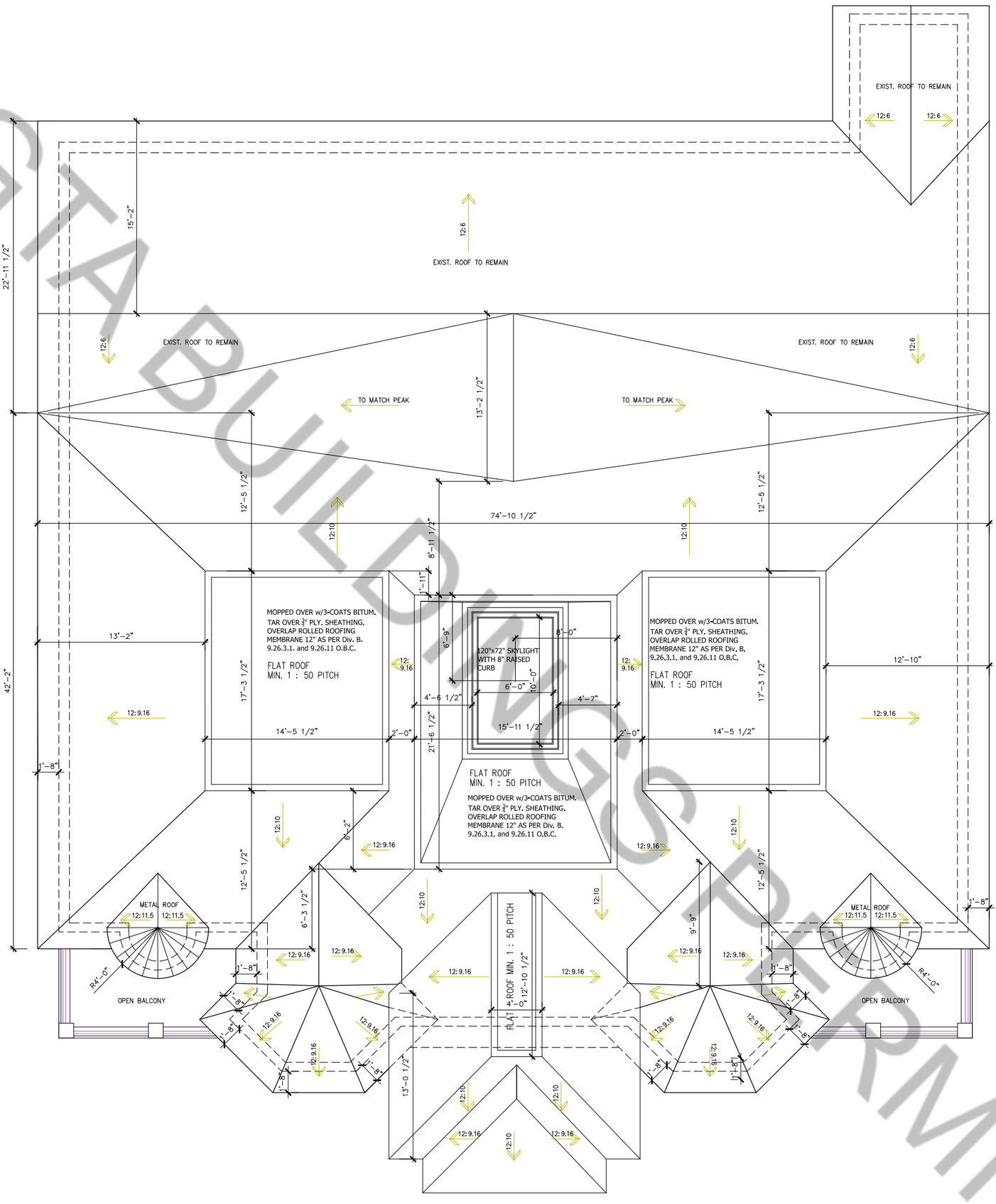
PROJECT:
NEW SINGLE FAMILY DWELLING

SHEET TITLE:
SECOND FLOOR PLAN

SCALE:	DATE:
3/16"=1'-0"	SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A03



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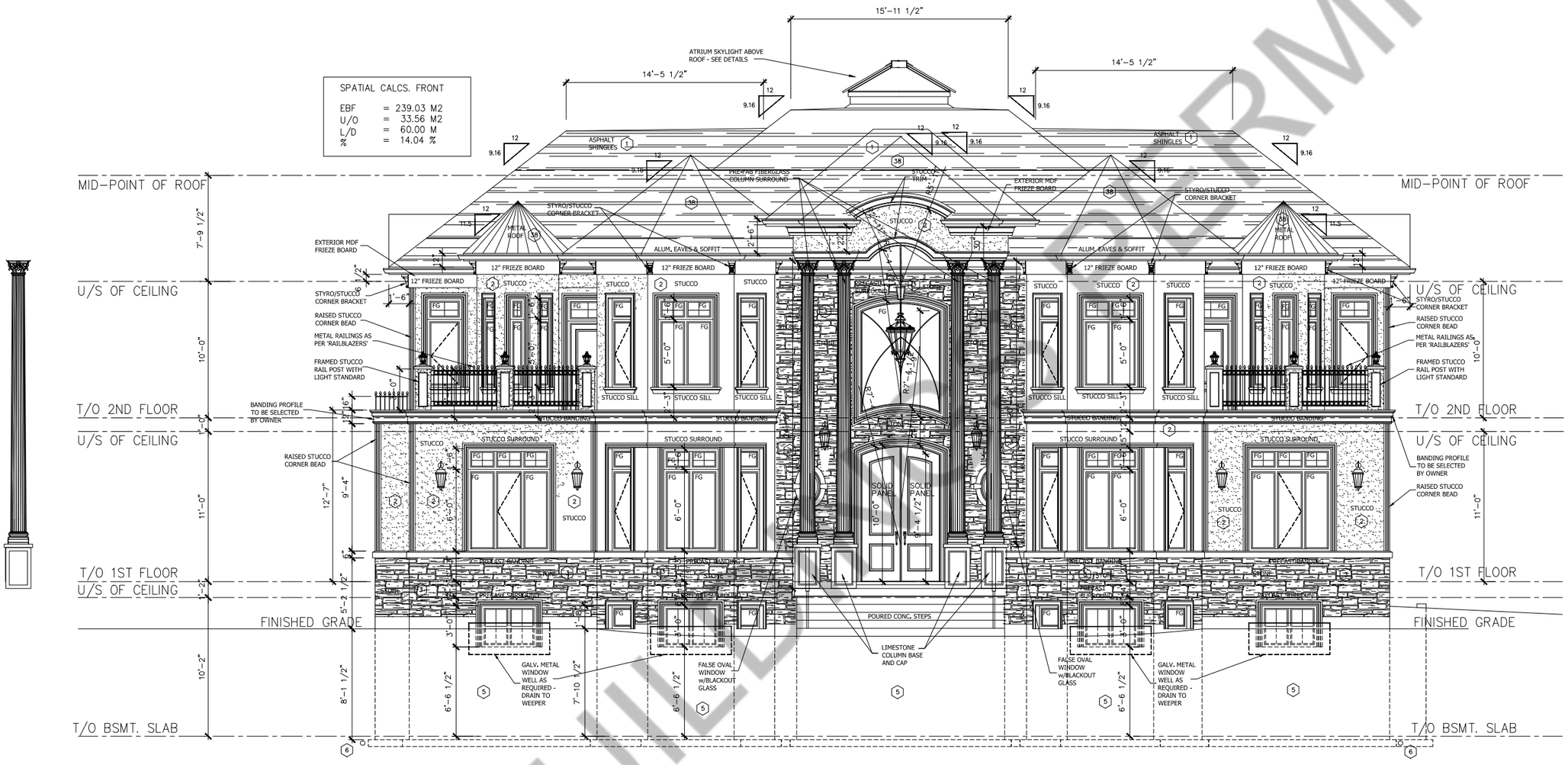
PROJECT:
NEW SINGLE FAMILY DWELLING

SHEET TITLE:
ROOF PLAN

SCALE:	DATE:
3/16"=1'-0"	SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A04



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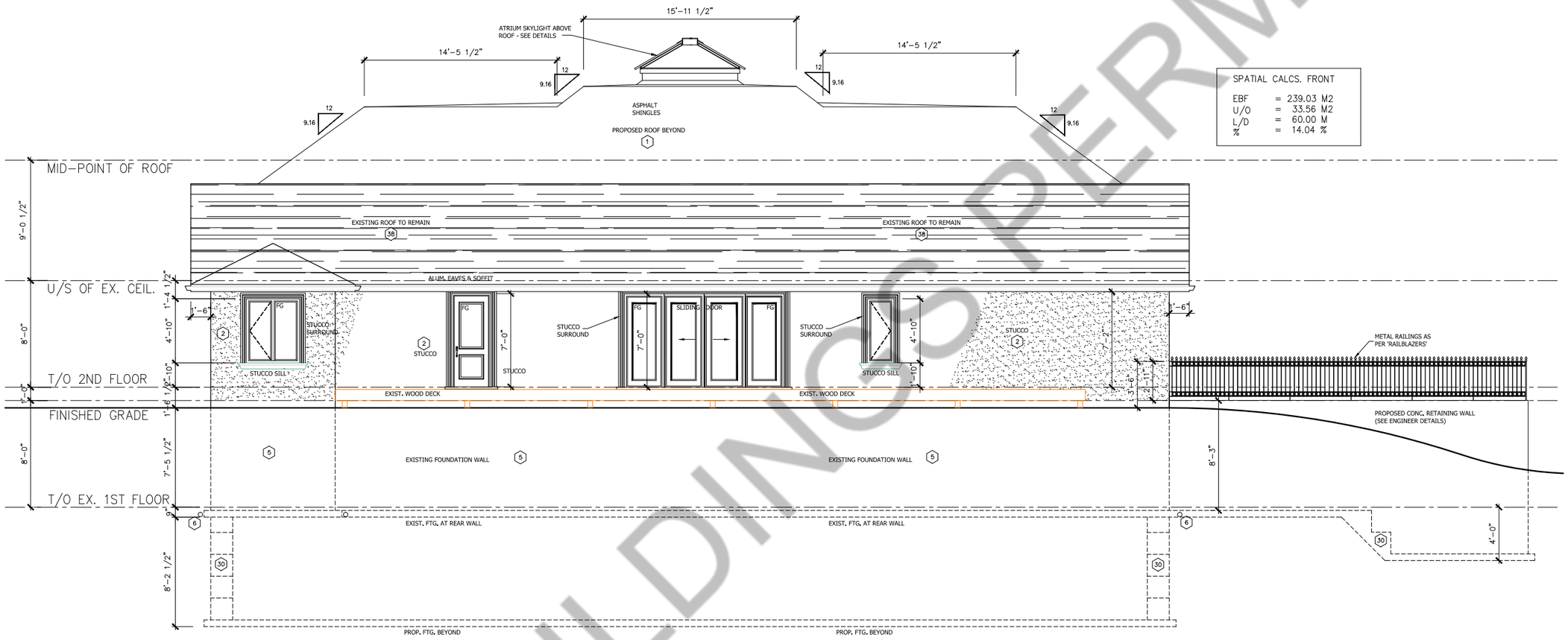
PROJECT:
NEW SINGLE FAMILY DWELLING

SHEET TITLE:
FRONT ELEVATION

SCALE:	DATE:
1/4"=1'-0"	SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A05



SPATIAL CALCS. FRONT

EBF	=	239.03 M2
U/O	=	33.56 M2
L/D	=	60.00 M
%	=	14.04 %

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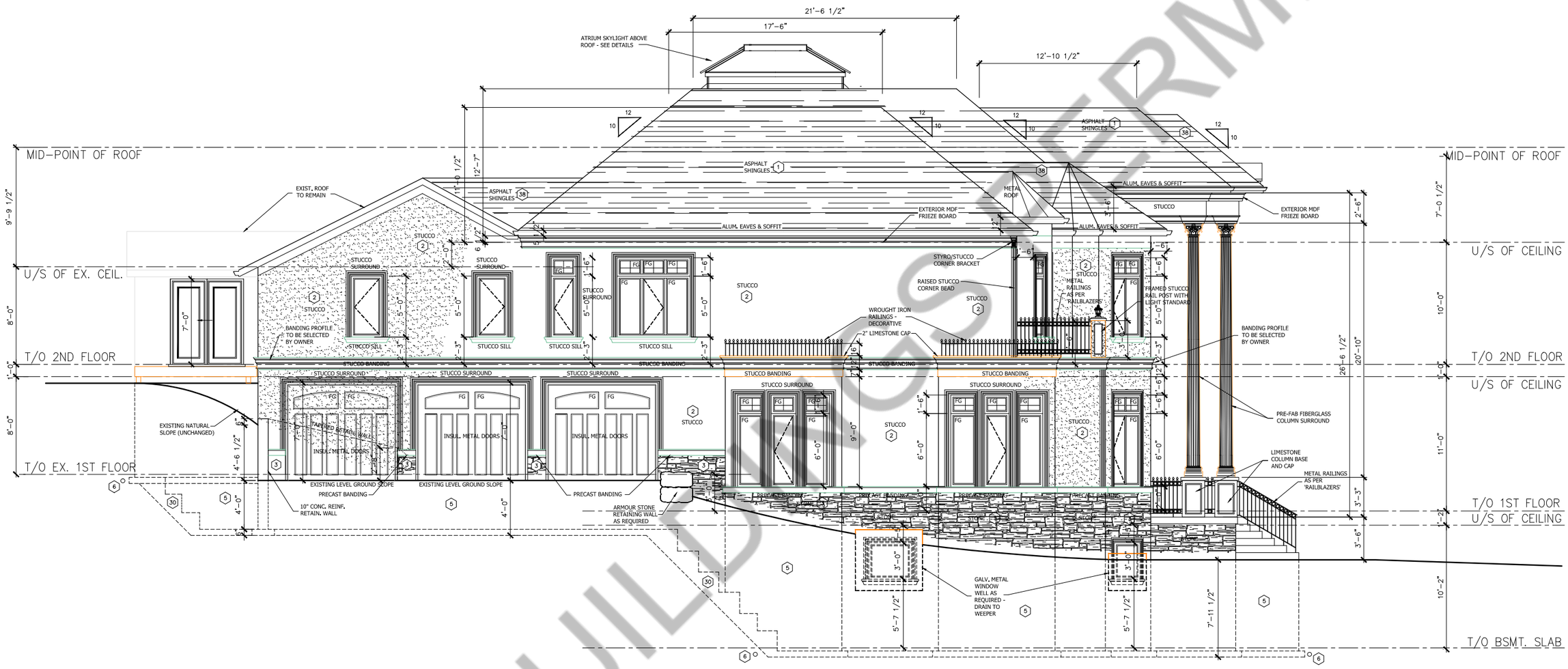
PROJECT:
NEW SINGLE FAMILY DWELLING

SHEET TITLE:
REAR ELEVATION

SCALE: 1/4"=1'-0"	DATE: SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A06



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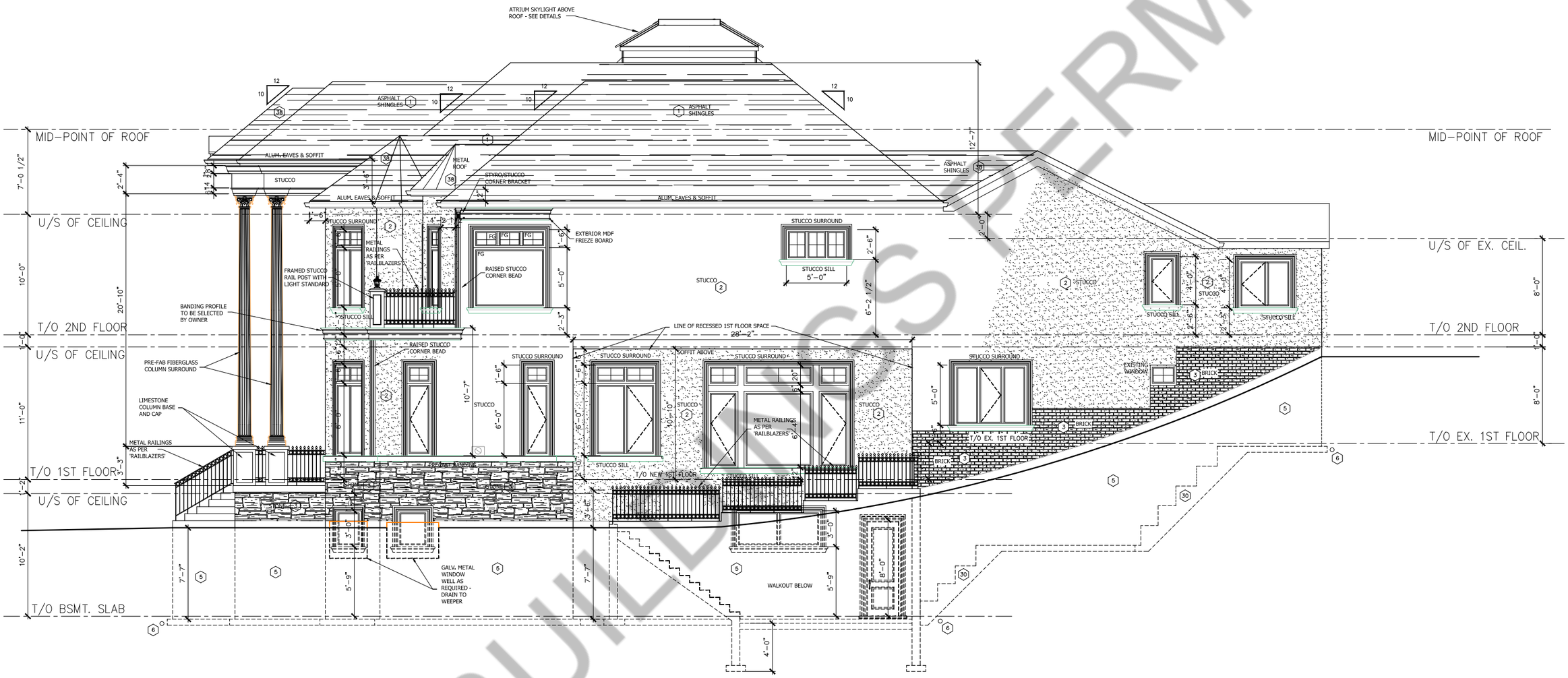
PROJECT:
NEW SINGLE FAMILY DWELLING

SHEET TITLE:
LEFT ELEVATION

SCALE:	DATE:
1/4"=1'-0"	SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A06



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PROJECT:
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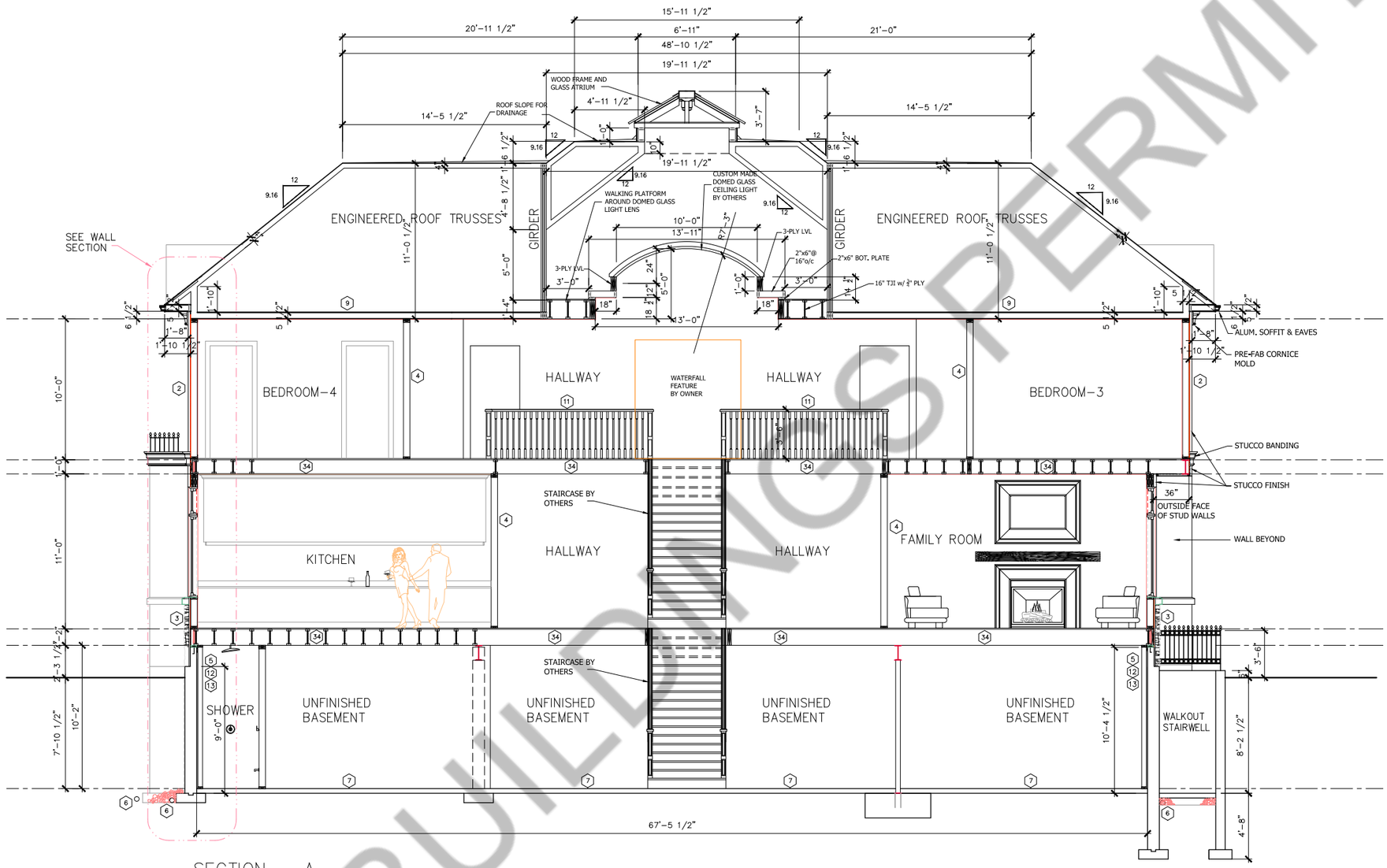
SHEET TITLE:
RIGHT ELEVATION

SCALE:	DATE:
1/4"=1'-0"	SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A07



SECTION – A

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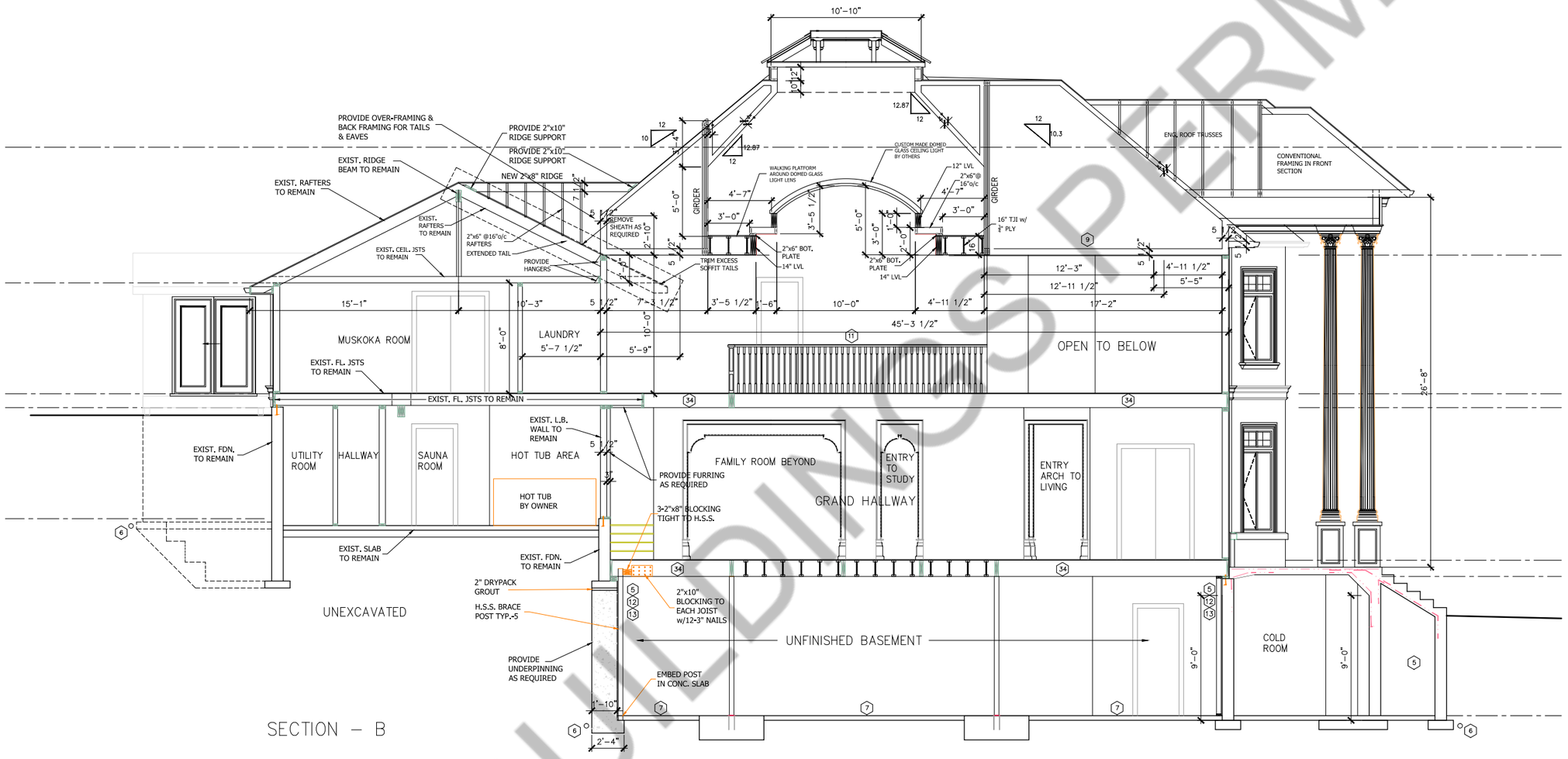
SHEET TITLE:
CROSS SECTION-A

SCALE:	DATE:
1/4"=1'-0"	SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A09



SECTION – B

Revision	No.	By	DD/MM/YY

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PROJECT:
NEW SINGLE FAMILY DWELLING

SHEET TITLE:
CROSS SECTION-B

SCALE:	DATE:
1/4"=1'-0"	SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A10

INSULATION VALUES UPDATED AS PER JAN 1 2012 SB-12 UPDATE TO O.B.C. 2012

1. ROOF CONSTRUCTION

NO.210 (10.25kg/m2) ASPHALT SHINGLES, 10mm (3/8") PLYWOOD SHEATHING WITH "H" CLIPS. APPROVED WOOD TRUSSES @ 600mm (24") O.C. MAX. APPROVED EAVES PROTECTION TO EXTEND 900mm (3'-0") FROM EDGE OF ROOF AND MIN. 300mm (12") BEYOND INNER FACE OF EXTERIOR WALL, 38x89 (2"x4") TRUSS BRACING @ 1830mm (6'-0") O.C. AT BOTTOM CHORD. PREFIN. ALUM. EAVESTROUGH, FASCIA, RWL & VENTED SOFFIT. ATTIC VENTILATION 1:300 OF INSULATED CEILING AREA WITH 50% AT EAVES.

2. FRAME WALL CONSTRUCTION (2"x6")

STUCCO OR SIDING OR EXT. BOARD AS PER ELEVATION, APPROVED SHEATHING PAPER, 12.5mm (1/2") EXT. TYPE SHEATHING, 38x140 (2"x6") STUDS @ 400mm (16") O.C., RSI 3.87 (R22) INSULATION AND APPROVED VAPOUR BARRIER AND APPROVED CONT. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH.

2A. FRAME WALL CONSTRUCTION (2"x4")

SIDING AS PER ELEVATION, APPROVED SHEATHING PAPER, RSI 0.9 (R5) EXTERIOR RIGID INSUL. BOARD, 38x89 (2"x4") STUDS @ 400mm (16") O.C., WITH APPROVED DIAGONAL WALL BRACING, FOR LOAD BEARING WALLS SUPPORTING A SECOND FLOOR & A ROOF 38X89 (2"X4") STUDS @ 400mm (16") O.C. FOR LOAD BEARING WALLS SUPPORTING ROOF ONLY, WITHAPPROVED DIAGONAL WALL BRACING, RSI 2.4 (R14) INSULATION AND APPROVED VAPOUR BARRIER AND APPROVED CONT. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH.

3. BRICK VENEER CONSTRUCTION (2"x6")

90mm (4") FACE BRICK OR STONE 25mm (1") AIR SPACE, 22x180x0.76mm (7/8"x7"x0.03") GALVANIZED METAL TIES @ 400mm (16") O.C. HORIZONTAL 600mm (24") O.C. VERTICAL. APPROVED SHEATHING PAPER, 19.0mm (5/8") EXT. TYPE SHEATHING, 38x140 (2"x6") STUDS @ 406mm (16") O.C., RSI 3.87 (R22) INSULATION AND APPROVED VAPOUR BARRIER WITH APPROVED CONTIN. AIR BARRIER. 19.0mm (5/8") INT. DRYWALL FINISH. PROVIDE WEEP HOLES @ 800mm (32") O.C. BOTTOM COURSE AND OVER OPENINGS. PROVIDE BASE FLASHING UP MIN. 150mm (6") BEHIND BUILDING PAPER.

3A. BRICK VENEER CONSTRUCTION (2"x4")

90mm (4") FACE BRICK 25mm (1") AIR SPACE, 22x180x0,76mm (7/8"x7"x0,03") GALV. METAL TIES @ 400mm (16") O.C. HORIZONTAL 600mm (24") O.C. VERTICAL. APPROVED SHEATHING PAPER, RSI 0.9 (R5) EXT. RIGID INSUL. BOARD, 38x89 (2"x4") STUDS @ 400mm (16") O.C. W/ APPROVED DIAGONAL WALL BRACING, FOR LOAD BEARING WALLS SUPPORTING A ROOF & A SECOND 38x89 (2"x4") STUDS @ 406mm (16") O.C. W/ APPROVED DIAGONAL WALL BRACING, RSI 2.4 (R14) INSUL. AND APPR'D 6 mil VAPOUR BARRIER W/ APPROVED CONT. AIR BARRIER, 13mm (1/2") INT. DRYWALL FINISH, PROVIDE WEEP HOLES @ 800mm (32") O.C. BOTTOM COURSE AND OVER OPENINGS, PROVIDE BASE FLASHING UP MIN. 150mm (6") BEHIND BUILDING PAPER.

4. INTERIOR STUD PARTITIONS

-BEARING PARTITIONS 38x89 (2"x4") @ 400mm (16") O.C. FOR 2 STOREYS AND 300mm (12") O.C. FOR 3 STOREYS. NON-BEARING PARTITIONS 38x89 (2"x4") @ 600mm (24") O.C.. PROVIDE 38x89 (2"x4") BOTTOM PLATE AND 2/38x89 (2-2"x4") TOP PLATE. 13mm (1/2") INTERIOR DRYWALL BOTH SIDES OF STUD, PROVIDE 38x140 (2"x6")@ 406mm (16") O.C. STUDS/PLATES WHERE NOTED. NON BEARING PARTITIONS 38X89 (2"X4") OR 38X140 (2"X6") @ 406mm (16") O.C.

5. FOUNDATION WALL/FOOTINGS: -SEE OBC 9.15.3-

250mm (10") POURED CONC. FDTN. WALL 32MPa WITH BITUMENOUS DAMPPROOFING AND DRAINAGE LAYER. DRAINAGE LAYER REQ. BASEMENT INSUL. MUST EXTEND FULL HEIGHT OF FND. WALL GRADE. MAXIMUM POUR HEIGHT 2390 (7'-10") ON 500x200 (22"x8") CONTIN. KEYED CONC. FTG. BRACE FOUNDATION WALL PRIOR TO BACKFILLING. ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL. REINFORCING AS PER ENGINEERING NOTES

6. 150mm (6") DIA. SLEEVED WEEPING TILE 300mm (12") CRUSHED STONE OVER AND AROUND WEEPING TILES.

7. BASEMENT SLAB

100mm (4")MIN. 32MPa CONC. SLAB ON 150mm (6") COARSE GRANULAR FILL, OR 20MPa (2900psi) CONC. WITH DAMPPROOFING BELOW SLAB, PROVIDE 2" RIGID INSULATION UNDER

8. EXPOSED FLOOR TO EXTERIOR

PROVIDE RSI 5.46 (R31) INSULATION, APPROVED VAPOUR BARRIER AND CONTINUOUS AIR BARRIER, FINISHED SOFFIT.

9. RSI 10.84 (R60) ROOF INSULATION AND APPROVED 6 mil. VAPOUR BARRIER, 16mm (5/8") INT. DRYWALL FINISH OR APPROVED EQUAL.

10. ALL STAIRS/EXTERIOR STAIRS -OBC. 9.8.-

MAX. RISE	= 200 (7-7/8")
MIN. RUN	= 210 (8-1/4")
MIN. TREAD	= 235 (9-1/4")
MAX. NOSING	= 25 (1")
MIN. HEADROOM	= 1950 (6'-5")
RAIL @ LANDING	= 900 (2'-11")
RAIL @ STAIR	= 800 (2'-8")
MIN. STAIR WIDTH	= 860 (2'-10")

FOR CURVED STAIRS

MIN. AVG. RUN	= 150 (6")
MIN. RUN	= 200 (8")

11. FINISHED RAILING ON PICKETS SPACED MAXIMUM 100mm (4") BETWEEN PICKETS.
GUARDS -OBC. 9.8.8.
INTERIOR GUARDS: 900mm (2'-11") MIN.
EXTERIOR GUARDS: 1070mm (3'-6") MIN.

12. 38x140 (2"x6") SILL PLATE WITH 13mm (1/2") DIA. ANCHOR BOLTS 200mm (8") LONG, EMBEDDED MIN. 100mm (4") INTO CONC. @ 2400mm (7'-10") O.C., CAULKING OR 25 (1") MIN MINERAL WOOL BETWEEN PLATE AND TOP OF FDTN. WALL. USE NON-SHRINK GROUT TO LEVEL SILL PLATE WHEN REQUIRED.

13. RSI 3.52 (R20ci) INSULATION BLANKET OR BATTS OR APPVD. SPRAYFOAM ON 38x89 (2"x4") STUD WALL w/APPVD. VAPOUR BARRIER FULL HEIGHT GRADE DAMPPROOF W/ BLDG. PAPER BETWEEN THE FDTN. WALL AND INSUL. UP TO GRADE LEVEL.

14. not used

15. STEEL BASEMENT COLUMN (SEE O.B.C. 9.17.3.4)

90mm (3-1/2") DIA. SINGLE TUBE ADJUSTABLE STL. COL. CONFORMING TO CAN/CGSB-7.2M, AND W/ 150x150x9.5 (6"x6"x3/8") STL. PL. TOP & BOTTOM. 870x870x410 (34"x34"x16") CONC. FTG. 15MPa ON UNDISTURBED SOIL. OR ON REINF. CONCRETE

15A. STEEL BASEMENT COLUMN (SEE O.B.C. 9.17.3.4)

90mm(3-1/2") DIA x 4.78mm(.188) NON-ADJUSTABLE STL. COL. W/ 150x150x9.5 (6"x6"x3/8") STL. TOP & BOTTOM PLATE ON 1120x1120x510 (44"x44"x20") CONC. FOOTING 15MPa ON UNDISTURBED SOIL.

15B. STEEL COLUMN (SEE O.B.C. 9.17.3.4)

90mm(3-1/2") DIA x 4.78mm(.188) NON-ADJUSTABLE STL. COLUMN WITH 150x150x9.5 (6"x6"x3/8") STEEL TOP & BOTTOM PLATE. BASE PLATE 120x250x12.5 (4 1/2"x10"x1/2") WITH 2-12mm DIA. x 300mm LONG x50mm HOOK ANCHORS (2-1/2"x12"x2") FIELD WELD COLUMN TO BASE PLATE.

15D. STEEL COLUMN (SEE O.B.C. 9.17.3.4)

3-1/2" ø x 0.138" WALL THICKNESS ADJUSTABLE COLUMN 15" x 5" x 1/4" H - PLATE 6"x6"x5/16" BASE PLATE ON FTG. 42"x42"x18" CONC. FTG. (15MPa) ON NAT. UNDISTURBED SOIL OR FOUNDATION WALL

16. BEAM POCKET OR 200x250 (8"x10") POURED CONCRETE NIB WALLS. STEEL SHIMS AS REQUIRED MINIMUM BEARING 90mm (3-1/2").

17. 19x64 (1"x3") CONTINUOUS WOOD STRAPPING BOTH SIDES OF STEEL BEAM.

18. GARAGE SLAB: 100mm (4") 32MPa (4640psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT ON OPT. 150 (6") COARSE GRANULAR FILL WITH COMPACTED SUB-BASE OR COMPACTED NATIVE FILL. SLOPE TO FRONT AT 1% MIN.

19. 19mm (5/8") GYPSUM BD. ON WALL AND CEILING BETWEEN HOUSE AND GARAGE, RSI 4.23 (R24) IN WALLS, RSI 5.46 (R31) IN CEILING. TAPE AND SEAL & STRUCTURALLY SUPPORT ALL JOINTS, IN ORDER TO BE GAS TIGHT.

20. DOOR AND FRAME GASPROOFED. DOOR EQUIPPED WITH SELF CLOSING DEVICE AND WEATHERSTRIPPING.

21. PRECAST CONCRETE STEP OR WD. STEP WHERE NOT EXPOSED TO WEATHER. MAX. RISE 200mm (7-7/8"); MINIMUM TREAD 250mm (9-1/2").

22. CAPPED DRYER EXHAUST VENTED TO EXTERIOR. DUCTS SHALL CONFORM TO O.B.C. PART 6

23. ATTIC ACCESS HATCH 500x700 (20"x28") WITH WEATHERSTRIPPING. RSI 8.81 (R50) RIGID INSULATION BACKING.

24. FIREPLACE CHIMNEYS -OBC. 9.21.-
TOP OF FIREPLACE CHIMNEY SHALL BE 915mm (3'-0") ABOVE THE HIGHEST POINT AT WHICH IT COMES IN CONTACT WITH THE ROOF AND 610mm (2'-0") ABOVE THE ROOF SURFACE WITHIN A HORIZ. DISTANCE OF 3050mm (10'-0") FROM THE CHIMNEY.

25. LINEN CLOSET 4 SHELVES MIN. 350mm (14") DEEP.

26. MECHANICAL EXHAUST FAN, VENTED TO EXTERIOR, TO PROVIDE AT LEAST ONE AIR CHANGE PER HOUR. PROVIDE DUCT SCREEN AS PER O.B.C. 9.32.3.12

27. STEEL BEARING PLATE FOR MASONRY WALLS

280x280x16 (11"x11"x5/8") STL. PLATE FOR STL BEAMS AND 280x280x12 (11"x11"x1/2") STL. PLATE FOR WOOD BEAMS BEARING ON CONC. BLK. PARTYWALL, ANCHORED W/ 2-19mm (3/4") x200mm (8") LONG GALV. ANCHORS WITHIN SOLID BLOCK COURSE. LEVEL WITH NON-SHRINK GROUT.
OR

SOLID WOOD BEARING FOR WOOD STUD WALLS

SOLID BEARING TO BE AT LEAST AS WIDE AS THE SUPPORTED MEMBER. SOLID WOOD BEARING COMPRISED OF BUILT-UP WOOD STUDS TO BE CONSTRUCTED IN ACCORDANCE WITH OBC. 9.17.4.2 (2).

28. STUD WALL REINFORCEMENT 9.5.2.3.
PROVIDE WOOD BLOCKING REINFORCEMENT TO STUD WALLS FOR FUTURE GRAB BAR INSTALLATION IN MAIN BATHROOM, 840-920mm (33"-36") A.F.F. BEHIND TOILET. 850mm (33") A.F.F. ON THE WALL OPPOSITE THE THE ENTRANCE TO THE BATHTUB OR SHOWER

29. 3-38x89 (3-2"x4") BUILT-UP-POST WITH DAMPROOFING MATERIAL WRAPPED AT THE END OF POST ANCHORED TO 610x610x300 (24"x24"x12") CONCRETE FOOTING.

30. STEP FOOTINGS: MIN. HORIZ. STEP = 600mm (23 5/8"). MAX. VERT. STEP = 600mm (23 5/8") FOR FIRM SOILS.

31. MIN. 127mm (5") CONCRETE SLAB ON GRADE ON 150mm (6") COARSE GRANULAR FILL. REINFORCED W/ 6x6-W2.9xW2.9 MESH PLACED NEAR MID-DEPTH OF SLAB. CONC. STRENGTH 32 MPa.(4640 psi) WITH 5-8% AIR ENTRAINMENT ON COMPACTED SUB-GRADE.

32. DIRECT VENT FURNACE TERMINAL MIN. 900mm (36") FROM A GAS REGULATOR. MIN. 300mm (12") ABOVE FIN. GRADE, FROM ALL OPENINGS, EXHAUST & INTAKE VENTS. HRV INTAKE TO BE A MIN. OF 1830mm (6'-0") FROM ALL EXHAUST TERMINALS. REFER TO GAS UTILIZATION CODE.

33. DIRECT VENT GAS FIREPLACE. VENT TO BE A MINIMUM 300mm (12") FROM ANY OPENING AND ABOVE FIN. GRADE. REFER TO GAS UTILIZATION CODE.

34. SUBFLOOR, JOIST STRAPPING AND BRIDGING

-3/4" T & G SUBFLOOR ON WOOD JOISTS OR ENG. WOOD FLOOR JOISTS. FOR CERAMIC TILE APPLICATION (* SEE OBC 9.30.6. *)
6mm (1/4") PANEL TYPE UNDERLAY UNDER RESILIENT & PARQUET FLOORING.
(-* SEE OBC 9.23.9.4 *)
ALL JOISTS TO BE BRIDGED WITH 38x38 (2"x2") CROSS BRACING OR SOLID BLOCKING @ 2100mm (6'-11") O.C. MAX. ALL JOISTS TO BE STRAPPED WITH 19x64 (1"x3") @ 2100mm (6'-11") O.C. UNLESS A PANEL TYPE CEILING FINISH IS APPLIED.

35. EXPOSED BUILDING FACE -OBC. 9.10.14.5-
EXTERIOR WALLS TO HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN 45 min. WHERE LIMITING DISTANCE IS LESS THAN 1.2M (3'-11"). WHERE THE LIMITING DISTANCE IS LESS THAN 600mm (1'-11") THE EXPOSING FACE SHALL BE CLAD IN NON-COMBUSTIBLE MATERIAL.

36. COLD CELLAR PORCH SLAB

FOR MAX. 2500 mm (8'-3") PORCH DEPTH, 130mm (5") 32MPa (4640psi) CONC. SLAB WITH 5-8% AIR ENTRAINMENT. REINF. WITH 10M BARS @ 200mm (8") O.C. EACH WAY IN BOTTOM THIRD OF SLAB, 610x610 (24"x24") DOWELS @ 600mm (24") O.C., ANCHORED IN PERIMETER FDTN. WALLS. SLOPE SLAB MIN. 1.0% FROM DOOR. PROVIDE (L7) LINTELS OVER CELLAR DOOR.

37. THE FDN. WALL SHALL NOT BE REDUCED TO LESS THAN 90mm (3-1/2") THICK TO A MAX. DEPTH OF 600mm (24") AND SHALL BE TIED TO THE FACING MATERIAL WITH METAL TIES SPACED 200mm (8") O.C. VERTICALLY AND 900mm (36") O.C. HORIZONTALLY. FILL SPACE BETWEEN WALL AND FACING SOLID WITH MORTAR.

38. CONVENTIONAL ROOF FRAMING

38x190 (2"x8") RAFTERS @ 400mm (16"O.C.), 38x310 (2"x12") RIDGE BOARD. 38x89 (2"x4") COLLAR TIES AT MIDSPANS. CEILING JOISTS TO BE 38x140 (2"x6") @ 400mm (16") O.C. FOR MAX. 2830mm (9'-3") SPAN & 38x140 (2"x6") @ 400 (16") O.C. FOR MAX. 4450mm (14'-7") SPAN. RAFTERS FOR BUILT-UP ROOF TO BE 38x89 (2"x4") @ 600mm (24") O.C. WITH A 38x89 (2"x4") CENTRE POST TO THE TRUSS BELOW, LATERALLY BRACED @ 1800mm (6'-0") O.C. VERTICALLY. (UNLESS NOTED BY ENGINEER)

LEGEND

FD	FLOOR DRAIN
DJ	DOUBLE JOIST
TJ	TRIPLE JOIST
LVL	LAMINATED VENEER LUMBER
PL	POINT LOAD FROM ABOVE
P.T.	PRESSURE TREATED LUMBER
G.T.	GIRDER TRUSS BY ROOF TRUSS MANUF.
R.R.	ROOF RAFTERS
C.J.	CEILING JOISTS

WOOD LINTELS AND BUILT-UP WOOD BEAMS	
L1A	2/38 x 140 (2/2" x 6") SPR.#2
L1	2/38 x 184 (2/2" x 8") SPR.#2
B1	3/38 x 184 (3/2" x 8") SPR.#2
B2	4/38 x 184 (4/2" x 8") SPR.#2
L3	2/38 x 235 (2/2" x 10") SPR.#2
B3	3/38 x 235 (3/2" x 10") SPR.#2
B4	4/38 x 235 (4/2" x 10") SPR.#2
L5	2/38 x 286 (2/2" x 12") SPR.#2
B5	3/38 x 286 (3/2" x 12") SPR.#2
B6	4/38 x 286 (4/2" x 12") SPR.#2

LOOSE STEEL LINTELS

L7	90 x 90 x 6.0L (3-1/2" x 3-1/2" x 1/4"L)
L8	90 x 90 x 8.0L (3-1/2" x 3-1/2" x 5/16"L)
L9	100 x 90 x 8.0L (4" x 3-1/2" x 5/16"L)
L10	125 x 90 x 8.0L (5" x 3-1/2" x 5/16"L)
L11	125 x 90 x 10.0L (5" x 3-1/2" x 3/8"L)
L12	150 x 100 x 10.0L (6"x 4" x 3/8"L)

LAMINATED VENEER LUMBER (LVL) BEAMS

LVL1	2-1 3/4"x7 1/4" (2-45x184)
LVL2	3-1 3/4"x7 1/4" (3-45x184)
LVL3	4-1 3/4"x7 1/4" (4-45x184)
LVL4	2-1 3/4"x9 1/2" (2-45x240)
LVL5	3-1 3/4"x9 1/2" (3-45x240)
LVL6	4-1 3/4"x9 1/2" (4-45x240)
LVL7	3-1 3/4"x11 7/8" (3-45x302)
LVL8	4-1 3/4"x11 7/8" (4-45x302)
LVL9	3-1 3/4"x14" (3-45x355)
LVL10	4-1 3/4"x14" (4-45x355)

39. TWO STOREY VOLUME SPACES

-FOR A MAXIMUM 5490 mm (18'-0") HEIGHT, PROVIDE 2-38x140 (2-2"x6") SPR.#2 CONTIN. STUDS @ 300mm (12") O.C. FOR BRICK AND 400mm (16") O.C. FOR SIDING C/W 9.6 (3/8") THICK EXT. PLYWOOD SHEATHING. PROVIDE SOLID WOOD BLOCKING BETWEEN WOOD STUDS @ 1220 mm (4'-0") O.C. VERTICALLY.

-FOR HORIZ. DISTANCES NOT EXCEEDING 2900 mm (9'-6"), PROVIDE 38x140 (2"x6") STUDS @ 400 (16") O.C. WITH CONTINUOUS 2-38x140 (2-2"x6")TOP PLATE + 1-38x140 (1-2"x6") BOTTOM PLATE & MINIMUM OF 3-38x184 (3-2"x8") CONT. HEADER AT GRND. CEILING LEVEL TOE-NAILED & GLUED AT TOP, BOTTOM PLATES AND HEADERS.

SA SMOKE ALARM (REFER TO OBC 9.10.19)
PROVIDE 1 PER FLOOR, NEAR THE STAIRS CONNECTING THE FLOOR LEVEL AND ONE PER SLEEPING ROOM. ALARMS TO BE CONNECTED TO AN ELECTRICAL CIRCUIT AND INTERCONNECTED TO ACTIVATE ALL ALARMS IF ONE SOUNDS ALL SMOKE ALARMS TO HAVE ACTIVE STROBE

CMD CARBON MONOXIDE DETECTOR (OBC 9.33.4)
* CHECK LOCAL BYLAWS FOR REQUIREMENTS *

SB= SOLID WOOD BEARING
SB2 - 2 MEMBER BUILT-UP STUD
SB3 - 3 MEMBER BUILT-UP STUD
SB4 - 4 MEMBER BUILT-UP STUD
SBFA- SOLID BEARING FROM ABOVE CARRY POST AND BLOCKING THROUGH FLOOR ASSEMBLY

SOLID BEARING POSTS TO BE MADE UP OF THE SAME SIZE OF STUD IN WALL IT IS LOCATED. (OR MIN 2"x4" FOR ROOF POSTS. EACH PLY TO BE TIED TOGETHER AS PER 9.17.4.2.(2) AND 9.23.10.7. DIV. B. O.B.C.

WINDOWS:

1) MINIMUM BEDROOM WINDOW -OBC. 9.9.10.-
AT LEAST ONE BEDROOM WINDOW ON A GIVEN FLOOR IS TO HAVE MIN. 0.35m2 UNOBSTRUCTED GLAZED OR OPENABLE AREA WITH MIN. CLEAR WIDTH OF 380mm (1'-3").

2) WINDOW GUARDS -OBC. 9.8.8.1.-
A GUARD IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED LESS THAN 480mm (1'-7") ABOVE FIN. FLOOR AND THE DISTANCE FROM THE FIN. FLOOR TO THE ADJACENT GRADE IS GREATER THAN 1800mm (5'-11").

3) WINDOW OVER STAIRS & LANDINGS -OBC. 9.8.8.1-
A GUARD IS REQUIRED WHERE THE TOP OF THE WINDOW SILL IS LOCATED LESS THAN 900mm (2'-11") ABOVE THE SURFACE OF THE TREAD, RAMP OR LANDING

D1	18"x96"x1.5" [I.H.S.]
D2	24"x96"x1.5" [I.H.S.]
D3	26"x96"x1.5" [I.H.S.]
D4	28"x96"x1.5" [I.H.S.]
D5	30"x96"x1.5" [I.H.S.]
D6	32"x96"x1.5" [I.H.S.]
D7	34"x96"x1.5" [I.H.S.]
D8	36"x96"x1.5" [I.H.S.]
D9	30"x96"x 2" [E.H.M.]
D10	32"x96"x 2" [E.H.M.]
D11	34"x96"x 2" [E.H.M.]
D12	36"x96"x 2" [E.H.M.]
D13	36"x96"x 2" [E.H.M.] SELF-CLOSER
D14	(42")x120"x 2" [SOLID WD.] CUSTOM SIZE & MATERIAL

-SLIDING PATIO DOORS = 72"x96"
-POCKET DOORS AS LABELLED ON PLAN

NOTE:
MECHANICAL VENTILATION IS REQUIRED TO PROVIDE 0.3 AIR CHANGES PER HOUR AVERAGED OVER 24 HOURS. SEE MECHANICAL DRAWINGS.

LUMBER:
1) ALL LUMBER SHALL BE SPRUCE NO.2 GRADE, UNLESS NOTED OTHERWISE.
2) STUDS SHALL BE STUD GRADE SPRUCE, UNLESS NOTED OTHERWISE.
3) LUMBER EXPOSED TO THE EXTERIOR TO BE SPRUCE No. 2 GRADE PRESSURE TREATED OR CEDAR, UNLESS NOTED OTHERWISE.
4) ALL LAMINATED VENEER LUMBER (L.V.L.) BEAMS, GIRDER TRUSSES, AND METAL HANGER CONNECTIONS SUPPORTING ROOF FRAMING TO BE DESIGNED & CERTIFIED BY TRUSS MANUFACTURER.
5) LVL BEAMS SHALL BE 2.0E WS MICRO-LAM LVL (Fb=2800psi.MIN.) OR EQUIVALENT. NAIL EACH PLY OF LVL WITH 89mm (3 1/2") LONG COMMON WIRE NAILS @ 300mm (12") O.C. STAGGERED IN 2 ROWS FOR 184,240 & 300mm (7 1/4",9 1/2", 11 7/8") DEPTHS AND STAGGERED IN 3 ROWS FOR GREATER DEPTHS AND FOR 4 PLY MEMBERS ADD 13mm (1/2") DIA. GALV. BOLTS BOLTED AT MID-DEPTH OF BEAM @ 915mm (3'-0") O.C.
6) PROVIDE TOP MOUNT BEAM HANGERS TYPE "SCL" MANUFACTURED BY MGA CONNECTOR LTD. Tel. (905) 642-3175 OR EQUAL FOR ALL LVL BEAM TO BEAM CONNECTIONS UNLESS NOTED OTHERWISE.
7) JOIST HANGERS: PROVIDE METAL HANGERS FOR ALL JOISTS AND BUILT-UP WOOD MEMBERS INTERSECTING FLUSH BUILT-UP WOOD MEMBERS.
8) WOOD FRAMING NOT TREATED WITH A WOOD PRESERVATIVE, IN CONTACT WITH CONCRETE, SHALL BE SEPARATED FROM THE CONC. BY AT LEAST 2 mil. POLYETHYLENE FILM, No.50 (45lbs.) ROLL ROOFING OR OTHER DAMPPROOFING MATERIAL, EXCEPT WHERE THE WOOD MEMBER IS AT LEAST 150mm (6") ABOVE THE GROUND.
9) TERMITE & DECAY PROTECTION
IN LOCATIONS WHERE TERMITES ARE KNOWN TO OCCUR, CLEARANCE BETWEEN STRUCTURAL WOOD ELEMENTS AND THE FINISHED GROUND LEVEL DIRECTLY BELOW THEM SHALL BE NOT LESS THAN 450mm (17 3/4") AND ALL SIDES OF SUPPORTING ELEMENTS SHALL BE VISIBLE TO INSPECTION.
STRUCTURAL WOOD ELEMENTS, SUPPORTED BY WOOD ELEMENTS IN CONTACT WITH THE GROUND OR OVER EXPOSED BARE SOIL SHALL BE PRESSURE TREATED WITH CHEMICAL THAT IS TOXIC TO TERMITES

STEEL:
1) STRUCTURAL STEEL SHALL CONFORM TO CAN/CSA-G40-21 GRADE 300W. HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO CAN/CSA-G40-21 GRADE 350W CLASS "H".
2) REINFORCING STEEL SHALL CONFORM TO CSA-G30-18M GRADE 400R.

NOTE:
PLEASE REFER TO TRUSS LAYOUT AND PACKAGE DETAILS FOR TRUSS DETAILS, HEEL HEIGHTS, NOTES AND UPLIFT CLIPS

FALSE DORMER NOTE:
VENEER TO BE 2" THICK, ADHERED THIN VENEER INSTALLED AS PER MANUFACTURER SPECS (OR LESS) OR CONTACT TACOMA FOR STEEL FRAMING SPEC PRIOR TO CONSTRUCTION

ROOF TRUSS DESIGN NOTE:
FOR PART 4 ROOF TRUSSES REQUIRING WEB LATERAL BRACING, TRUSS MANUFACTURER IS TO DESIGN T-BRACING INSTEAD OF WEB LATERALS

FALSE DORMER STRUCTURAL NOTE:
1.BUILD DORMER WITH 2X6 WALLS ADN2X6 STICK FRAMED ROOF, PROPPED DOWN ONTO TRUSS TOP CHORDS @ 2'-0" O.C SUCH THAT THE DORMER WEIGHT IS EVENLY SPREAD OUT ONTO TRUSSES.

2.DORMER WEIGHT IS .35kPa WHICH IS WITHIN THE ALLOWANCE FOR THE TRUSS DEAD LOAD

3.SPECIAL TRUSS ANALYSIS IS NOT REQUIRED FROM THE MANUFACTURER

NOTE:
ALL CONSTRUCTION SHALL CONFORM TO THE ONTARIO BUILDING CODE (O.B.C) AND OTHER APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. UNLESS NOTED OTHERWISE, THE CODE REFERENCE ARE FROM 2012 O.B.C, REG 332/12 , DIVISION B, PART 9.

NOTE:
PROVIDE 3-2X6 POST BELOW ALL GIRDER TRUSSES (U.N.O)

NOTE:
CODE REFERENCES REFER TO O.B.C 2012 DIVISION B

VENT NOTE:
ROOF TO BE VENTED TO 1/300 OF INSULATED ATTIC AREA- AT LEAST 50% OF VENT AREA IN THE SOFFIT- NO MORE THAN 50% OF THE REQUIRED ROOF VENT AREA AS ROOF OR RIDGE VENTS

VENT NOTE:
ROOF AREA-4716 SQFT. @ 1/300=15.3 (13.5/2=7.6 OR MIN. 8 ROOF VENTS)

NOTE:
REFER TO TRUSS LAYOUT BY WATFORD ROOF TRUSS LTD. DATED MARCH 13, 2017 FOR TRUSS SPANS AND EXACT GIRDER LOCATIONS

NOTES:
PROVIDE FIRE SEPARATION IN ATTIC SPACE. NO SPACE CAN BE LARGER THAN 3230. SQFT.

LICENSED PROFESSIONAL ENGINEER
G.D. Rosenburg
100012893
GDR#20-59
10/4/2020
PROVINCE OF ONTARIO
FOR STRUCTURAL ONLY

Revision	No.	By	DD/MM/YY

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS.
ANY DISCREPENCIES ARE TO BE REPORTED TO THE DESIGNER PRIOR TO COMMENCEMENT OF WORK. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR OR SUBCONTRACTOR PROCEED IN UNCERTAINTY.
REVIEWED UNDER THE 2012 O.B.C. AS AMENDED

OWNER:
Sangha Residence
8951 Mississauga Rd.
Brampton, ON
416-525-8411

PROJECT:
NEW SINGLE FAMILY DWELLING

SHEET TITLE:
GENERAL NOTES

SCALE:	DATE:
1/4"=1'-0"	SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A11

GENERAL STRUCTURAL NOTES

1. ALL DESIGN AND CONSTRUCTION IS TO CONFORM TO THE ONTARIO BUILDING CODE (OBC) – 2012 (PART 9) INCLUDING ALL AMENDMENTS, AND THE LATEST REVISION OF APPLICABLE LISTED CSA STANDARDS.
2. READ THESE DRAWINGS WITH ALL RELATED ARCHITECTURAL, MECHANICAL, ELECTRICAL, CIVIL AND GEO–TECHNICAL DRAWINGS, REPORTS AND OTHER APPLICABLE CONTRACT DOCUMENTS.
3. BEFORE PROCEEDING WITH THE WORK, THE CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS AND MEASUREMENTS AT THE SITE AND REPORT IN WRITING ANY DISCREPANCIES OR CONDITIONS WHICH MAY ADVERSELY AFFECT THE PROPER COMPLETION OF THE WORK.
4. DO NOT SCALE THE DRAWINGS.
5. DESIGN SNOW AND LIVE LOADS FOR THE STRUCTURE ARE AS INDICATED ON THE DRAWINGS AND GENERAL NOTES. DO NOT EXCEED THESE LOADS DURING CONSTRUCTION.
6. ALL LOADS STATED ARE UNFACTORED SERVICE LIMIT STATES (SLS) UNLESS NOTED.
7. CONSTRUCTION, FABRICATION AND SHOP DRAWING REVIEW MUST BE PROVIDED WHERE APPLICABLE AS PER CODE.
8. APPROVED SHALL MEAN 'APPROVED IN WRITING' BY THE STRUCTURAL ENGINEER OF RECORD.
9. DELIVER, HANDLE AND STORE ALL MATERIALS TO AVOID DAMAGE OR DETERIORATION PRIOR TO AND DURING CONSTRUCTION..
10. MAINTAIN A CURRENT SET OF DRAWINGS ON SITE AND UPDATE WITH CONSTRUCTION RECORD INFORMATION.
11. PROVIDE TEMPORARY BRACING AS REQUIRED TO KEEP NEW AND EXISTING STRUCTURES STABLE, TRUE AND PLUMB DURING CONSTRUCTION.
12. LOADS: (TYP. UNLESS NOTED ON PLANS)

ROOF:	DL=15 PSF (SLOPED) DL=20 PSF (FLAT) SL=23.3 PSF Ss=1.3 kPa
FLOOR:	DL=20 PSF LL=40 PSF

MATERIALS

UNLESS NOTED OTHERWISE ON THE DRAWINGS THE FOLLOWING MATERIALS SHALL BE USED FOR CONSTRUCTION:

CONCRETE:	30MPa – 28 DAY MIN. COMP. STRENGTH FOR SLABS 25MPa – 28 DAY MIN. COMP. STRENGTH OTHERWISE (ALL SURFACES EXPOSED TO FREEZE THAW CYCLES SHALL HAVE 4–7% AIR ENTRAINMENT)
BEARING GROUT:	35MPa – 28 DAY MIN. COMP. STRENGTH (NON SHRINK, NON METALLIC)
REINFORCING STEEL:	BILLET STEEL BARS TO G30.18–GRADE 400R
WELDED WIRE FABRIC (WWF):	CSA G30.5 (Fy=400 MPa)
ANCHOR BOLTS, NUTS AND WASHERS:	ASTM A307 & A36, OR ASTM F1554
STEEL SHAPES & PLATE:	G40.21–350W FOR W & HSS SHAPES, 300W FOR OTHER U/N
STEEL PIPE:	ASTM A53, Fy=240 MPa MIN.
GALVANIZING:	CSA G164 & ASTM A153 CLASS B2
WELDING:	CSA W59, W55 AND W47 SERIES E49XX ELECTRODES
BRICK	55MPa CLAY TO CSA A82 SERIES
BLOCK:	15MPa CONCRETE ON NET AREA TO CSA A165 SERIES
MORTAR:	TYPE S TO CSA A179
MASONRY GROUT:	TO CSA A179 AND TO STRENGTH OF 15MPa MIN.
WIRE REINFORCING:	CSA G30.3 & ASTM A82 (HOT DIPPED GALVANIZED)
WOOD LUMBER:	GRADED TO NLGA, SPF NO. 2 OR BETTER, S–DRY UNLESS NOTED.
PLYWOOD:	CSA 0151 SOFTWOOD EXTERIOR GRADE
WAFERBOARD:	CSA 0437 GRADE O–1 OR O–2.
COMPOSITE LUMBER:	MANUFACTURED BY WEYERHAUSER TRUS–JOIST, OR EQUAL PARALLAM (PSL) 2.0E MIN. MICROLAM (LVL) 2.0E MIN. TIMBERSTRAND (LSL) 1.5E MIN. BENDING fb=4805 PSI MINIMUM SHEAR fv=530 PSI MINIMUM
GLULAM:	CSA 0122 SP GRADE 20f–E BENDING STRESS UNLESS NOTED SP 12c–E COMPRESSION STRESS UNLESS NOTED

FOUNDATION:

1. FOUND ALL SPREAD FOOTINGS ON NATIVE UNDISTURBED SOIL CAPABLE OF SUSTAINING 75 kPa (1570 PSF) UNLESS NOTED OR APPROVED ON SITE IN WRITING BY A GEO–TECHNICAL ENGINEER.
2. FOUND ALL FOOTINGS WHICH WILL BE EXPOSED TO FROST A MINIMUM OF 1200mm (4'–0") BELOW FINISHED GRADE UNLESS NOTED OR APPROVED ON SITE IN WRITING BY A GEO–TECHNICAL ENGINEER.
3. DO NOT EXCEED A RISE OF 7 IN A RUN OF 10 IN THE LINE OF SLOPE BETWEEN ADJACENT FOOTING EXCAVATIONS OR ALONG STEPPED FOOTINGS. USE STEPS NOT EXCEEDING 600mm (2') IN HEIGHT AND NOT LESS THEN 1200mm (4') IN LENGTH.
4. ERECT, MAINTAIN, AND IF REQUIRED, REMOVE A SUPPORTING SHORING SYSTEM ALONG THE SIDES OF EXCAVATIONS. A GEO–TECHNICAL ENGINEER IS TO DESIGN SUCH SYSTEM IN ACCORDANCE WITH SOIL CONDITIONS.
5. PROTECT SOIL FROM FREEZING ADJACENT TO AND BELOW ALL FOOTINGS.
6. BACKFILL AGAINST FOUNDATION WALLS IN SUCH A MANNER THAT THE LEVEL OF FILL ON ONE SIDE OF THE WALL IS NEVER MORE THAN 600mm (2') FROM THE OTHER SIDE OF THE WALL EXCEPT WHERE TEMPORARY SUPPORT FOR THE WALL IS PROVIDED OR WALLS ARE DESIGNED AS LATERALLY UNSUPPORTED RETAINING WALLS.
7. SOFT BEARING SOIL AREAS FOUND DURING EXCAVATION SHALL BE EXCAVATED TO SUITABLE BEARING MATERIAL, AND MAY BE BACKFILLED WITH ENGINEERED FILL APPROVED BY A GEOTECHNICAL ENGINEER OR WITH 500 kPa (10 KSF) MIN. LEAN MIX CONCRETE FILL.
8. UNDERPINNING:
   - EXCAVATE AND FORM IN 1200 (4'–0") MAXIMUM LONG SECTIONS IN A CHECKERBOARD PATTERN AS INDICATED ON THE PLANS UNLESS NOTED
   - CHECKERBOARD EXCAVATE/POUR PATTERN TO BE POURED IN AT LEAST 3 SEPARATE STAGES
   - PROVIDE 25 (1") MIN – 50 (2") MAX DRYPACK GROUT BETWEEN EXISTING UNDERSIDE OF FOUNDATION AND NEW UNDERPINNING CONCRETE.
   - ALLOW UNDERPINNING & GROUT TO REACH 70% COMPRESSIVE STRENGTH (3 DAYS MIN.) PRIOR TO EXCAVATING ADJACENT UNDERPIN SECTIONS
   - UNDERSIDES OF ADJACENT UNDERPIN POURS OR EXISTING FOUNDATIONS TO NOT BE STEPPED MORE THAN 600 (2'–0").

CAST IN PLACE (CIP) CONCRETE

1. CONCRETE MATERIAL AND METHODS OF CONCRETE CONSTRUCTION — CAN/CSA–A23.1–LATEST
   CODE FOR THE DESIGN OF CONCRETE STRUCTURES FOR BUILDINGS — CAN3–A23.3–LATEST
2. THE CLEAR DISTANCE BETWEEN REINFORCING STEEL AND SURFACE OF CONCRETE SHALL BE:

SLABS (EXT.)	50mm (2")	TO TOP AND BOTTOM
WALLS	50mm (2")	TO EXT. FACE; 25 (1") TO INT. FACE
CONCRETE PIERS	50mm (2")	TO MAIN STEEL
FOOTINGS	75mm (3")	TO MAIN STEEL

3. REINFORCING STEEL TO BE GENERALLY DETAILED IN ACCORDANCE WITH THE REINFORCING STEEL INSTITUTE OF CANADA MANUAL OF STANDARD PRACTICE (LATEST EDITION).
4. CONCRETE PLACING, CURING AND TESTING TO CONFORM TO CAN3–A23.1 AND A23.2. FORMWORK AND TOLERANCES TO CONFORM TO ACI 347.
5. NO CUTTING OR DRILLING IN HARDENED CONCRETE IS PERMITTED WITHOUT WRITTEN APPROVAL.
6. GROUT UNDERSIDE OF STEEL BEARING PLATES WITH 25mm (1") MIN TO 50mm (2") MAX THICKNESS OF DRY–PACK NON–SHRINK GROUT TO MANUFACTURERS INSTRUCTIONS.
7. PLACE SLAB ON GRADE ON SOIL CAPABLE OF SUSTAINING 25 kPa (500 PSF) WITHOUT SETTLEMENT RELATIVE TO THE BUILDING FOUNDATION. AS A MINIMUM, PLACE SLAB ON 100mm (4") THICK CLEAR CRUSHED STONE OR GRANULAR 'A' COMPACTED TO 98% STANDARD PROCTOR MAXIMUM DRY DENSITY.
8. PROVIDE SAWCUT OR CONSTRUCTION CRACK CONTROL JOINTS IN FLOOR SLABS AT 9000mm (30') MAX. c/c. FILL JOINTS WITH ISOLATION JOINT MATERIAL (SEE NOTE BELOW)
9. MAINTAIN SLAB THICKNESSES AND REINFORCING STEEL AT ALL DEPRESSIONS.
10. ALL SPLICES SHALL BE CLASS 'B' U.N.O.
11. OBTAIN APPROVAL AND DIRECTION FROM THE ENGINEER FOR DRILLED MECHANICAL OR ADHESIVE ANCHOR BOLTS IN POURED CONCRETE.
12. ALL REINFORCING STEEL TO BE INSPECTED AND APPROVED WHERE REQUIRED BEFORE POURING CONCRETE. CONTRACTOR MUST CO–ORDINATE INSPECTION REQUIREMENTS WITH THE LOCAL BUILDING OFFICIALS.
13. ISOLATION JOINT MATERIAL SHALL BE 10mm MIN. THICK ASPHALT IMPREGNATED FIBREBOARD., SAW CUT JOINT SEALANT FILLER SHALL BE AN ELASTOMERIC MATERIAL SUCH AS SIKA DUOFLEX SL, OR APPROVED EQUAL.

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL SHALL BE DESIGNED TO COMPLY TO THE REQUIREMENTS OF C.S.A. SPECIFICATIONS S16.1 (LATEST EDITION), AND FOLLOW CISC CODE OF STANDARD PRACTISE FOR STRUCTURAL STEEL.
2. ALL STEEL TO BE SHOP PRIMED WITH AN APPROVED ANTI–CORROSIVE PRIMER (EXCEPT IN THE CONTACT AREAS OF CONNECTIONS) AND TOUCHED UP IN THE FIELD AS REQUIRED. EXTERIOR EXPOSED STEEL TO BE GALVANIZED, OR PRIMED AND PAINTED WITH SUITABLE ANTI–CORROSIVE ZINC–RICH OR EPOXY PAINT.
3. CO–ORDINATE WITH ALL SUB–TRADES WHOSE WORK AFFECTS THE STRUCTURAL STEEL. DO NOT CUT OPENINGS IN STRUCTURAL STEEL WITHOUT APPROVAL.
4. ALL CONNECTIONS TO BE DESIGNED BY THE FABRICATOR'S CONNECTION DESIGN ENGINEER UNLESS NOTED. ALL CONNECTIONS TO BE STANDARD FRAME CONNECTIONS DESIGNED FOR SHEAR (Vf) BASED ON MOMENT (Mr). [Vf = (4 x Mr)/SPAN]
5. BOLTED CONNECTIONS TO BE MADE USING HIGH STRENGTH BOLTS (A325 MIN).
6. COPIES OF THE ERECTION DRAWINGS TO BE SUBMITTED FOR REVIEW AND APPROVAL. ERECTION DRAWINGS MUST BE SEALED BY AN ENGINEER RESPONSIBLE FOR CONNECTION DESIGN. ALTERNATIVELY, AN ENGINEER SEALED LETTER REFERENCING THE DRAWINGS MAY BE SUBMITTED.
7. WELD BEAMS TO STEEL BEARING PLATES WITH 50mm (2') X 5mm ($\frac{3}{16}$") FILLET WELD AND BUILD MASONRY AND CONCRETE WALLS TIGHT TO BEAM WEBS.

MASONRY:

1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO C.S.A. STANDARDS A371 AND A370–LATEST EDITIONS.
2. OVER ALL OPENINGS OR RECESSES IN MASONRY WALLS, PROVIDE AND INSTALL LINTELS IN ACCORDANCE WITH THE LINTEL SCHEDULE OR OBC TABLES.
3. FILL MASONRY VOIDS SOLID WITH GROUT AT ALL DOWELS, REINFORCING AND ANCHOR BOLTS. LAP REINFORCING AT LEAST 50X BAR DIAMETER.
4. PROVIDE 200mm (8") MIN. LENGTH OF SOLID MASONRY AT BEARING OF STEEL, CONCRETE OR MASONRY LINTELS.
5. ALL MASONRY SHALL BE SET WITH FULLY FILLED JOINTS.
6. PROVIDE A 25mm (1") MIN. GROUT UNDER WALL AND BASE PLATES AND BEAR ON SOLID MASONRY 400mm (16") MIN. WIDE AND DEEP.
7. FILL BLOCK CELLS WITH GROUT IN 1500mm (5'–0") HIGH LIFTS. IF CLEANOUTS ARE PROVIDED, 2400mm (8'–0") HIGH LIFTS ARE PERMITTED.
8. REINFORCE LINTEL BLOCK COURSES WITH TWO 15M CONTINUOUS BARS AND FILL WITH GROUT.
9. MASONRY WORK SHALL NOT BE PERMITTED WHEN TEMPERATURE IS BELOW 5°C UNLESS APPROVED PROVISIONS ARE MADE FOR PROTECTING THE MATERIALS AND COMPLETED WORK.
10. PROVIDE GALVANIZED CONTINUOUS LADDER TYPE JOINT REINFORCING AT 400mm (16") c/c & USE "CORNER–LOK" AT ALL WALL INTERSECTIONS.

STEEL LINTEL (SL) SCHEDULE

UNLESS NOTED ON PLAN

CLEAR SPAN	STEEL LINTEL SIZE (100 MAX. BRICK/STONE)
UP TO 1200	L90x90x6 (L3.5"x3.5"x$\frac{1}{4}$")
1200 TO 1800	L90x90x8 (L3.5"x3.5"x$\frac{5}{16}$")
1800 TO 2400	L127x90x8 (L5"x3.5"x$\frac{5}{16}$")
2400 TO 3000	L152x90x10 (L6"x3.5"x$\frac{3}{8}$")
3000 TO 3600	L178x102x10 (L7"x4"x$\frac{3}{8}$")
3600 TO 4200	L178x102x12 (L7"x4"x$\frac{1}{2}$")

NOTES:
1. SEE OBC TABLES 9.20.5.2.B&C FOR OTHER SIZES & SPANS
2. MINIMUM BEARING FOR STEEL ANGLES SHALL BE 150mm (6") UNLESS NOTED.

TIMBER NOTES:

1. ALL WOOD MATERIALS, FABRICATION AND ERECTION TO BE IN ACCORDANCE WITH CAN/CSA–086.1 (LATEST EDITION). ALL TIMBER GRADING TO BE IN ACCORDANCE WITH NLGA.
2. PRE–MANUFACTURED SPECIALTY WOOD PRODUCTS SUCH AS 'PSL' PARALLEL STRAND LUMBER, 'LVL' LAMINATED VENEER LUMBER, 'LSL' LAMINATED STRAND LUMBER, OR MANUFACTURED WOOD I–JOISTS, MUST BE STORED, HANDLED AND ERECTED AS PER MANUFACTURERS SPECIFICATIONS.
3. FLAT JOIST AND PROFILED TRUSS FABRICATOR SHALL SUPPLY ERECTION DRAWINGS SHOWING LOCATION, LOADING, ALLOWABLE STRESSES, WIND UPLIFT FORCES, REQUIRED BEARING, TEMPORARY AND PERMANENT BRACING, AND CONNECTIONS. DRAWINGS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER RESPONSIBLE FOR THE DESIGN. ALL HANDLING AND ERECTION OF TRUSSES TO BE IN ACCORDANCE WITH TRUSS SUPPLIER'S REQUIREMENTS.
4. ALL TRUSSES MUST BE ANCHORED TO SUPPORTS WITH TIE DOWN METAL ANCHORS. HANGER CONNECTIONS TO BE DESIGNED BY THE TRUSS DESIGN ENGINEER AND SUPPLIED BY THE TRUSS FABRICATOR UNLESS NOTED. ERECTION DRAWINGS TO INDICATE TYPE AND LOCATIONS FOR ALL TRUSS CONNECTION HARDWARE.
5. PROVIDE DOUBLE JOISTS UNDER PARALLEL PARTITION WALLS.
6. MAXIMUM BRIDGING SPACING: STD WOOD JOISTS – 2000mm (6'–6")
   STUD WALLS – 1220mm (4'–0") TO MATCH SHEATHING JOINTS
7. NAIL ALL BUILT–UP & LVL/PSL/LSL BEAMS WITH 75 (3") NAILS AT 300 (12") c/c IN ROWS NOT EXCEEDING 75mm (3") c/c UNLESS NOTED. ALTERNATIVELY FOR LVL/PSL/LSL, USE MINIMUM TWO ROWS OF 12ø ($\frac{1}{2}$"ø) BOLTS AT 24" c/c, TOP AND BOTTOM ROWS LOCATED 50 (2") FROM TOP & BOTTOM OF BEAM.
8. WHERE BEAMS FRAME FLUSH INTO SIDE OF BUILT–UP BEAMS, PROVIDE ADDITIONAL NAIL ROWS TO ACHIEVE FOUR ROWS SPACED AT 75 (3") AT THE BEAM HANGER LOCATION, OR ADDITIONAL BOLT ROWS SO THERE IS A ROW OF 12ø ($\frac{1}{2}$"ø) BOLTS WITHIN 50 (2") BESIDE EACH SIDE OF THE HANGER.
9. GLUE AND NAIL BUILT–UP POSTS AT 150mm (6") c/c IN ROWS NOT EXCEEDING 75mm (3") c/c UNLESS NOTED.
10. SEPARATE ALL WOOD FROM CONCRETE WITH WATERPROOF BARRIER OR USE PRESSURE–TREATED WOOD.
11. METAL CONNECTORS:
    - USE STEEL HANGERS AT ALL FLUSH JOIST, RAFTER, TRUSS AND BEAM FRAMING
    - INSTALL WITH FASTENERS AS PER MANUFACTURER'S SPECIFICATIONS
    - PROVIDE GALVANIZED CONNECTORS WHERE EXPOSED TO WEATHER. PROVIDE SUITABLE CONNECTORS APPROVED FOR USE IN CONTACT WITH PRESSURE TREATED OR OTHER TREATED LUMBER OR ENG'D WOOD PRODUCTS.
    - FASTEN BEAMS TO TOP OF POSTS WITH POST CAPS AND ANCHOR BOTTOMS OF POSTS TO FOUNDATION WITH STEEL POST/COLUMN BASES WITH ANCHORS.
12. ALL ROOF BEAMS, RAFTERS, TRUSSES AND GIRDERS MUST BE ANCHORED TO THE SUPPORTING STRUCTURE TO RESIST WIND UPLIFT USING SUITABLE METAL TIE DOWN ANCHORS BY SIMPSON OR USP, OR APPROVED EQUAL.
13. ALL BEAMS AND LINTELS TO BEAR 75mm (3") MIN. EACH END UNLESS SPECIFIED. LVL/PSL BEAMS TO FULLY BEAR ON WALLS, POSTS AND POST CAP PLATES SPECIFIED ON THE DRAWINGS UNLESS NOTED.
14. DRYWALL AND/OR WOOD SHEATHING MUST BE NAILED EACH SIDE OF WALL TO AT LEAST ONE PLY OF ALL BUILT–UP WOOD POSTS WITHIN STUD WALLS.
15. PROVIDE JOIST BLOCKING AT 1200mm (4'–0") MAX. C/C BETWEEN RIMBOARD AND ADJACENT FLOOR JOIST WHERE FOUNDATION WALLS ARE PARALLEL TO FLOOR JOIST SPAN.
16. PROVIDE BLOCKING AT 1800mm (6'–0") MAX. C/C BETWEEN GABLE END TRUSS BOTTOM CHORD OR ROOF RAFTER AND 1ST ADJACENT TRUSS/RAFTER WHERE TOP OF EXTERIOR STUD WALLS ARE PARALLEL TO ROOF FRAMING SPAN.
17. PROVIDE BLOCKING FOR CONVENTIONAL WOOD JOISTS AS PER OBC 23.9.4.4 & PROVIDE I–JOIST BLOCKING AT MIDSPAN & 2400mm (8'–0") MAX. C/C ALONG SPAN OF PRE–ENGINEERED WOOD I–JOISTS.
18. WHERE WOOD BEAMS ARE WIDER THAN SUPPORTING WOOD POSTS, PROVIDE STEEL SIMPSON POST OR COLUMN CAPS (OR EQUAL) TO MATCH BEAM WIDTH.

Revision	No.	By	DD/MM/YY

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS.
ANY DISCREPPENCIES ARE TO BE REPORTED TO THE DESIGNER PRIOR TO COMMENCEMENT OF WORK. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR OR SUBCONTRACTOR PROCEED IN UNCERTAINTY.
REVIEWED UNDER THE 2012 O.B.C. AS AMENDED

LICENSED PROFESSIONAL ENGINEER
G.D. Rosenburg
100012893
GDR#20-59
10/4/2020
PROVINCE OF ONTARIO
FOR STRUCTURAL ONLY

OWNER:
Sangha Residence
8951 Mississauga Rd.
Brampton, ON
416–525–8411

PROJECT: NEW SINGLE FAMILY DWELLING

SHEET TITLE: GENERAL NOTES

SCALE:	DATE:
1/4"=1'–0"	SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A12

Table 9.23.3.4.
Nailing for Framing
Forming Part of Sentence 9.23.3.4.(1)

Column 1 Construction Detail	Column 2 Minimum Length of Nails, mm	Column 3 Minimum Number or Maximum Spacing of Nails
Floor joist to plate – toe nail	82,0	2,0
Wood or metal strapping to underside of floor joists	57,0	2,0
Cross bridging to joists	57,0	2 at each end
Double header or trimmer joists	76,0	300 mm (o.c.)
Floor joist to stud (balloon construction)	76,0	2,0
Ledger strip to wood beam	82,0	2 per joist
Joist to joist splice (See also Table 9,23,13,&,)	76,0	2 at each end
Header joist end nailed to joists along perimeter	101,0	3,0
Tail joist to adjacent header joist (end nailed) around openings	82,0 101,0	5,0 3,0
Each header joist to adjacent trimmer joist (end nailed) around openings	82,0 101,0	5,0 3,0
Stud to wall plate (each end) toe nail or end nail	62,0 82,0	4,0 2,0
Doubled studs at openings, or studs at walls or wall intersections and corners	76,0	750 mm (o.c.)
Doubled top wall plates	76,0	600 mm (o.c.)
Bottom wall plate or sole plate to joists or blocking (exterior walls)(1)	82,0	400 mm (o.c.)
Interior walls to framing or subflooring	82,0	600 mm (o.c.)
Horizontal member over openings in non-loadbearing walls – each end	82,0	2,0
Lintels to studs	82,0	2 at each end
Ceiling joist to plate – toe nail each end	82,0	2,0
Roof rafter, roof truss or roof joist to plate – toe nail	82,0	3,0
Rafter plate to each ceiling joist	101,0	2,0
Rafter to joist (with ridge supported)	76,0	3,0
Rafter to joist (with ridge unsupported)	76,0	See Table 9,23,13,8,
Gusset plate to each rafter at peak	57,0	4,0
Rafter to ridge board – toe nail – end nail	82,0	3,0
Collar tie to rafter – each end	76,0	3,0
Collar tie lateral support to each collar tie	57,0	2,0
Jack rafter to hip or valley rafter	82,0	2,0
Roof strut to rafter	76,0	3,0
Roof strut to loadbearing wall – toe nail	82,0	2,0
38 mm × 140 mm or less plank decking to support	82,0	2,0
Plank decking wider than 38 mm × 140 mm to support	82,0	3,0
38 mm edge laid plank decking to support (toe nail)	76,0	1,0
38 mm edge laid plank to each other	76,0	450 mm (o.c.)

GENERAL NOTES

1. WHERE THE FOUNDATIONS OF A BUILDING ARE TO BE CONSTRUCTED BELOW THE LEVEL OF THE FOOTINGS OF AN ADJACENT BUILDING AND WITHIN THE ANGLE OF REPOSE OF THE SOIL, OR THE UNDERPINNING EXCEEDS 1200mm OF LATERALLY UNSUPPORTED HEIGHT OR THE SOIL IS CLAY OR SILT, THE UNDERPINNING & RELATED CONSTRUCTION SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER.

2. EXCAVATION SHALL BE UNDERTAKEN IN A MANNER SO AS TO PREVENT MOVEMENT WHICH WOULD CAUSE DAMAGE TO ADJACENT PROPERTY, STRUCTURES, UTILITIES, ROADS & SIDEWALKS. CONTACT YOUR LOCAL UTILITIES PRIOR TO COMMENCING EXCAVATION.

3. MINIMUM CONCRETE STRENGTH FOR UNDERPINNING SHALL BE 15MPa AT 28 DAYS. ALL EXTERIOR CONCRETE SHALL BE 32MPa W/ 5%–8% AIR ENTRAINMENT.

4. CONCRETE SHALL BE CURED MINIMUM 48 HOURS BEFORE GROUTING AND PROCEEDING TO THE NEXT STAGE.

5. SHORE & BRACE WHERE NECESSARY TO ENSURE THE SAFETY & STABILITY OF THE EXISTING STRUCTURE DURING UNDERPINNING.

6. WEEPING TILE IS TO DRAIN TO THE STORM SEWER, DITCH, DRYWELL OR INSTALL COVERED SUMP PIT WITH AN AUTOMATIC PUMP.

7. FOOTINGS

20"X6" POURED CONC. FOOTING ALL FOOTINGS SHALL REST ON NATURAL UNDISTURBED SOIL OR COMPACTED GRANULAR FILL

8. CONCRETE

MINIMUM COMPRESSIVE STRENGTH OF 32MPa @ 28 DAYS W/ 5% TO 8% AIR ENTRAINMENT

9. EXTERIOR STAIRS

200mm RISE MAXIMUM 125mm MINIMUM
210mm RUN MINIMUM 355mm MAXIMUM
235mm TREAD MINIMUM 355mm MAXIMUM

10. INSULATION

– MIN. RSI 3.87 (R22) INSULATION SPRAYFOAM BARRIER ON THE INSIDE FACE OF THE EXPOSED FOUNDATION WALL
– MIN. RSI 2.11 (R12) INSULATION FOR 600mm BELOW GRADE AT WALKOUT LANDING

11. RETAINING WALL

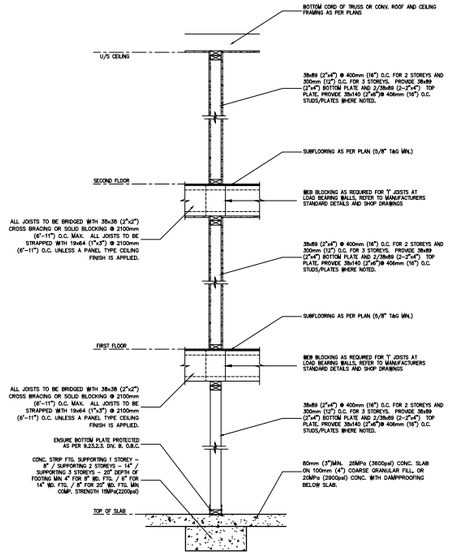
8" MASONRY OR POURED CONCRETE W/ NO REINFORCING REQUIRED FOR WALL HEIGHTS TO A MAX. OF 1200mm PROVIDE 25M VERTICAL REINFORCEMENT @600mm O.C. & A BOND BEAM CONTAINING AT LEAST (1) 15M REINFORCEMENT FOR BACKFILL HEIGHTS TO A MAX. OF 2400mm

12. PRE–ENGINEERED GUARDS

1070mm HIGH WHERE DISTANCE FROM GRADE TO BOTTOM OF WALKOUT EXCEEDS 1800mm; 900mm FOR LESSER HEIGHTS. MAXIMUM 100mm BETWEEN VERTICAL PICKETS

13. LINTELS (FOR MAX. 1200mm OPENINGS)

1. SOLID MASONRY: 2– 90mmx90mmx6mm ANGLES
2. BRICK VENEER: 1– 90mmx90mmx6mm L + 2–38x184
3. WOOD FRAME/SIDING: 2–38x184



TYP. LOADBEARING WALL SECTION

MATERIALS

1 PROVIDE ONLY NEW STRUCTURAL MATERIALS IN ACCORDANCE WITH THE REFERENCE STANDARDS AND THE FOLLOWING, UNLESS OTHERWISE NOTED.

1.1 CONCRETE:

1.1.1 EXPOSED TO WEATHER: F'c = 35 MPa AT 28 DAYS, SLUMP 80mm (3"), EXPOSURE CLASS C–1, W/C RATIO 0.40, AIR CONTENT 5%–8%, AND CONCRTE TO HAVE A MINIMUM CEMENTING MATERIAL CONTENT OF 320 kg/m3.

1.2 REINFORCING STEEL: GRADE 400.

1.3 BLOCK: COMPRESSIVE STRENGTH = 12.5 MPa (MIN.) ON NET AREA.

1.4 MORTAR: TYPE S UNLESS NOTED.

1.5 MASONRY GROUT: CONFORM TO CSA A179, 10 MPa MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS, 10" SLUMP, MAXIMUM AGGREGATE SIZE 3/8".

ALL REFERNCES TO DIV. B. O.B.C. 2012 UNLESS OTHERWISE NOTED
THE FOLLOWING IS A LIST OF APPLICABLE REGULATIONS FROM THE O.B.C. 2012

ROOFING:
1) SEE 9.26.4.5. FOR Intersection of Shingle Roofs and Walls Other Than Masonry
2) SEE 9.26.4.3. FOR Valley Flashing CONSTRUCTION
3) SEE 9.26.2.2. FOR Nails and 9.26.2.3. FOR Staples
4) ASPHALT SHINGLES TO COMPLY WITH CAN/CSA–A123.5, "Asphalt Shingles Made from Glass Felt and Saturated with Mineral Granules"
SEE Article 9.26.2.1.
5) Interior wood studs in contact with concrete located below grade are required to comply with 2012 Building Code Div. B, Article 9.23.2.3. Protection from Dampness SEE BEARING STUD DETAIL.
6) FACTORY BUILT FIRE PLACES TO CONFORM TO "CAN/ULC–S610–M, "Factory–Built Fireplaces".
SEE Article 9.22.8.1.
7) CAULKING:
9.27.4.1. Required Caulking
(1) Caulking shall be provided where required to prevent the entry of water into the structure.
(2) Caulking shall be provided between masonry, siding or stucco and the adjacent door and window frames or trim, including sills unless such locations are completely protected from the entry of rain.
(3) Caulking shall be provided at vertical joints between different cladding materials unless the joint is suitably lapped or flashed to prevent the entry of rain.
(2) Caulking shall conform to,
(a)CGSB 19–GP–5M, "Sealing Compound, One Component, Acrylic Base, Solvent Curing",
(b)CAN/CGSB–19.13–M, "Sealing Compound, One Component, Elastomeric, Chemical Curing",
(c)CGSB 19–GP–14M, "Sealing Compound, One Component, Butyl–Polyisobutylene Polymer
Base ,Solvent Curing", or
(d)CAN/CGSB–19.24–M, "Multicomponent, Chemical Curing Sealing Compound".

8) ALL window sills are TO BE provided with an outward slope with a drip loacted to the underside 1" from the wall surface, see 2012 Building Code Div. B, Article 9.20.13.12.
9) DOWN SPOUTS ARE TO BE PROVIDED AT ALL CORNERS AND VALLEYS OF ROOF. DOWN SPOUTS ARE NOT PROVIED ON ELEVATION FOR CLARITY, see 2012 Building Code Div. B, Article 9.26.18.2.
Where downspouts are provided and are not connected to a sewer, extensions shall be provided to carry rainwater away from the building in a manner that will prevent soil erosion.

10) SEE general note 5 ON drawing A11 Drainage layer to be installed as outlined in Article 9.14.2.1. AND foundation wall are to be waterproofed as outlined in Subsection 9.13.3.
11) SEE Subsection 9.10.22. FOR clearances for kitchen ranges,
12) SEE Article 9.7.6.1. and Subsection 9.6.8. Resistance to Forced Entry for windows and doors WITH IN 2000mm ABOVE GRADE
13) SEE 2012 Building Code Div. B, Article 9.7.1.3. FOR bedroom window requirements. ALL BEDROOM WINDOWS ARE TO BE DESIGNED AND INSTALLED TO THESE REQUIREMENTS.

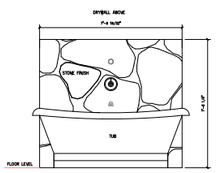
EXECUTION

1. FOUNDATIONS

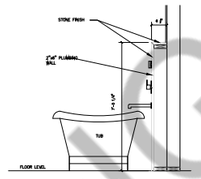
1.1. FOUND FOOTINGS ON SOIL CAPABLE OF SUSTAINING 200 kN/m2 (4000 psf).

1.2. FOUND ALL FOOTINGS WHICH WILL BE EXPOSED TO FROST ACTION IN THE COMPLETED BUILDING A MINIMUM OF 1200 mm (4'–0") BELOW FINISHED GRADE.

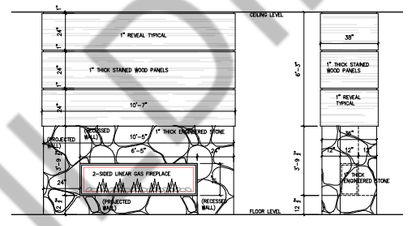
1.3. DO NOT EXCEED A RISE OF 7 IN A RUN OF 10 IN THE LINE OF SLOPE BETWEEN ADJACENT FOOTING EXCAVATIONS OR ALONG STEPPED FOOTINGS. FOR STEPPED FOOTINGS, USE STEPS NOT EXCEEDING 600 mm (2'–0") IN HEIGHT AND 1200 mm (4'–0") (MIN.) IN LENGTH.



TUB ELEVATION



TUB PROFILE

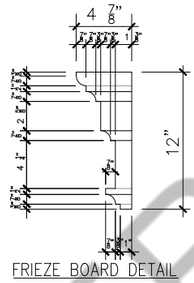


ELEVATION VIEW–1 PROFILE

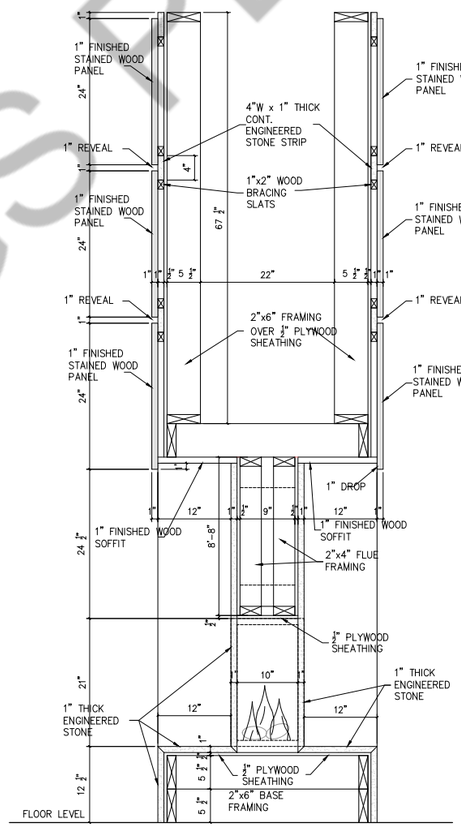
1.4. *SOIL BEARING CAPACITY SPECIFIED MUST BE VERIFIED BY THE SOIL ENGINEER PRIOR TO THE PLACING OF FOOTINGS AND ANY NON–CONFORMANCE WITH THE SPECIFIED MINIMUM CAPACITIES MUST BE IMMEDIATELY REPORTED TO THE STRUCTURAL ENGINEERS.*

2. *CONCRETE*

2.1. *THE CONTRACTOR SHALL ENSURE THAT REINFORCING STEEL IS ADEQUATELY BRACED AGAINST MOVEMENT DURING CONCRETE PLACING.*



FRIEZE BOARD DETAIL



FIREPLACE SECTION

ALL REFERNCES TO DIV. B. O.B.C. 2012 UNLESS OTHERWISE NOTED
THE FOLLOWING IS A LIST OF APPLICABLE REGULATIONS FROM THE O.B.C. 2012

ROOFING:
1) SEE 9.26.4.5. FOR Intersection of Shingle Roofs and Walls Other Than Masonry
2) SEE 9.26.4.3. FOR Valley Flashing CONSTRUCTION
3) SEE 9.26.2.2. FOR Staples
4) ASPHALT SHINGLES TO COMPLY WITH CAN/CSA–A123.5, "Asphalt Shingles Made from Glass Felt and Saturated with Mineral Granules"
SEE Article 9.26.2.1.
5) Interior wood studs in contact with concrete located below grade are required to comply with 2012 Building Code Div. B, Article 9.23.2.3. Protection from Dampness SEE BEARING STUD DETAIL.
6) FACTORY BUILT FIRE PLACES TO CONFORM TO " CAN/ULC–S610–M, "Factory–Built Fireplaces".
SEE Article 9.22.8.1.
CAULKING:
9.27.4.1. Required Caulking
(1) Caulking shall be provided where required to prevent the entry of water into the structure.
(2) Caulking shall be provided between masonry, siding or stucco and the adjacent door and window frames or trim, including sills unless such locations are completely protected from the entry of rain.
(3) Caulking shall be provided at vertical joints between different cladding materials unless the joint is suitably lapped or flashed to prevent the entry of rain.
(2) Caulking shall conform to,
(a) CGSB 19–GP–5M, "Sealing Compound, One Component, Acrylic Base, Solvent Curing",
(b) CAN/CGSB–19.13–M, "Sealing Compound, One Component, Elastomeric, Chemical Curing",
(c) CGSB 19–GP–14M, "Sealing Compound, One Component, Butyl–Polyisobutylene Polymer
Base ,Solvent Curing", or
(d) CAN/CGSB–19.24–M, "Multicomponent, Chemical Curing Sealing Compound".

8) ALL window sills are TO BE provided with an outward slope with a drip loacted to the underside 1" from the wall surface, see 2012 Building Code Div. B, Article 9.20.13.12.
9) DOWN SPOUTS ARE TO BE PROVIDED AT ALL CORNERS AND VALLEYS OF ROOF. DOWN SPOUTS ARE NOT PROVIED ON ELEVATION FOR CLARITY, see 2006 Building Code Div. B, Article 9.26.18.2.
Where downspouts are provided and are not connected to a sewer, extensions shall be provided to carry rainwater away from the building in a manner that will prevent soil erosion.

10) SEE general note 5 ON drawing A11 Drainage layer to be installed as outlined in Article 9.14.2.1. AND foundation wall are to be waterproofed as outlined in Subsection 9.13.3.
11) SEE Subsection 9.10.22. FOR clearances for kitchen ranges,
12) SEE Article 9.7.6.1. and Subsection 9.6.8. Resistance to Forced Entry for windows and doors WITH IN 2000mm ABOVE GRADE
13) SEE 2006 Building Code Div. B, Article 9.7.1.3. FOR bedroom window requirements. ALL BEDROOM WINDOWS ARE TO BE DESIGNED AND INSTALLED TO THESE REQUIREMENTS.

ALL REFERNCES TO DIV. B. O.B.C. 2012 UNLESS OTHERWISE NOTED
THE FOLLOWING IS A LIST OF APPLICABLE REGULATIONS FROM THE O.B.C. 2012

1) ALL FLOOR SURFACES ARE Required TO HAVE Finished Flooring. SEE 9.30.1.1.(1)
2) 9.30.1.2. Water Resistance
Finished flooring in bathrooms, kitchens, public entrance halls, laundry and general storage areas shall consist of resilient flooring, felted–synthetic–fibre floor coverings, concrete, terrazzo, ceramic tile, mastic or other types of flooring providing similar degrees of water resistance

3) SEE 9.30.6. FOR Ceramic Tile AND ITS INSTALLATION.
4) SEE Subsection 9.29.10 FOR Wall Tile Finish INSTALLATION
5) SEE Subsection 9.29.5. FOR Gypsum Board Finish (Taped Joints) INSTALLATION
6) SEE Subsection 9.29.2. FOR Waterproof Wall Finish STANDARDS
7) SEE Subsection 9.34.2. FOR Lighting Outlets AND THEIR LOCATION
8) CCMC report number for stucco system 12969–R " InsulROCK and PUCC Exterior Insulation
Finish Systems"
9) SEE Sentence 9.27.1.1.(2) AND (3) FOR EXTERIOR cladding.
10) SEE Subsection 9.26.7. FOR INSTALLATION OF Asphalt Shingles on Slopes of 1 in 3 or Greater
11)SEE 2012 Building Code Div. B, Tables 9.23.3.4. Nailing for Framing AND 9.33.3.5. Fasteners for Sheathing and Subflooring
12)SEE 2012 Building Code Div. B, Article 9.20.3.1. and Table 9.20.3.2.A. FOR MORTAR TYPE AND STANDARD – CSA A179, "Mortar and Grout for Unit Masonry"

All building code references are to Div. B, of the 2012 Ontario Building Code.

All windows to be provided with a drip edge that complies with 9.20.13.12. Drips Beneath Window Sills

Modified Bituminous Material to comply to Section 9.26. and CGSB 37–GP–56M, "Membrane, Modified, Bituminous, Prefabricated, and Reinforced for Roofing"

Asphalt Shingles to comply to 9.26.7.1. and CAN/CSA–A123.5, "Asphalt Shingles Made from Glass Felt and Saturated with Mineral Granules".

9.26.18.2. Downspouts
(1) Where downspouts are provided and are not connected to a sewer, extensions shall be provided to carry rainwater away from the building in a manner that will prevent soil erosion.

9.27.3.2. Sheathing Membrane Material Standard
(1) Sheathing membranes shall conform to the performance requirements of CAN/CGSB–51.32–M, "Sheathing, Membrane, Breather Type".

9.27.3.3. Required Sheathing Membrane and Installation
(1) Except as provided in Articles 9.27.3.4. to 9.27.3.6., at least one layer of sheathing membrane shall be applied beneath siding, stucco or masonry veneer.
(2) Sheathing membrane required in Sentence (1) shall be applied so that joints are lapped not less than 100 mm.
(3) Where sheathing membrane required in Sentence (1) is applied horizontally, the upper sheets shall overlap the lower sheets.

9.27.4. Caulking
9.27.4.1. Required Caulking
(1) Caulking shall be provided where required to prevent the entry of water into the structure.
(2) Caulking shall be provided between masonry, siding or stucco and the adjacent door and window frames or trim, including sills unless such locations are completely protected from the entry of rain.
(3) Caulking shall be provided at vertical joints between different cladding materials unless the joint is suitably lapped or flashed to prevent the entry of rain.
9.27.4.2. Materials
(1) Caulking shall be,
(a)a non–hardening type suitable for exterior use,
(b)selected for its ability to resist the effects of weathering, and
(c)compatible with and adhere to the substrate to which it is applied.
(2) Caulking shall conform to,
(a)CGSB 19–GP–5M, "Sealing Compound, One Component, Acrylic Base, Solvent Curing",
(b)CAN/CGSB–19.13–M, "Sealing Compound, One Component, Elastomeric, Chemical Curing",
(c)CGSB 19–GP–14M, "Sealing Compound, One Component, Butyl–Polyisobutylene Polymer Base, Solvent Curing", or
(d)CAN/CGSB–19.24–M, "Multicomponent, Chemical Curing Sealing Compound".

9.29.5. Gypsum Board Finish (Taped Joints)
9.29.5.1. Application
(1) The requirements for application of gypsum board in this Subsection apply to the single layer application of gypsum board to wood furring or framing using nails or screws.
(2) Gypsum board applications not described in this Subsection shall conform to CSA A82.31–M, "Gypsum Board Application".
9.29.5.2. Materials
(1) Gypsum products shall conform to,
(a)CAN/CSA–A82.27–M, "Gypsum Board",
(b)ASTM C36 / C36M, "Gypsum Wallboard",
(j)ASTM C1395 / C1395M, "Gypsum Ceiling Board", or
(k)ASTM C1396 / C1396M, "Gypsum Board".

See 9.29.5. for further instalation requirements.

9.23.14.2. Material Standards for OSB – CSA O437.0, "OSB and Waferboard".

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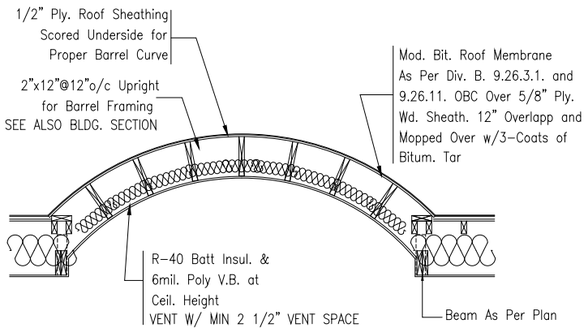
LICENSED PROFESSIONAL ENGINEER
G.D. Rosenburg
100012893
GDR#20–59
10/4/2020
PROVINCE OF ONTARIO
FOR STRUCTURAL ONLY

OWNER:
Sangha Residence
8951 Mississauga Rd.
Brampton, ON
416–525–8411

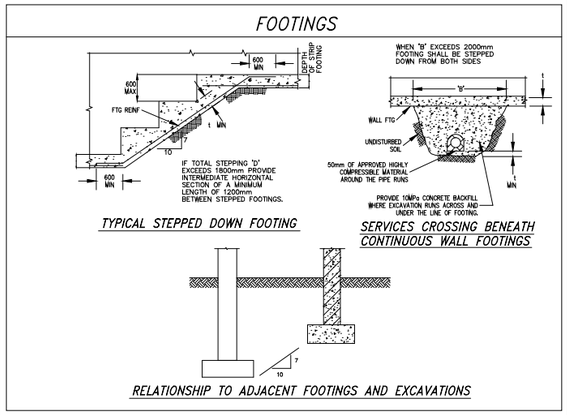
PROJECT:
NEW SINGLE FAMILY DWELLING

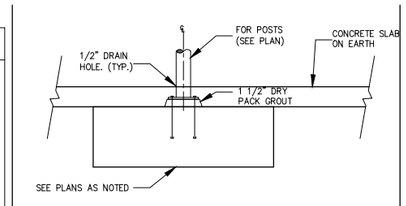
SHEET TITLE:
DETAILS

SCALE: 1/4"=1'–0"
DATE: SEP./2020
DRAWN BY: PV
CHECKED BY: PV
PROJECT NO:
SHEET NO: **A13**

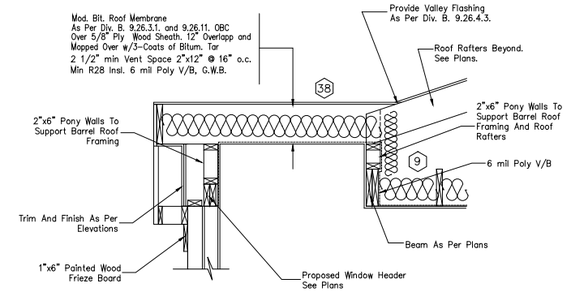


BARREL FRAMING SECTION–A

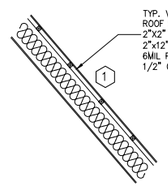




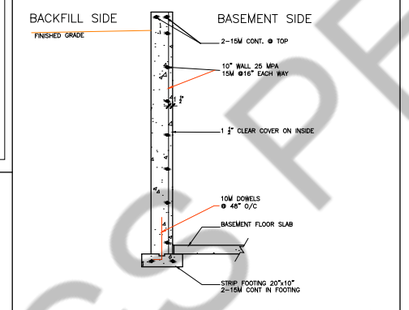
CONC. PAD DETAIL



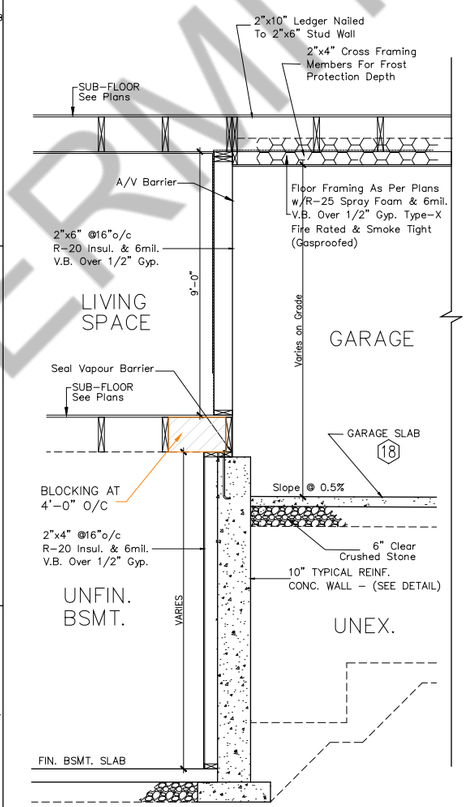
BARREL FRAMING SECTION–B

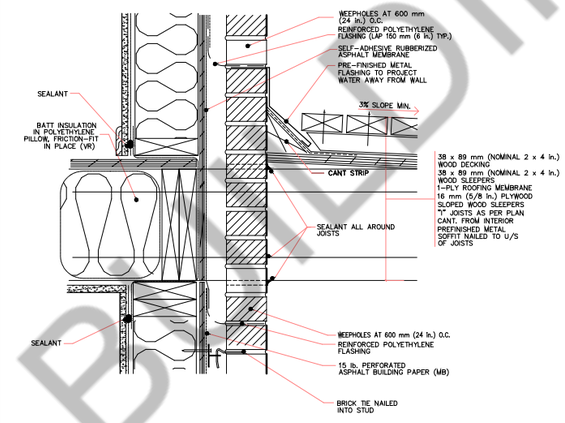


TYP. CATHEDRAL ROOF CONST.

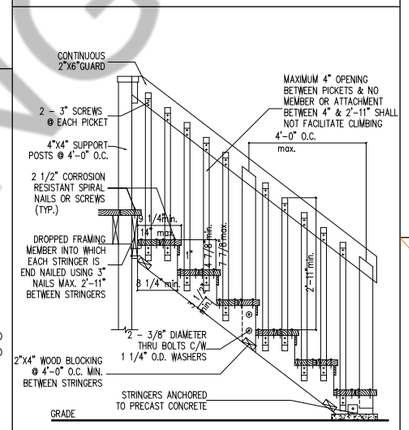


REINF. BASEMENT FDN. (TYP. FW1)

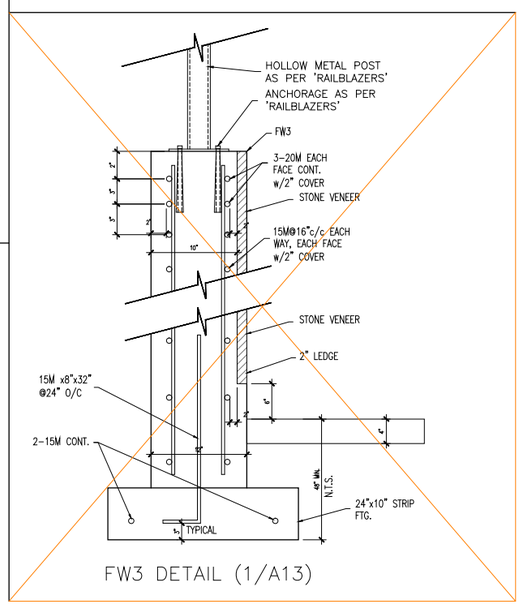




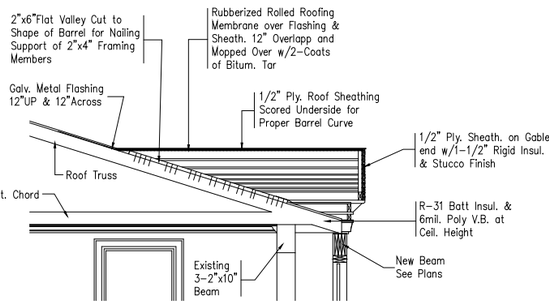
COLUMN–SUPPORTED BALCONY WITH VENEER



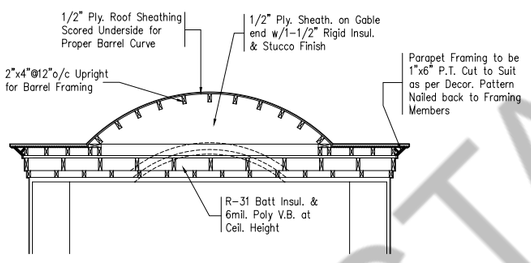
TYP. STAIR SECTION



FW3 DETAIL (1/A13)



Barrel Framing to Trusses N.T.S.



Barrel Framing N.T.S.

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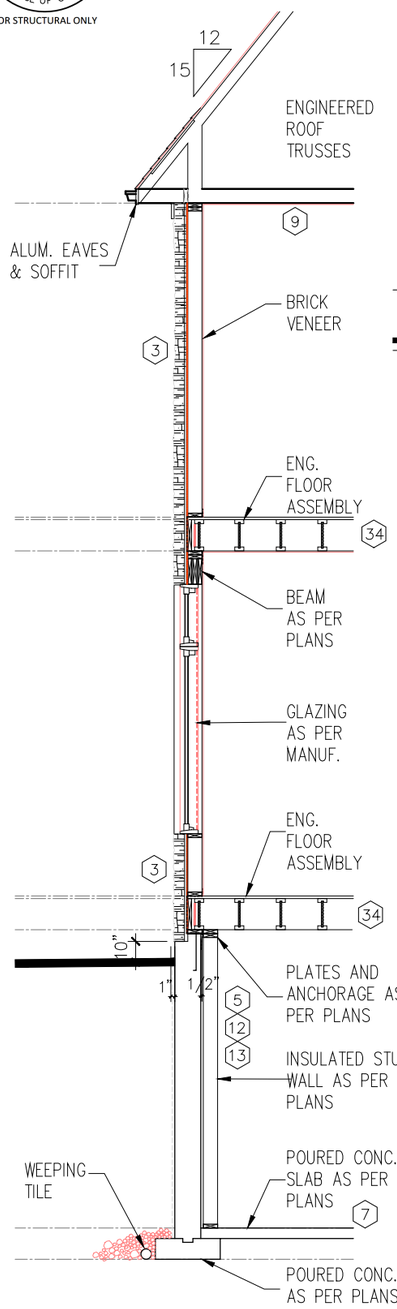
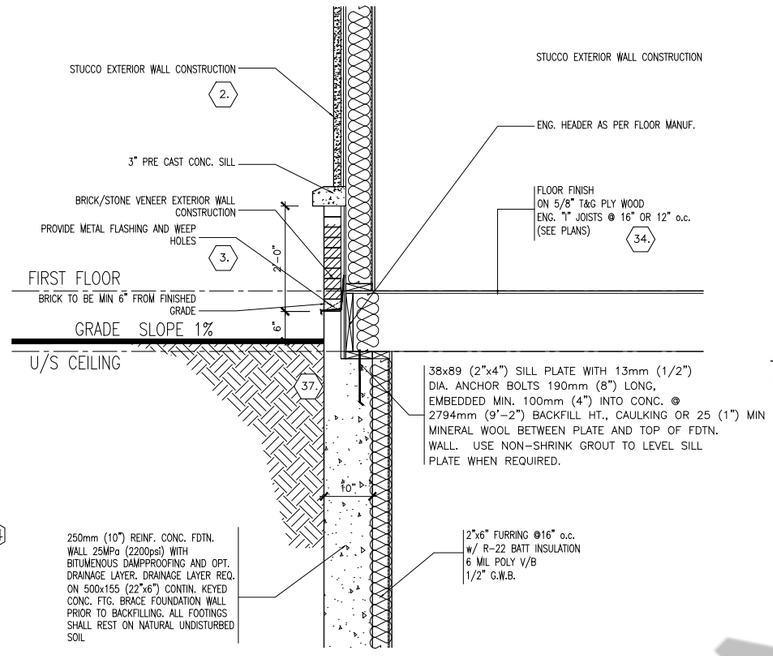
DETAILS

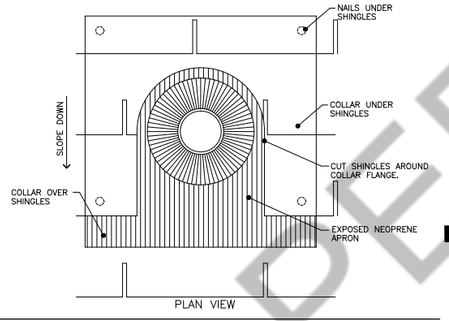
SCALE: 1/4"=1'–0"	DATE: SEP./2020
DRAWN BY: PV	CHECKED BY: PV
PROJECT NO:	SHEET NO: A14



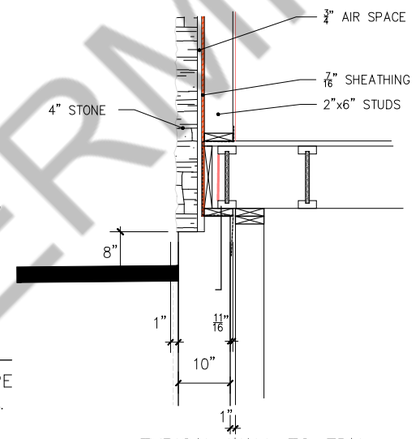
TYPICAL 2-STOREY WALL SECTION – D1



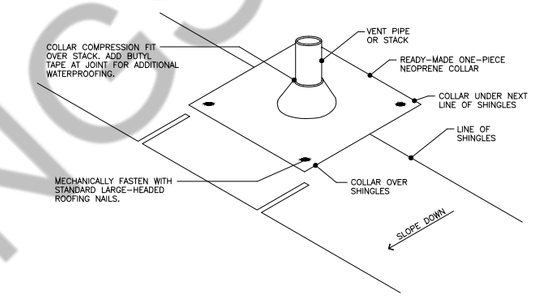
TYP. WALL SECTION N.T.S.
SEE CROSS SECTION-2 ON A16 FOR REINFORCING DETAILS
BACKFILL HEIGHT AS NOTED ON ELEVATIONS



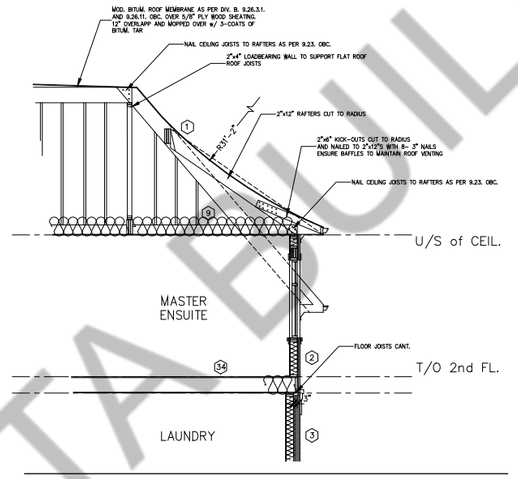
ROOF PENETRATIONS – PREFABRICATED VENT/PIPE FLASHING – SHINGLE ROOF N.T.S.



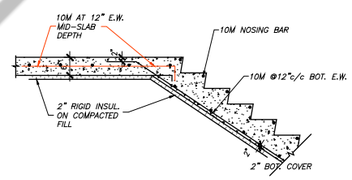
TYPICAL WALL TO FDN. CONNECTION – D2



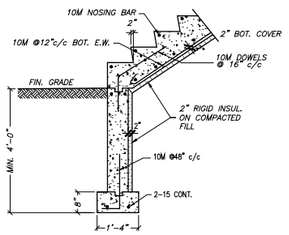
TYP. PLUMBING VENT N.T.S.



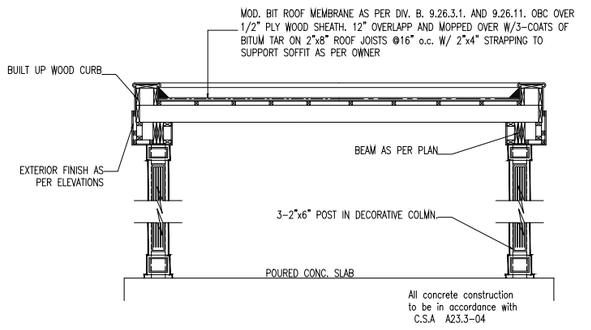
TYP. SHED DORMER DETAIL N.T.S.



TYPICAL CONC. STAIR @ TOP



TYPICAL CONC. STAIR @ BOTTOM



FLAT ROOF DETAIL N.T.S.

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1/4"=1'-0"	SEP./2020
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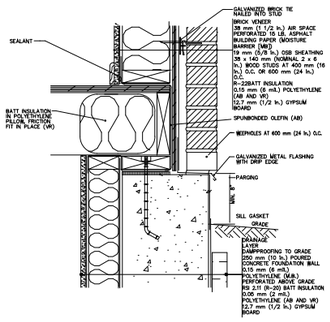
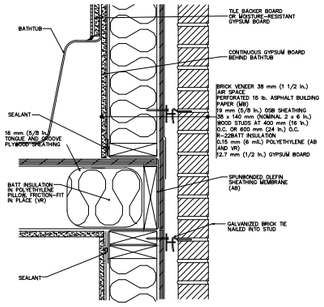
PROJECT NO:	SHEET NO: A15

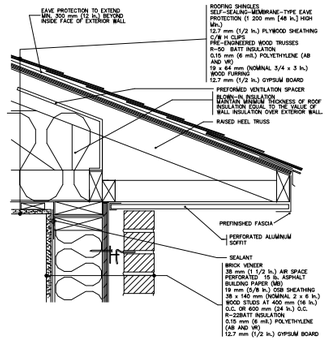
WOOD FRAME ENVELOPE



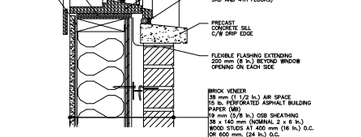
VENEER WALL AT FOUNDATION



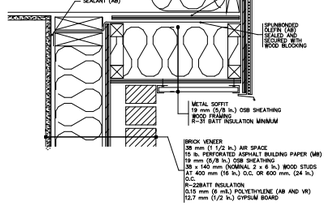
VENEER WALL AT HEADER



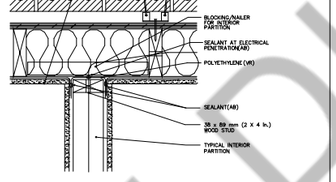
VENEER WALL AT ROOF



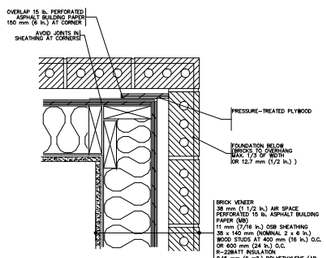
WINDOW OPENING



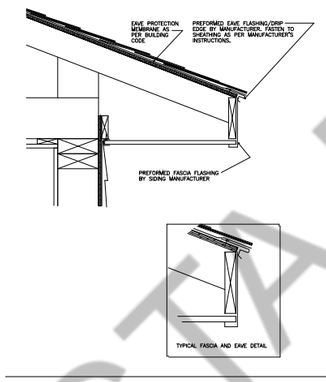
CANTILEVERED FLOOR



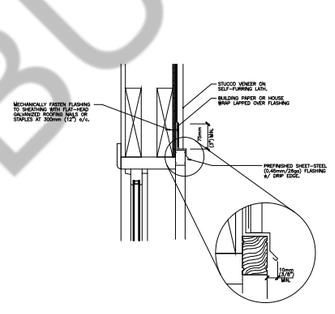
INTERIOR PARTITION, HORIZONTAL SECTION



CORNER, HORIZONTAL SECTION

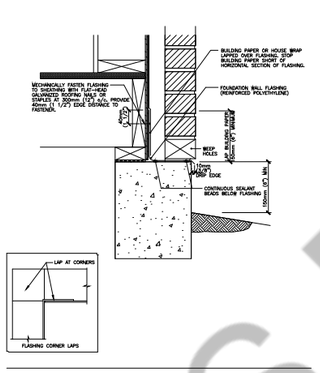


SLOPED SHINGLE ROOF EAVE

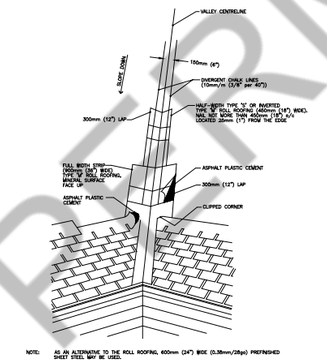


WINDOW/DOOR HEAD – STUCCO VENEER

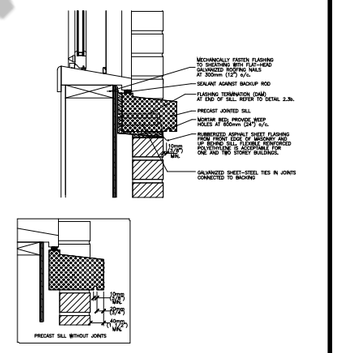
FLASHING DETAILS–TYPICAL



FOUNDATION WALL – BRICK VENEER



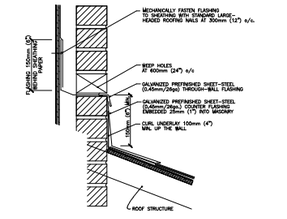
OPEN VALLEY – ASPHALT SHINGLE ROOF



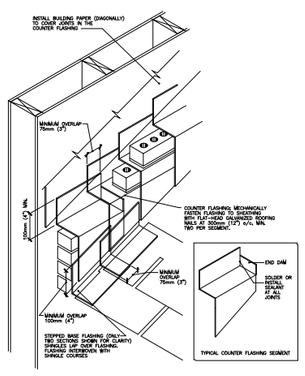
PRECAST WINDOW SILL – WOOD–FRAME WALL

ROOF PENETRATIONS – UPPER SIDE OF CHIMNEY

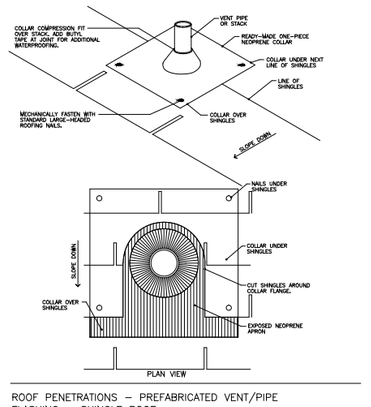
ROOF PENETRATIONS – CHIMNEY



SLOPED ROOF/WALL INTERSECTION – BRICK VENEER



SLOPED ROOF/WALL INTERSECTION – WOOD–FRAME



ROOF PENETRATIONS – PREFABRICATED VENT/PIPE FLASHING – SHINGLE ROOF

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