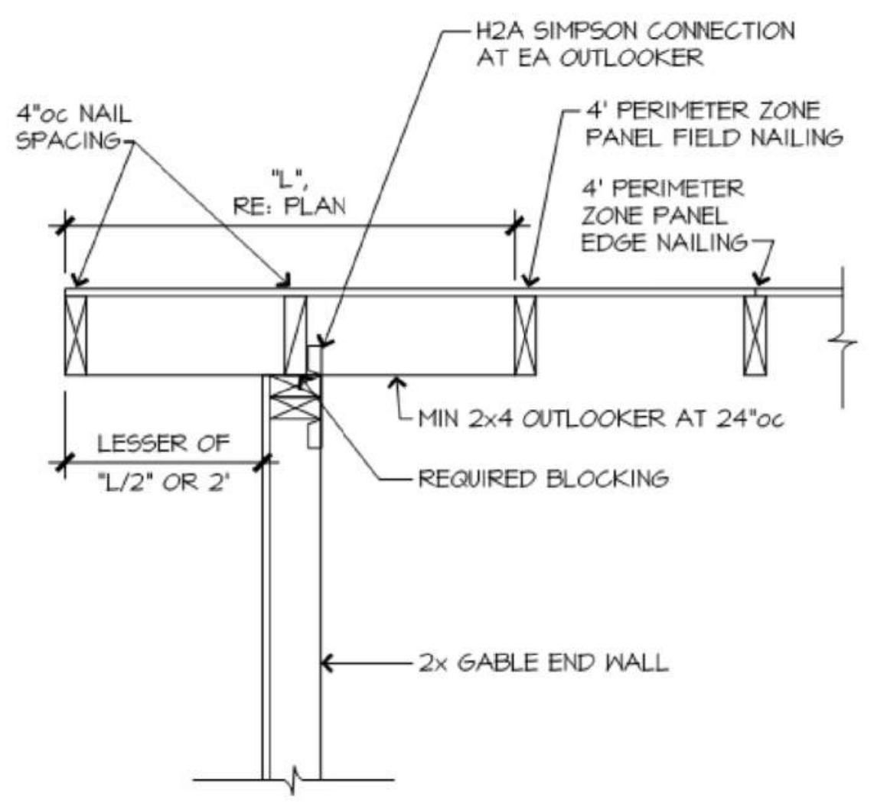
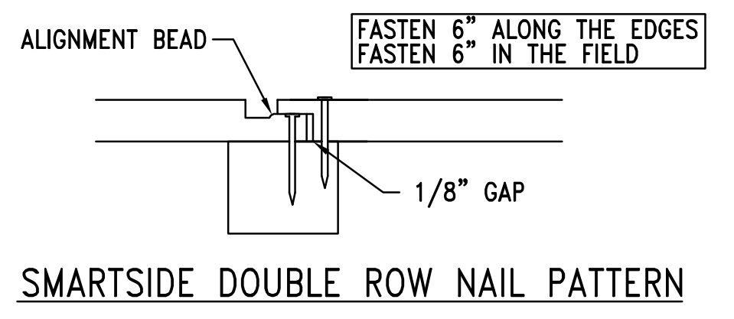


J GABLE END FRAMING REQUIREMENTS

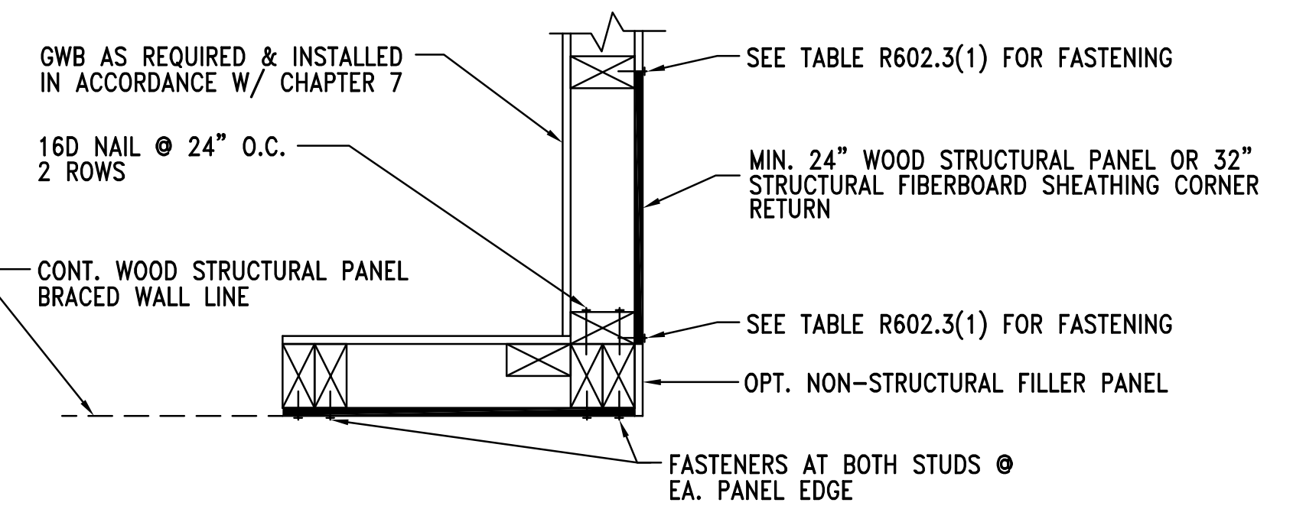
N.T.S.



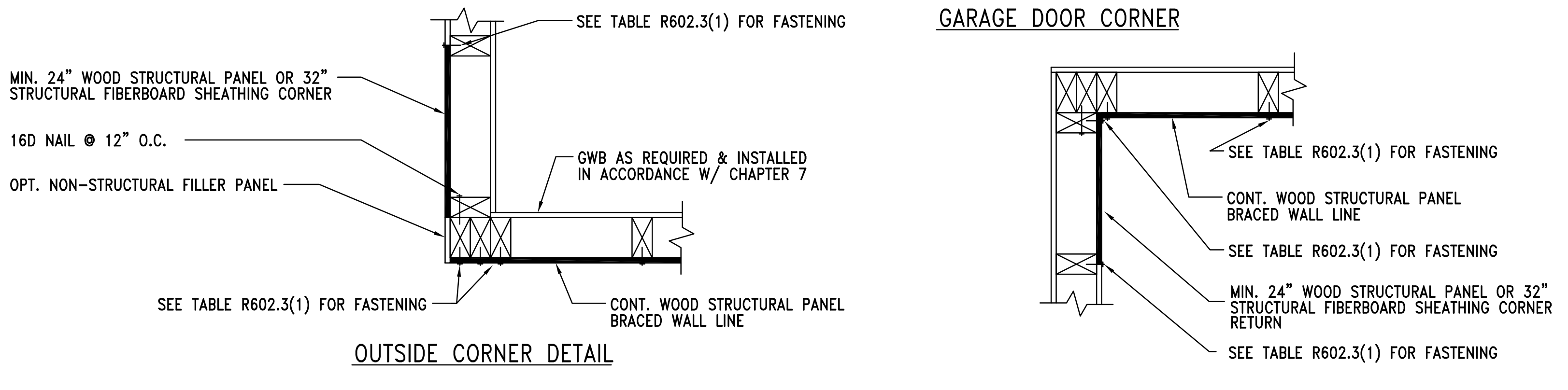
SMARTSIDE DOUBLE ROW NAIL PATTERN

H SMARTSIDE NAILING PATTERN

N.T.S.



GARAGE DOOR CORNER

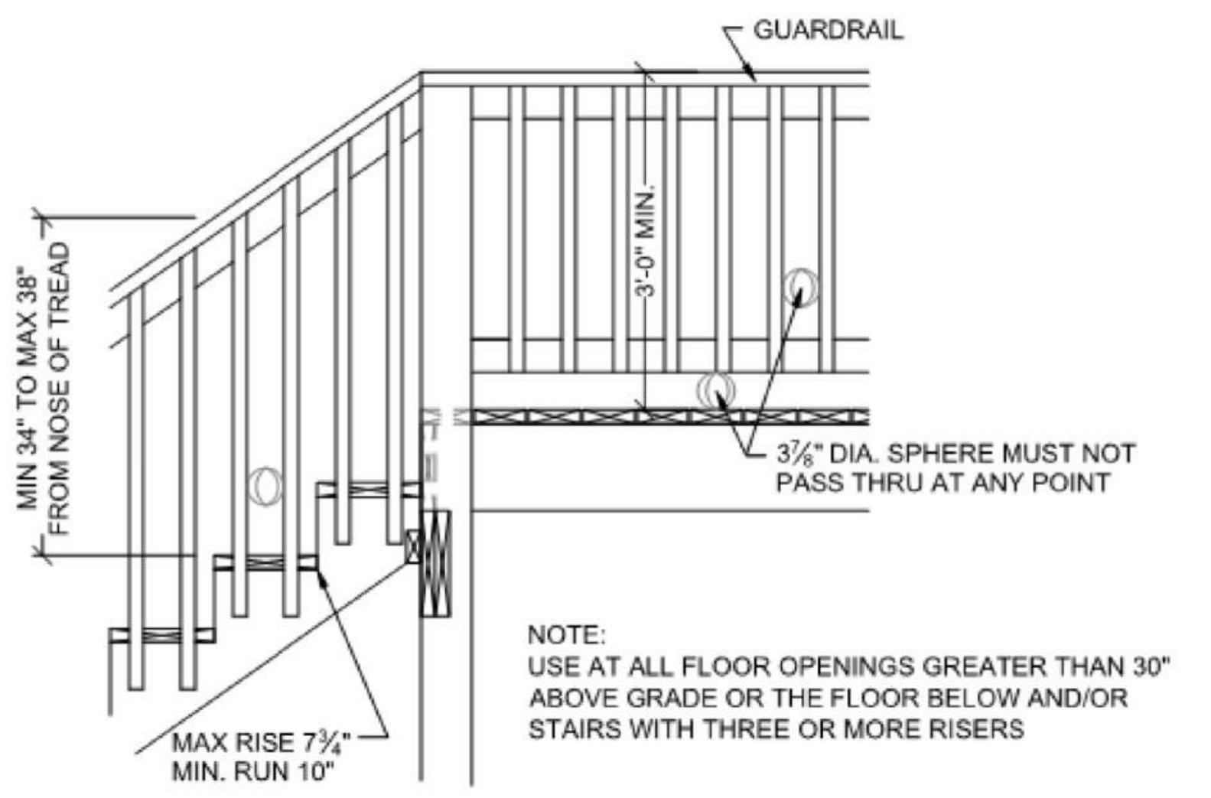


OUTSIDE CORNER DETAIL

INSIDE CORNER DETAIL

E CS-WSP CORNER FRAMING DETAILS

N.T.S.



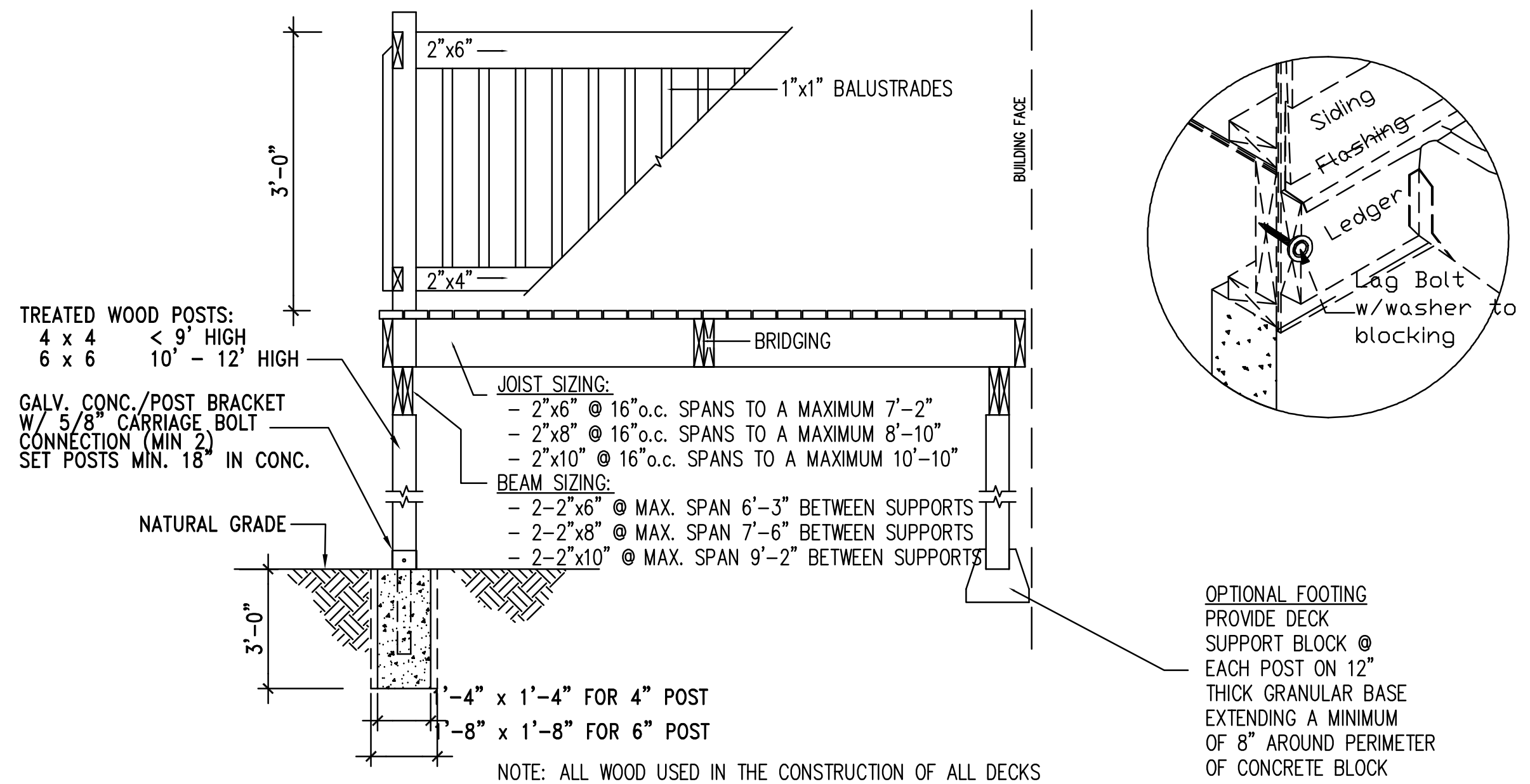
NOTE:
USE AT ALL FLOOR OPENINGS GREATER THAN 30" ABOVE GRADE OR THE FLOOR BELOW AND/OR STAIRS WITH THREE OR MORE RISERS

G DECK RAILING REQUIREMENTS

N.T.S.

NOTE:
- WHERE ADJACENT GRADE IS 2'-0" OR LESS A GUARD IS NOT REQUIRED.
- DECK DESIGN LOAD IS BASED ON 100 lb/sq.ft. AS PER NATIONAL BUILDING CODE.
- WHERE JOIST SPAN EXCEEDS 7'-0", PROVIDE BRIDGING @ MID-SPAN (AS SHOWN)

DECK LEDGER ATTACHMENT
1. (2) LAGS REQUIRED AT EA. END 2" FROM ENDS
2. PROVIDE 1 x 4 TREATED SPACED BEHIND EA. LAG
3. PROVIDE LAGS IN EA. JOIST SPACE W/ (2) EVERY OTHER SPACE, 2" FROM EDGES
4. MIN. SIZE LAG IS 1/2" DIAM x 6" LENGTH
5. PROVIDE FLASHING BETWEEN RIM JOIST & LEDGER



TREATED WOOD POSTS:
4 x 4 < 9' HIGH
6 x 6 10' - 12' HIGH

GALV. CONC./POST BRACKET W/ 5/8" CARRIAGE BOLT CONNECTION (MIN 2)
SET POSTS MIN. 18" IN CONC.

JOIST SIZING:
- 2"x6" @ 16"o.c. SPANS TO A MAXIMUM 7'-2"
- 2"x8" @ 16"o.c. SPANS TO A MAXIMUM 8'-10"
- 2"x10" @ 16"o.c. SPANS TO A MAXIMUM 10'-10"

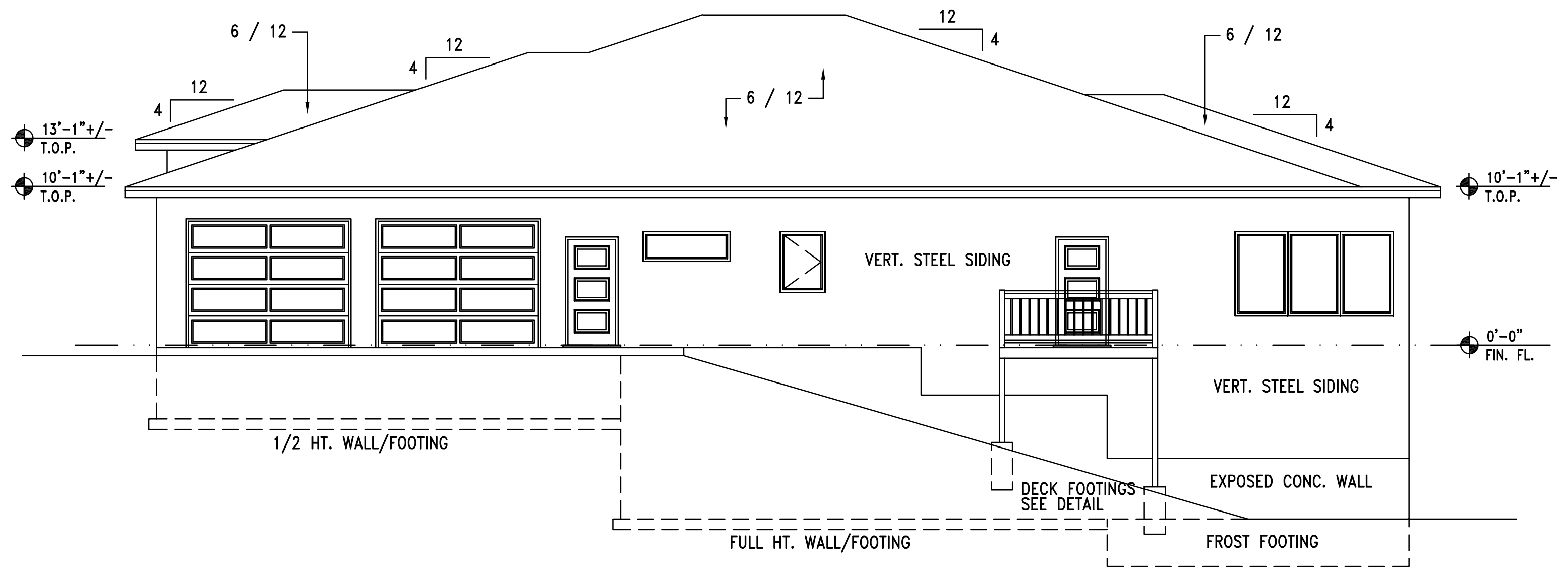
BEAM SIZING:
- 2-2"x6" @ MAX. SPAN 6'-3" BETWEEN SUPPORTS
- 2-2"x8" @ MAX. SPAN 7'-6" BETWEEN SUPPORTS
- 2-2"x10" @ MAX. SPAN 9'-2" BETWEEN SUPPORTS

OPTIONAL FOOTING
PROVIDE DECK SUPPORT BLOCK @ EACH POST ON 12" THICK GRANULAR BASE EXTENDING A MINIMUM OF 8" AROUND PERIMETER OF CONCRETE BLOCK & TAMPED

NOTE: ALL WOOD USED IN THE CONSTRUCTION OF ALL DECKS & RAILINGS, ETC. TO BE PRESSURE TREATED. APPLY BUILDING PAPER BETWEEN DECKING & JOISTS.

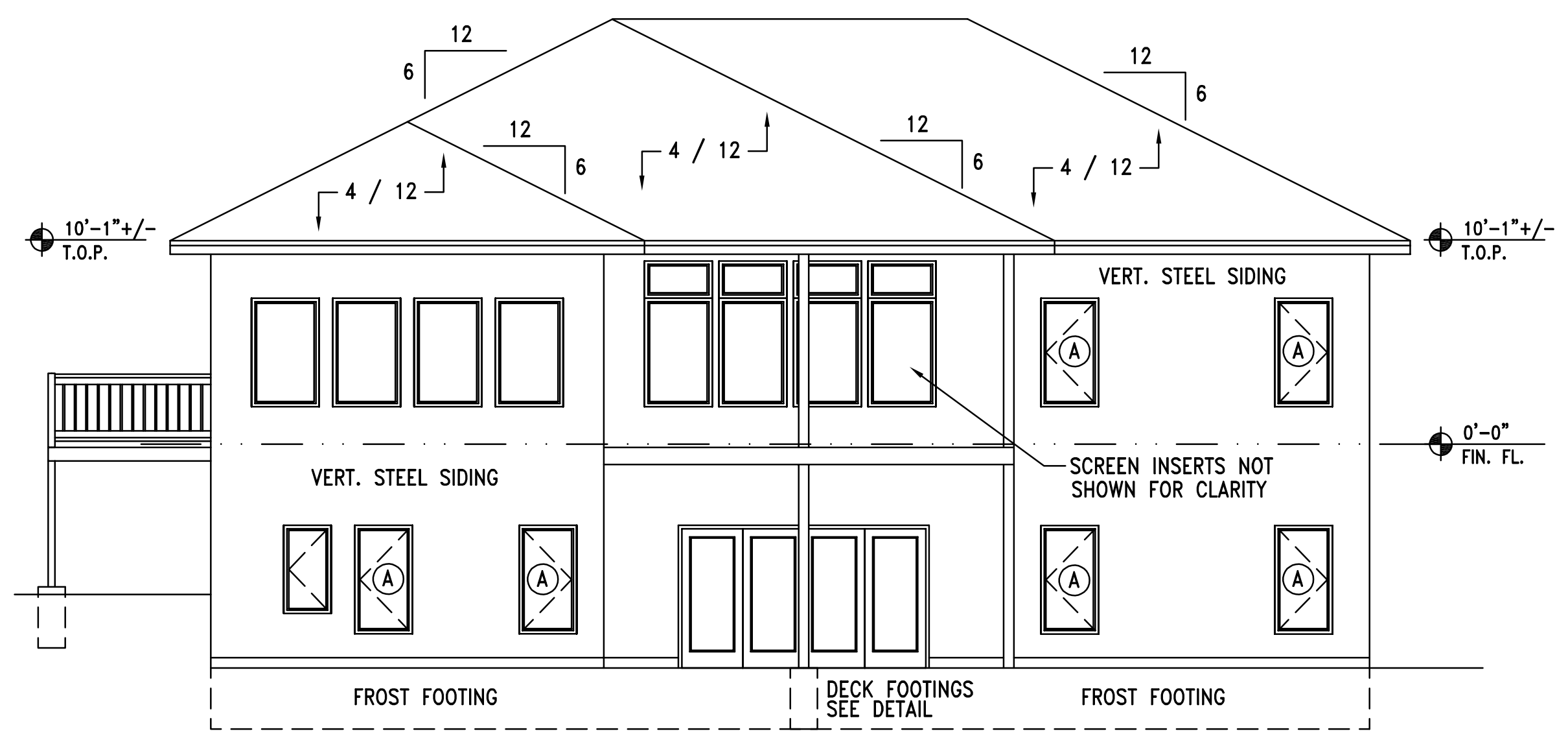
F TYPICAL RAISED WOOD DECK FRAMING

N.T.S.



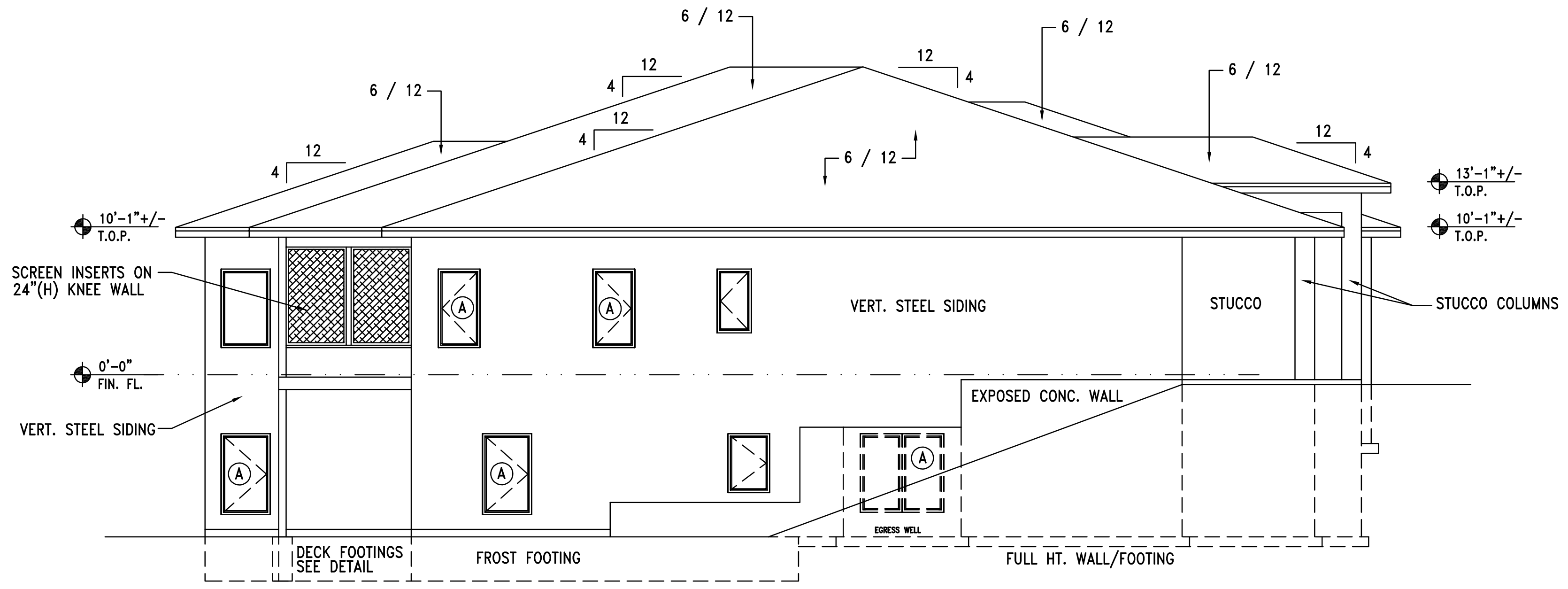
D SIDE ELEVATION

1/8" = 1'-0"



C REAR ELEVATION

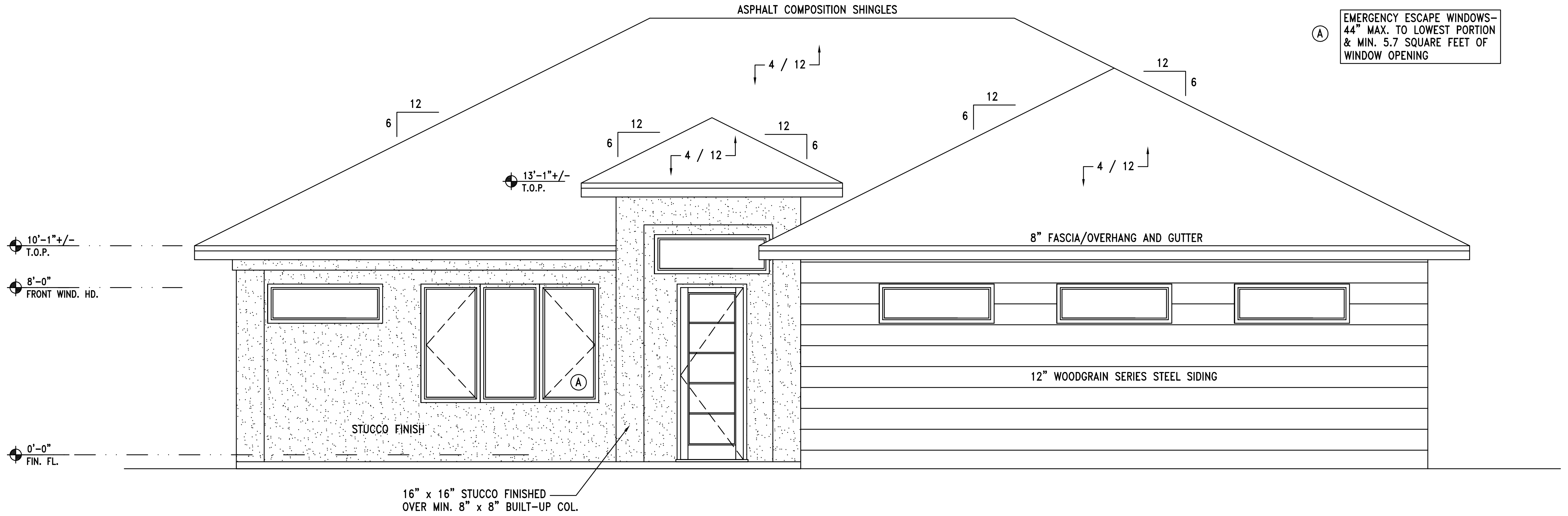
1/8" = 1'-0"



B SIDE ELEVATION

1/8" = 1'-0"

Ⓐ EMERGENCY ESCAPE WINDOWS– 44" MAX. TO LOWEST PORTION & MIN. 5.7 SQUARE FEET OF WINDOW OPENING



A FRONT ELEVATION

1/4" = 1'-0"

Brandon Kalwei
Digitally signed by Brandon Kalwei
DN: CN=Brandon Kalwei, OU=Development, OU=LS Users, DC=COLS, DC=LOC
Date: 2021.08.06 14:05:54-05'00'

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/06/2021

NUMBER A-7215

AOR: AARON BROWN
MO #: A-7215
4334 QUARTER HORSE LANE
BATES CITY, MO 64011
816-588-1178

BOYER RESIDENCE

725 SW 15TH CIRCLE
LEE'S SUMMIT, MISSOURI 64081

DATE: 07-22-2021
SUBDIVISION: ______________
PLOT #: ________________

REVISION	DATE

ISSUED: PERMIT/CONSTRUCTION

A1

BRACED WALL LINE SCHEDULE			
WALL LINE	REQ'D LENGTH	PROVIDED LENGTH	END CONDITION
MAIN FLOOR			
A	8.33'	16.00'	3-3
B	8.41'	16.00'	3-3
C	4.95'	10.50'	3-3
D	5.38'	8.00'	3-3
1	10.88'	16.00'	3-3
2	10.05'	16.00'	3-3
3	10.11'	17.25'	3-2
LOWER FLOOR			
A	8.55'	16.00'	3-3

1. CS-WSP PANELS: DISTANCE FROM END OF BRACED WALL LINE TO FIRST BRACED WALL PANEL CANNOT EXCEED A COMBINED TOTAL OF 10' PER R602.10.2.2
2. WOOD STRUCTURAL PANELS: MIN. 48" AND COVER 3 STUDS FOR FRAMING AT 16" O.C. OR 2 STUDS FOR 24" O.C.
3. CS-WSP PANELS: MIN. 2' PANELS AT BOTH CORNERS WITHOUT USING HOLD DOWNS PER R602.10.4.4 AND MAX. 12'-6" FROM CORNER
4. CS-WSP PANELS: MIN PANELS LENGTH ADJACENT TO AN OPENING FOR 9' PLATE = 27" PER R602.10.4.2
5. METH. GB SHALL USE MIN. 5d COOLER NAILS OR #6 SCREWS ATTACHED 7" O.C. ALONG EDGES & IN THE FIELD OF PANEL

C BRACED WALL CALCULATIONS

N.T.S.

2012 INTERNATIONAL ENERGY CONSERVATION CODE (TABLE R402.1.1)

DOORS & WINDOWS:	U-0.35 MAX (HEAT GAIN MAX 0.25)
SKYLIGHTS:	U-0.55 MAX
ATTIC CEILINGS:	R-49 MIN.
WOOD FRAME WALLS:	20 OR 13 + 5 MIN.
FLOOR (OVER UNHEATED):	R-19 MIN
SLAB ON GRADE:	R-10 FOR 24" IN
FUEL FIRED FURNACE:	90% AFUE MIN.
ELECTRIC FURNACE:	NO MINIMUM
COOLING SYSTEM:	13 SEER MIN.
WATER HEATER	
GAS FIRED STORAGE:	0.67 EF MIN
GAS FIRED INSTANT:	0.62 EF MIN
ELECTRIC STORAGE:	0.97 EF MIN
ELECTRIC INSTANT:	0.93 EF MIN

AN ENERGY EFFICIENT CERTIFICATE IS REQUIRED TO BE POSTED IN OR ON THE ELECTRICAL PANEL BEFORE FINAL INSPECTION. THE CERTIFICATE WILL BE PROVIDED WITH ALL NEW RESIDENTIAL PERMITS. IT IS THE PERMIT HOLDER/CONTRACTOR'S RESPONSIBILITY TO ENSURE THE CERTIFICATE HAS ACCURATE INFORMATION & IS POSTED BEFORE FINAL INSPECTION OWNER/CONTRACTOR IS RESPONSIBLE FOR MEETING THE PRESCRIPTIVE REQUIREMENTS OF IRC CHAPTER 11 UNLESS A HER INDEX ANALYSIS FOR PERFORMANCE COMPLIANCE BASED ON THE PLANS IS SUBMITTED TO THE AHJ FOR APPROVAL

B BRACED WALL CALCULATIONS

N.T.S.

GENERAL NOTES AND REQUIREMENTS

DOORS AND WINDOWS:
1. ALL GLAZING WITHIN 12" OF THE FINISHED FLOOR, ADJACENT TO DOORS <24") AND WITHIN DOORS, ABOVE BATHTUBS TO BE SAFETY TYPE GLASS AND LABELED SUCH & IN COMPLIANCE W/ SECTION 308 OF THE IRC
2. SHOWER DOORS SHALL HAVE SAFETY GLAZING. HINGED SHOWER DOORS SHALL SWING OUTWARD

GARAGES:
1. GARAGE SEPARATION WALL TO BE 1-HR CONST. W/ MIN. 5/8" TYPE X GWB, EXTEND TO BOTT. OF ROOF. DOOR TO BE 20-MIN RATED, 1-3/8" S.C. & EQUIPPED W/ CLOSER & LATCH
2. 15 & 20-AMP RECEPTACLES SHALL HAVE GFCI PROTECTION
3. TYPE-X 5/8" GB REQUIRED ON GARAGE CEILING BELOW LIVING AREAS

LIGHT AND VENTILATION:
1. PROVIDE STAIRWAY ILLUMINATION PER R303.7.9
2. GABLE VENT & MUSHROOM VENTS TO PROVIDE A MIN. OF 10 S.F. NET-FREE OF ATTIC VENTILATION
3. FURNACES ENCLOSED IN A ROOM LESS THAN 100 S.F. SHALL BE PROVIDED W/ A MEANS OF COMBUSTION MAKE-UP AIR AS DETERMINED/CALCULATED AND PRESCRIBED BY MECH. CONTRACTOR
4. VENTILATE KITCHENS AND LAUNDRY ROOMS PER R303.3
5. PROVIDE MIN. 16" x 10" SOFFIT VENTS ALONG EAVE SPACED EVENLY W/ NO MORE THAN 8'-0" O.C.

GYPSUM BOARD:
1. G.B. APPLIED TO CEILING SHALL BE 16" WHEN FRAMING MEMBERS ARE 16" O.C. OR 5/8" WHEN MEMBERS ARE 24" O.C. OR USE 1/2" SAG-RESISTANT GYP. CEILING BOARD

MECHANICAL SYSTEMS
1. FURNACE & WATER HEATER SHALL BE ON 18" PLATFORMS IF PLACED IN A GARAGE OR ROOM W/ DIRECT ACCESS TO A GARAGE
2. PROVIDE MIN. 78% AFUE FOR WEATHERIZED GAS HEATING EQUIP. 80% FOR NON-WEATHERIZED
3. PROVIDE MIN. 13 SEER FOR AIR CONDITIONING EQUIPMENT
4. SUPPLY AND RETURN DUCTS SHALL BE INSULATED TO MIN. R-8
5. MECHAINCAL VENTILATION, RECIRCULATION OF AIR-EXHAUST AIR FROM BATHROOMS & TOILET ROOMS SHALL NOT BE RECIRCULATED WITHIN A RESIDENCE OR CIRCULATED TO ANOTHER DWELLING UNIT & SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS. EXHAUST AIR FROM BATHROOMS, TOILET ROOMS & KITCHENS SHALL NOT DISCHARGE INTO AN ATTIC, CRAWL SPACE OR OTHER AREA INSIDE THE BUILDING.
6. MECHANICAL VENTILATION, LOCAL EXHAUST RATES-BATHROOMS, TOILET ROOMS MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS

ELECTRICAL SYSTEMS
1. PROVIDE UFER GROUND ENCASED IN CONCRETE FOOTING IN ACCORDANCE WITH IRC SECTION 3608.1
2. ALL ELECTRICAL CONDUCTORS SHALL BE COPPER
3. RECEPT. IN THE FOLLOWING LOCATIONS SHALL BE GFCI PROTECTED: BEDROOM, KITCHEN (W/IN 6 FEET OF SINK), GARAGE, SHED, EXTERIOR, UNFINISHED BASEMENT & HEATED FLOORS
4. ALL BRANCH CIRCUITS THAT SUPPLY 120-V, SINGLE PHASE, 15 & 20 AMP OUTLETS INSTALLED IN: FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, REC ROOMS, CLOSETS, HALLWAYS & SIM. ROOMS SHALL BE PROTECTED BY A COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT
5. ALL 15 & 20-A RECEPT. SHALL BE LISTED TAMPER-RESISTANT. EXCEPTION: RECEPTACLES IN THE FOLLOWING LOCATIONS SHALL NOT BE REQUIRED TAMPER-RESISTANT:
   1. RECEPTACLES LOCATED MORE THAN 5.5 FEET AFF
   2. WHERE SUCH RECEPTACLES ARE LOCATED IN SPACES DEDICATED FOR THE APPLIANCE SERVED & UNDER CONDITIONS OF NORMAL USE, THE APPLIANCES ARE NOT EASILY MOVED. APPLIANCES TO BE CORD-N-PLUG CONNECTED TO RECEPT.
6. RECEPTACLE OUTLETS-SPACINGS-RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT IS MEASURED HOR. ALONG THE FLOOR OF ANY WALL SPACE MORE THAN 6-FEET FROM A RECEPTACLE
7. TAMPER RESISTANT RECEPTACLES SHALL BE LOCATED NO MORE THAN 5.5 FEET ABOVE THE FINISHED FLOOR
8. ARC-FAULT CIRCUIT INTERUPTER PROTECTION: BRANCH CIRCUITS THAT SUPPLY 12-VOLT, SINGLE PHASE, 15 AND 20-AMPERE OUTLETS INSTALLED IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, DENS, BEDROOMS, SUNSROOMS, RECREATIONS ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS AND SIMILAR ROOMS/AREAS SHALL BE PROTECTED.
9. LOCATION OF GROUND FAULT CIRCUIT INTERUPTERS: GROUND FAULT CIRCUIT PROTECTORS SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION.
   BATHROOMS (125-VOLT, 15 & 20-AMPERES)
   OUTDOOR RECEPTACLES (125-VOLT, 15 & 20-AMPERES)
   UNFINISHED BASEMENT RECEPTACLES (125-VOLT, 15 & 20-AMPERES)
   KITCHEN (125 VOLT, 15 & 20-AMPERES)
   SINK (125 VOLT, 15 & 20-AMPERES)

EXTERIOR WALL FRAMING
1. BOTTOM SILL PLATES SHALL BE PRESSURE TREATED OR EQUAL
2. SILL PLATES SHALL BEAR/EXTEND MIN. 6-INCHES ABOVE GRADE
3. ALL EXT. STUD TO BE SECURED TO THEIR DOUBLE TOP PLATES W/ (2) 16-d NAILS (MIN)
4. ALL EXTERIOR CORNERS TO BE BRACED WITH 7/16" OSB NAILING SCHEDULE SHALL BE 8d COMMON @ 6" O.C. ALONG EDGES & 8d COMMONS @ 12" O.C. @ INTERMEDIATE STUDS

ROOF FRAMING
1. ALL ROOF EAVES/OVERHANGS TO BE 16" - U.N.O.
2. ALL JOISTS & RAFTERS TO BE ALIGNED OVER STUDS
3. ROOF SHEATHING SHALL BE 7/16" OSB LAID W/ LONG DIMENSION PERPENDICULAR TO EAVE LINE & STAGGERED 48" O.C. W/ GALV. SPACER CLIPS ALONG ALL EDGES - SECURE SHEATHING W/ 8d COMMON NAILS TO RAFTERS AT 6" O.C. ALL EDGES

EROSION CONTROL
1. EROSION CONTROL MEASURES SHALL BE IN PLACE & IN GOOD WORKING ORDER AT ALL TIMES DURING INSPECTIONS. IN THE EVENT THAT THEY ARE NOT, THE INSPECTOR MAY CANCEL THE INSPECTION UNTIL SUCH TIME THE EROSION CONTROL MEASURES ARE IN PLACE. A FINE, RE-INSPECTION FEE & STOP-WORK ORDER MAY BE ISSUED IF EROSION CONTROL IS NOT ADDRESSED. MINIMUMS INCLUDE:

   SILT FENCE OR STRAW WATTLE AROUND ALL DISTURBED SOIL, SHALL BE IN PLACE BEFORE ANY EXCAVATION BEGINS

   TEMPORARY GRAVEL CONSTRUCTION ENTRANCE, THIS ENTRANCE SHOULD BE THE ONLY ENTRANCE & EXIT USED FOR VEHICLES INTO & OUT OF THE SITE

   STREETS SHALL BE MAINTAINED FREE OF ALL SOIL & GRAVEL IN A BROOM CLEAN CONDITION AT ALL TIMES

FOOTING/FOUNDATION & CONCRETE NOTES
1. TO ADDRESS DIFFERNETIAL SETTLEMENT, ALL INTERIOR BEARING AND EXTERIOR FOOTINGS & PADS TO BE EXCAVATED & PLACED MIN. 18 INCHES INTO UNDISTURBED NATURAL SOIL.
2. EXT. FOOTING TO BE PLACED MIN. 36-INCHES BELOW FIN. GRADE
3. DESIGN IS BASED ON MIN. OF 2,500 PSI, CONCRETE STRENGTHS TO ACHIEVE THE FOLLOWING BASED UPON:
   A. 3,000 PSI FOR FOOTINGS, FOUND. WALLS & VERT. SUPPORTS
   B. 3,500 PSI FOR GARAGE FLOOR
4. CONC. EXPOSED TO WEATHER TO HAVE 6%(+/-1%) AIR ENTRAINMENT
5. PROVIDE 4" (MIN) CONC. SLAB REINF. W/ #4 @ 12" O.C. E.W.; TOP REINF. OVER PEDESTALS AS INDICATED (#4 x 7 FT @ 8" O.C. E.W.; PLACE OVER 6 MIL VAPOR BARRIER)
6. REINFORCE EXTERIOR FOOTINGS W/ #4 @ 24" E.W.; REINFORCE W/ (2) #4 CONT. AT BOTTOM
7. PROVIDE #4 x 48"(L) @ 45-DEGREES @ RE-ENTRANT CORNERS
8. 1/2"x10"(L) ASTM A307 ANCHOR BOLTS @ 48" O.C. @ EXT. WALLS
9. ANCHOR PRESSURE TREATED PLATE @ INT. BEARING WALLS W/ 1/2" x 4-1/2" HILTI WEDGE BOLTS @ 72" O.C. MAX. 12' FROM ENDS
10. PROVIDE 24" LAPS MIN. INCLUDING CORNERS
11. INSTALL HOLDOWN BOLT ANCHORAGE AS INDICATED ON PLAN
12. PROVIDE BITUMINOUS DAMP-PROOFING AT FOUNDATION WALLS
13. SOIL BEARING CAPACITY IS NOT ASSUMED TO BE GREATER THAN 2,000 PSF IN THE CURRENT FOUNDATION DESIGN ALL COMPACTED FILL AREAS REQUIRE A SPECIAL INSPECTION

WOOD FRAMING, FLOORS AND ROOF NOTES
1. EXT. WALL FRAMING TO BE 2 x 4 (SYP OR DFL STUD GRADE 2 OR BETTER) @ 16" O.C.
2. ROOF SHEATHING TO BE 7/16" OSB NAILED W/ 8D @ 6" O.C. PANEL INDEX 24/0; PROVIDE CLIPS AT UNSUPPORTED PANEL EDGES
3. SHEATH EXT. WALLS W/ 7/16" OSB NAILED W/ 8D @ 6" O.C.
4. HEADERS: PROVIDE (2) 2 x 8 (SYP OR DFL #2 OR BETTER) U.N.O.; CONSTRUCT HEADERS W/ 2 x & 7/16" OSB BETWEEN W/ (2) ROWS OF 16D @ 16" O.C.
5. BLOCKING MIN. 1.5 INCHES UTILITY GRADE LUMBER-JOISTS TO BE SUPPORTED AT ENDS FULL DEPTH SOLID BLOCKING NOT < 2-INCHES
6. TJI F.J., C.J. & RAFTERS TO BE SYP OR DFL GRADE #2 OR BETTER
7. EXT. WALL STUDS & LOAD BEARING WALLS TO BE CONTINUOUS FROM FLOOR TO ROOF/CEILING DIAPHRAGM PER IRC 602.3
8. STUDS, RAFTERS, JOISTS, MISC. LUMBER MIN. GRADE #2 D.F. OR S.Y.P.

STEEL COLUMNS & OTHER BASEMENT/FOUNDATION NOTES
1. ALL STEEL PIPE COLUMNS TO BE 3" (OR 3-1/2")SCHEDULE 40 GRADE
2. INTER. BEARING WALLS & COLUMNS SHALL BE ISOLATED FROM THE BASEMENT FLOOR SLAB.
3. INTER. NON-BEARING WALLS, OTHER THAN THOSE RESTING DIRECTLY ON THE FOOTING, SHALL BE ISOLATED FROM THE FLOOR FRAMING ABOVE.
4. AT WALKOUT FOUNDATION AREAS, REINFORCE THE SLAB FROM THE FOUNDATION WALL TO 2 FEET BEYOND THE OVERDIG AREA WITH #4 BARS AT 24 INCHES O.C. PERPENDICULAR AND HORIZONTAL TO THE WALL; MAXIMUM 4-FOOT OVERDIG.
5. AT WALKOUTS THE FOUNDATION WALL SHALL BE INSULATED W/ A MINIMUM R-6 INSULATION FOR A MIN. OF 3 FEET BELOW THE BOTTOM OF THE SLAB.
6. WHERE FLOOR JOISTS ARE PARALLEL TO THE FOUNDATION WALL, THE WALL SHALL BE SUPPORTED LATERALLY AT THE TOP BY SOLID BLOCKING FOR A MINIMUM OF TWO JOIST SPACES, SPACED NOT MORE THAN 4 FEET O.C.

UNFINISHED BASEMENT REQUIREMENTS
1. FIRE PROTECTION OF FLOORS: FLOOR ASSEMBLIES CONSTRUCTED W/ JOISTS LESS THAN 2x10 DIMENSIONAL LUMBER
2. I-JOISTS OR OPEN WEB JOISTS OVER UNFINISHED BASEMENTS SHALL BE PROVIDED WITH 1/2 INCH GWB, 5/8 INCH WOOD
3. UNFINISHED BASEMENTS SHALL BE MIN. R-13 INSULATED WALLS OR INSULATED O/H FLOOR/CEILING (MIN R-19)
4. ALL EXPOSED HVAC DUCTING IN UNFINISHED BASEMENTS SHALL BE MIN R-8 INSULATED OR ENCLOSED INSIDE A FLOOR/CEIL'G
5. UNFINISHED BASEMENTS SHALL HAVE NO CONDITIONED AIR OUTLETS

PHYSICAL SECURITY ORDINANCE
1. OWNER/BUILDER IS RESPONSIBLE FOR COMPLIANCE OF PHYSICAL SECURITY ORDINANCE FOR THEIR LOCAL JURISDICTION

1. Smoke alarms shall be listed in accordance with UL 2034 and comply with Section R314. Combination smoke/carbon monoxide alarms shall be in accordance w/ UL 217 & UL 2034.
2. Smoke alarms shall be installed in the following locations:
a. In each sleeping room.
b. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
c. On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics.
3. Where more than one smoke alarm is required to be installed w/in an individual dwelling unit in accordance with Section R314.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all alarms in the individual unit.

D SMOKE & CARBON MON. DETECTOR REQ'S.

N.T.S.

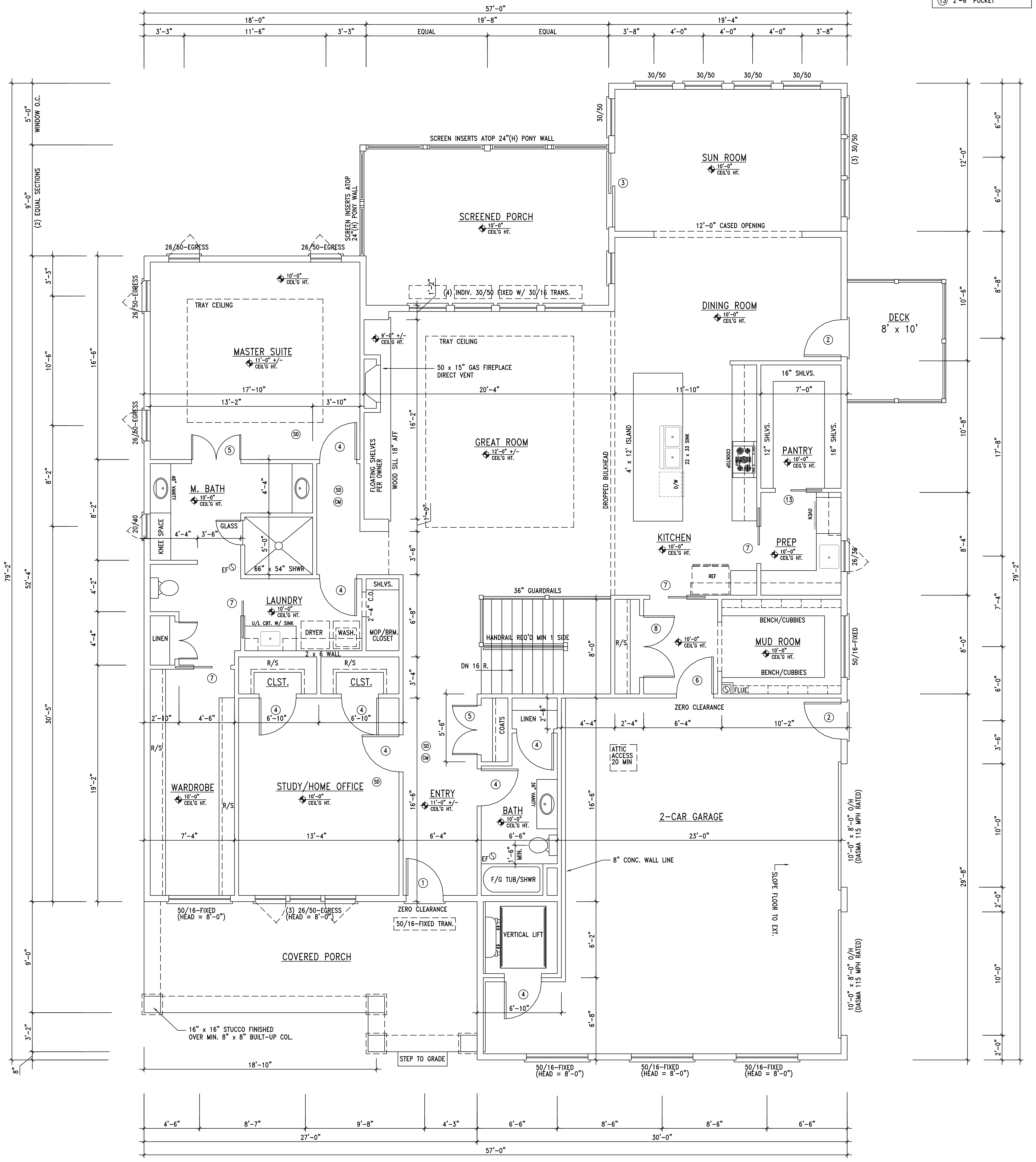
DOOR SCHEDULE
*ALL DOORS ARE 6'-8" HIGH UNLESS NOTED OTHERWISE

①	3'-0" x 8'-0"(H) ENTRY
②	3'-0" THERMAL
③	6'-0" SLIDING GLASS
④	3'-0" HC
⑤	PR. 2'-0"
⑥	3'-0" (20 MIN)-CLOSER
⑦	3'-0" POCKET
⑧	PR. 2'-6"
⑨	6'-0" SLIDER
⑩	1'-6"
⑪	PR. 3'-0"
⑫	5'-0" SC
⑬	2'-6" POCKET

STATE OF MISSOURI
AARON A. BROWN
NUMBER A-7215
REGISTERED ARCHITECT

AOR: AARON BROWN
MO #: A-7215
4334 QUARTER HORSE LANE
BATES CITY, MO 64011
816-588-1178

BOYER RESIDENCE
725 SW 15TH CIRCLE
LEE'S SUMMIT, MISSOURI 64081



A MAIN LEVEL FLOOR PLAN

1/4" = 1'-0"

SQUARE FOOTAGE CALCULATIONS
MAIN LEVEL = 2,790 GSF
2-CAR GARAGE = 767 GSF
UNFINISHED LOWER = 2,790 GSF
SUSPENDED PORCH = 270 GSF
SCREEN PORCH = 260 GSF
COVERED ENTRY PORCH = 270 GSF

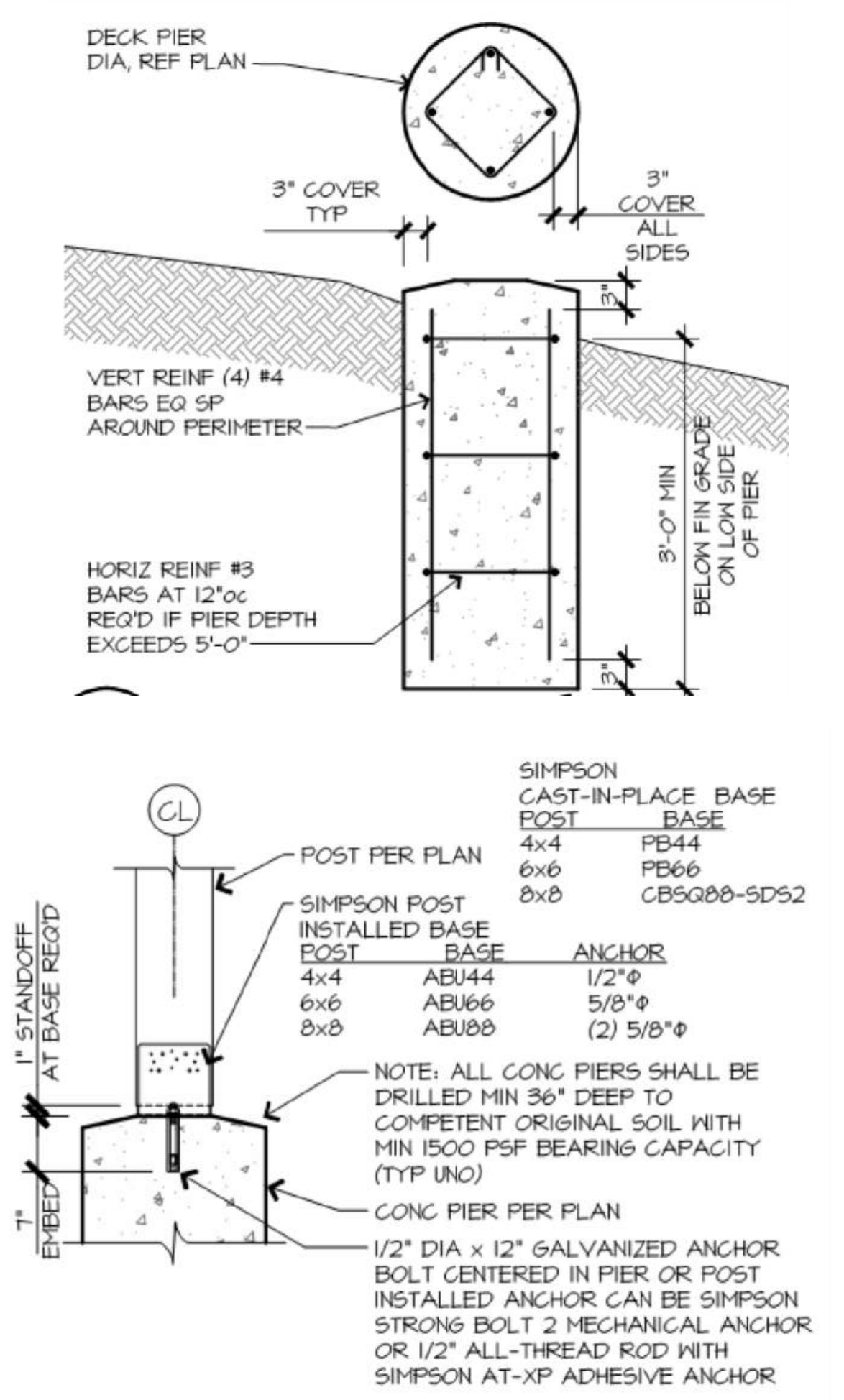
DATE: 07-22-2021
SUBDIVISION: ______________
PLOT #: ________________

REVISION	DATE

ISSUED: PERMIT/CONSTRUCTION

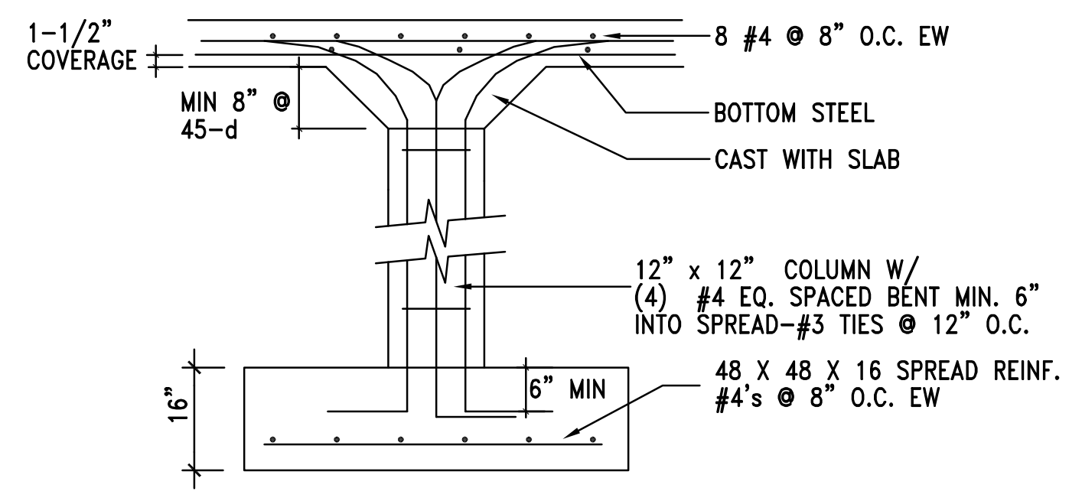
A2

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/06/2021



H TYP. DETAILS FOR POST/PIER

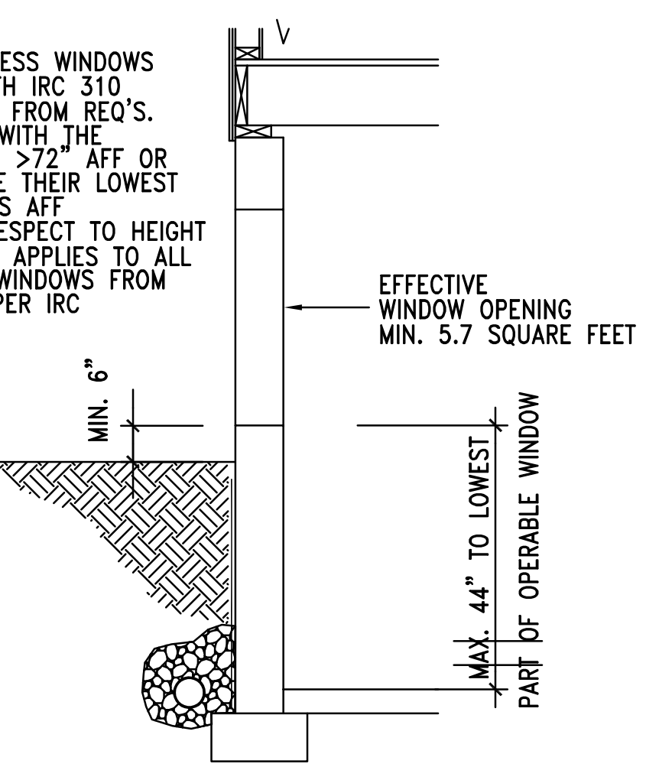
N.T.S.



F PEDESTAL FOOTING DETAIL

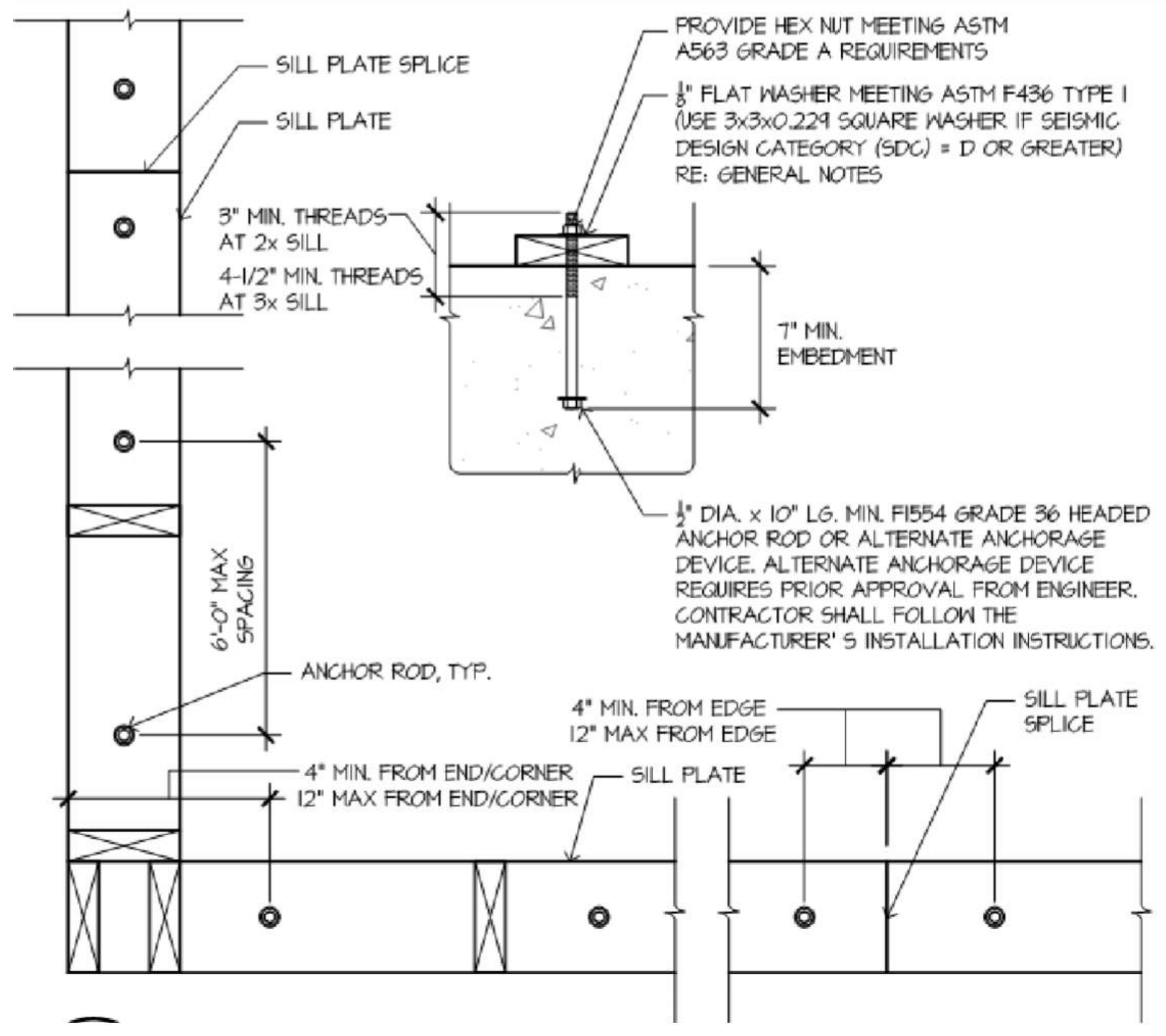
N.T.S.

1. ALL REQURIED EGRESS WINDOWS SHALL COMPLY WITH IRC 310
2. ALL WINDOW SILLS FROM REQ'S. EGRESS WINDOWS WITH THE OPERABLE PORTION >72" AFF OR GRADE SHALL HAVE THEIR LOWEST PORTION 24 INCHES AFF
3. THIS DETAIL W/ RESPECT TO HEIGHT & OPENING REQ'S. APPLIES TO ALL DENOTED EGRESS WINDOWS FROM SLEEPING ROOMS PER IRC



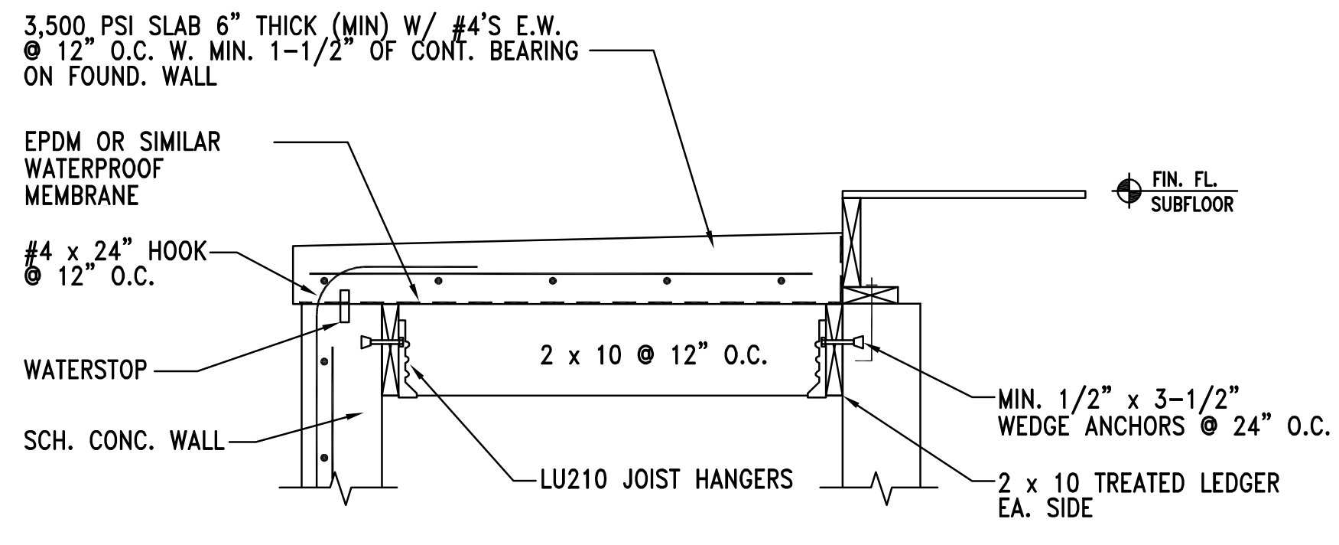
E EGRESS WINDOW CRITERIA–BELOW GRADE

N.T.S.



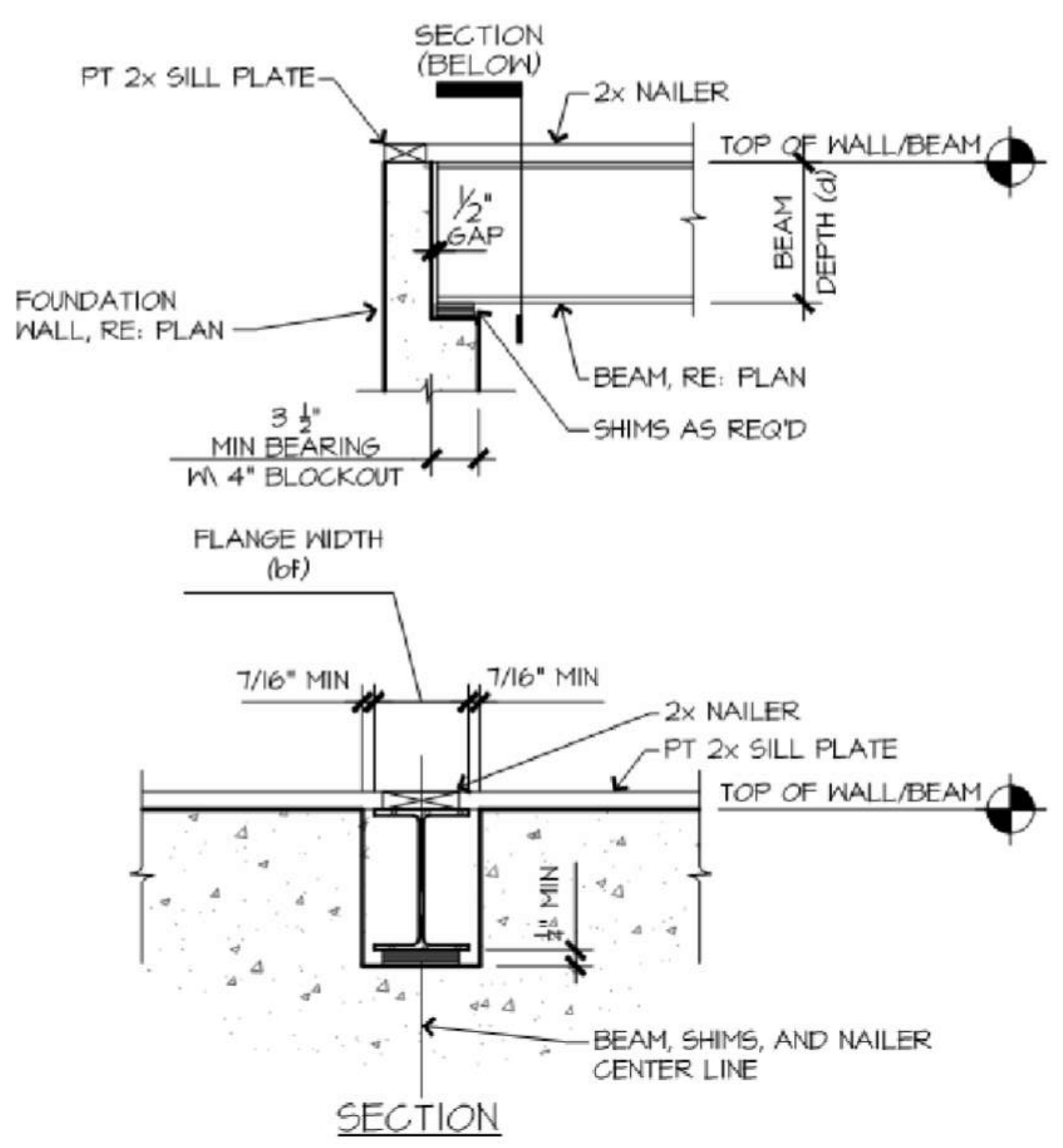
C SILL PLATE LAYOUT/DETAILS

N.T.S.



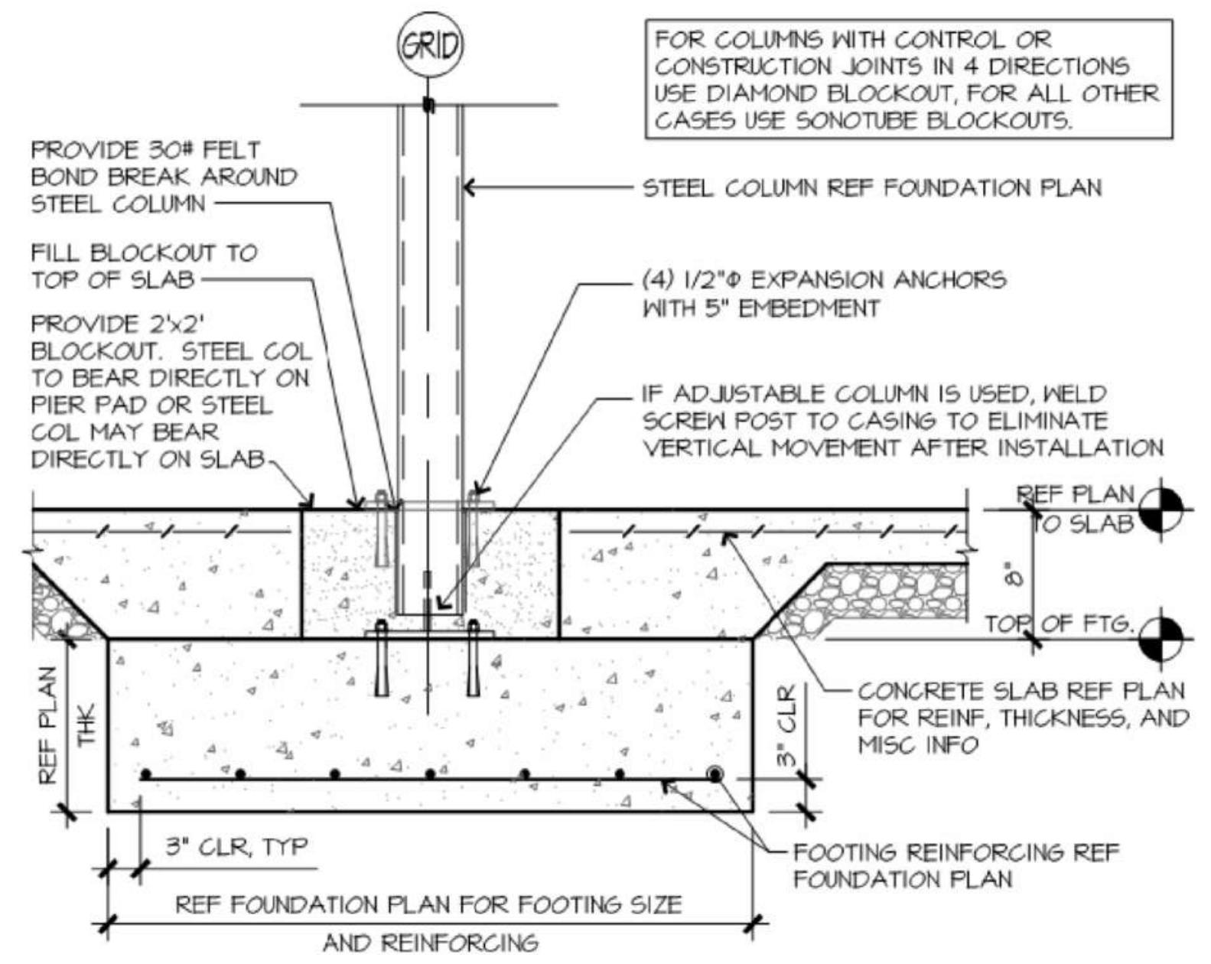
K STOOP FRAMING DETAIL

N.T.S.



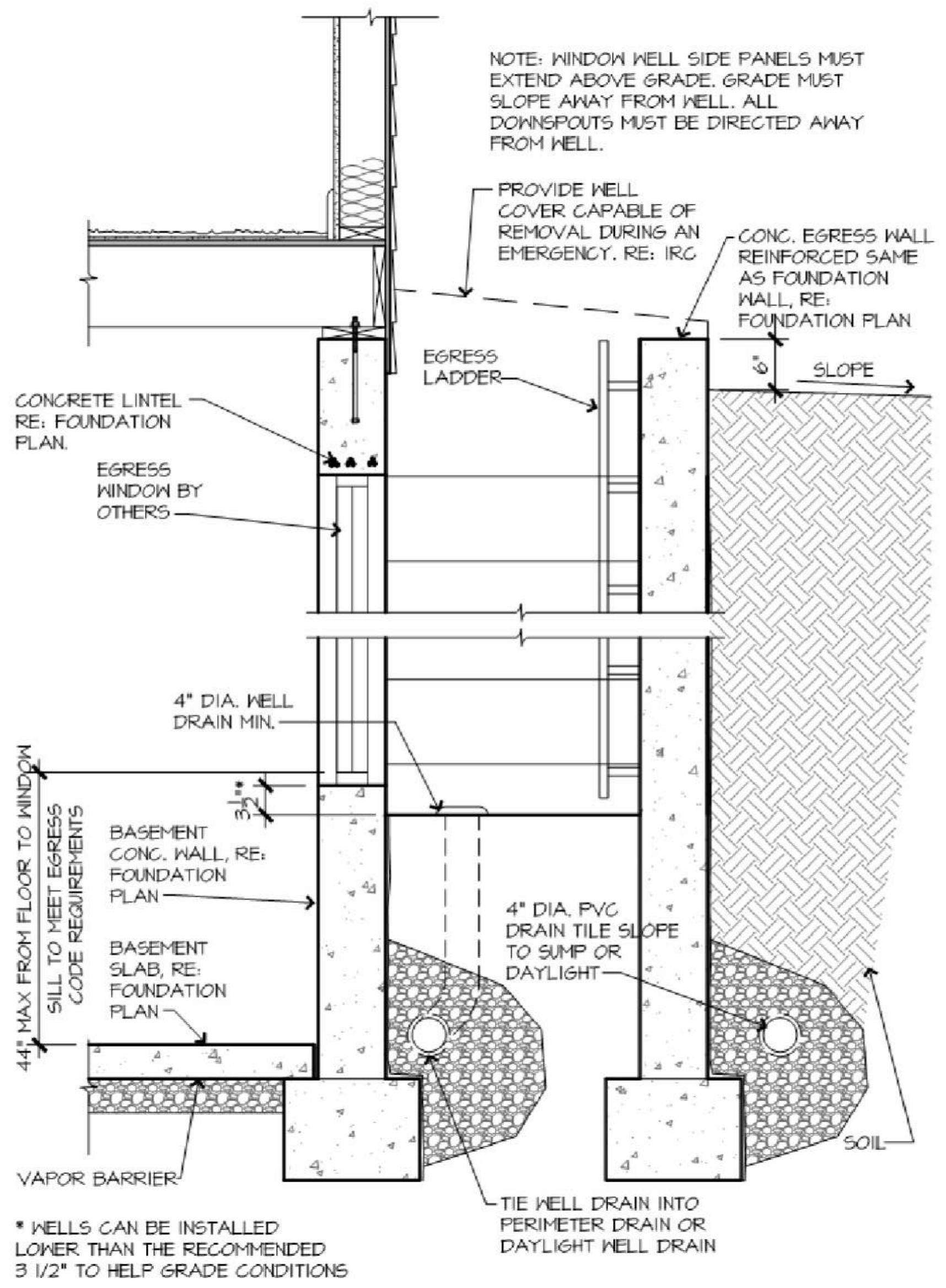
G BEAM POCKET DETAIL

N.T.S.



D INTERIOR COLUMN PAD DETAIL

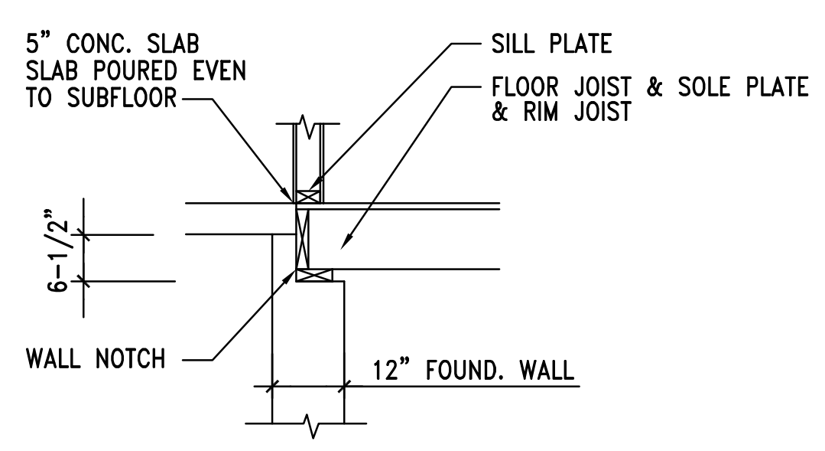
N.T.S.



* WELLS CAN BE INSTALLED LOWER THAN THE RECOMMENDED 3 1/2" TO HELP GRADE CONDITIONS

B EGRESS WELL CONSTRUCTION/DETAIL

N.T.S.

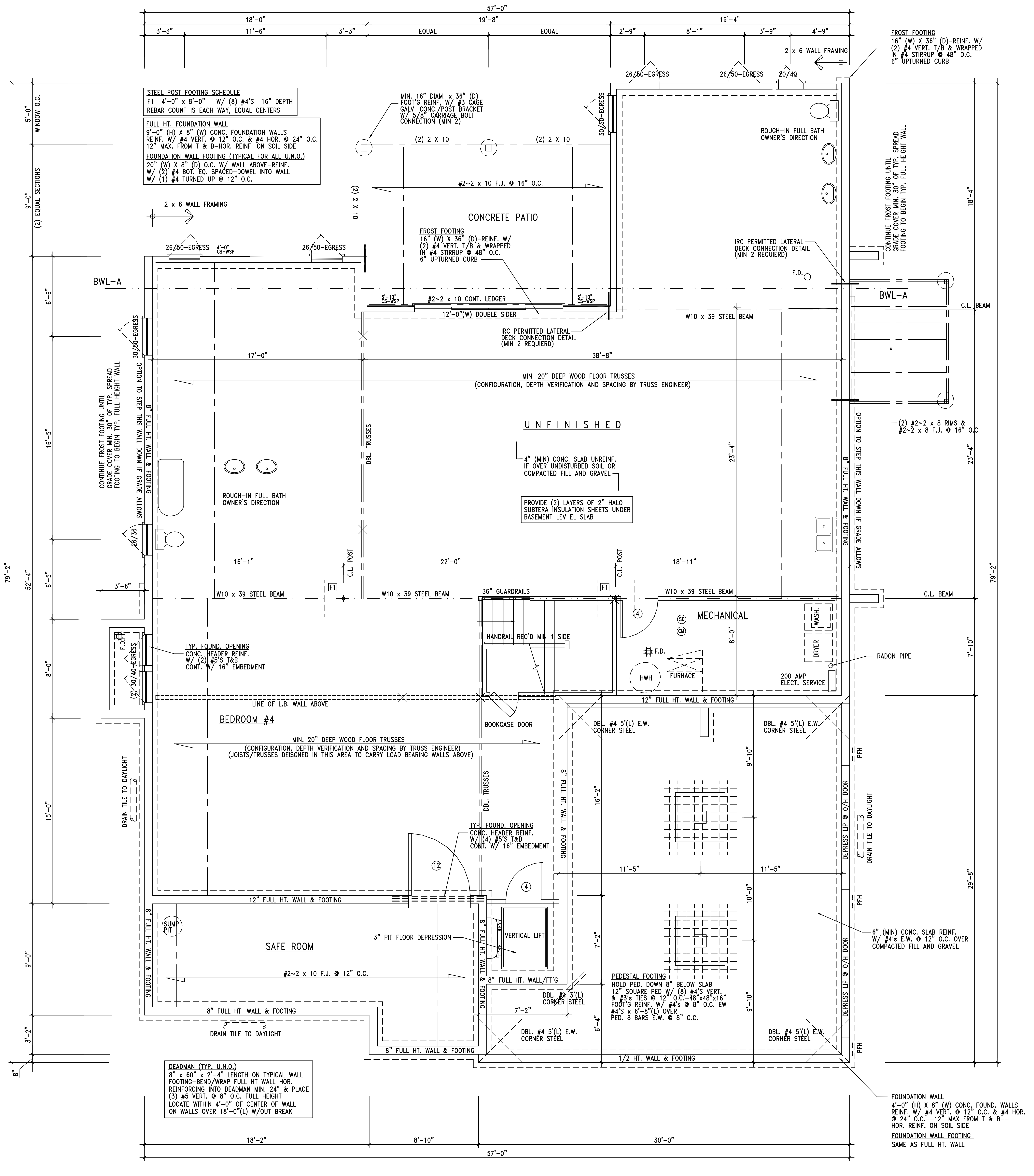


J ZERO CLEARANCE GARAGE DETAIL

N.T.S.

DOOR SCHEDULE
*ALL DOORS ARE 6'-8" HIGH
UNLESS NOTED OTHERWISE

①	3'-0" x 8'-0"(H) ENTRY
②	3'-0" THERMAL
③	6'-0" SLIDING GLASS
④	3'-0" HC
⑤	PR. 2'-0"
⑥	3'-0" (20 MIN)-CLOSER
⑦	3'-0" POCKET
⑧	PR. 2'-6"
⑨	6'-0" SLIDER
⑩	1'-6"
⑪	PR. 3'-0"
⑫	5'-0" SC



A LOWER LEVEL/FOUNDATION PLAN

1/4" = 1'-0"

STATE OF MISSOURI
AARON A. BROWN
NUMBER
A-7215
REGISTERED ARCHITECT

AOR: AARON BROWN
MO #: A-7215
4334 QUARTER HORSE LANE
BATES CITY, MO 64011
816-588-1178

BOYER RESIDENCE

725 SW 15TH CIRCLE
LEE'S SUMMIT, MISSOURI 64081

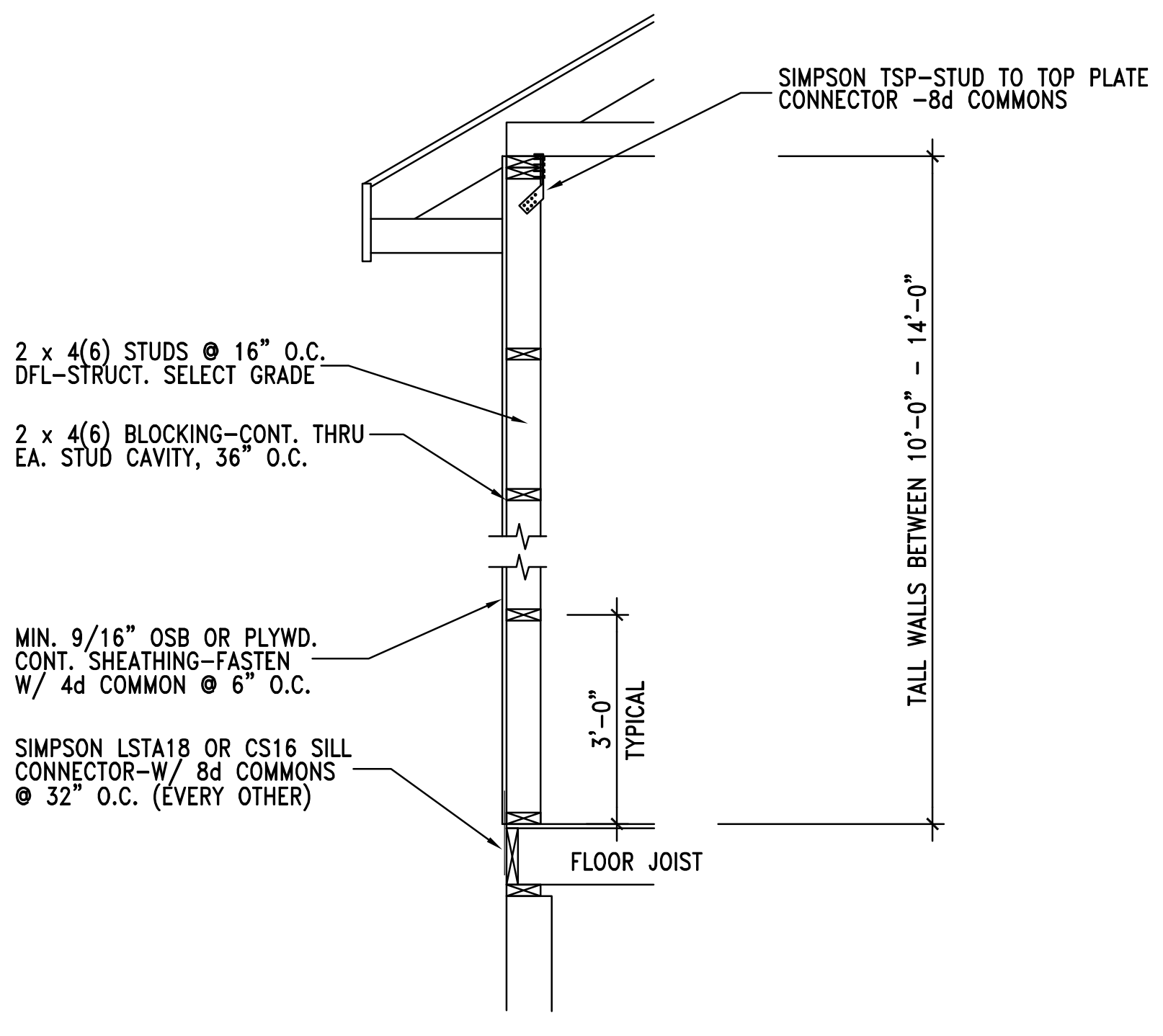
DATE: 07-22-2021
SUBDIVISION: ________________
PLOT #: ____________________

REVISION	DATE

ISSUED: PERMIT/CONSTRUCTION

A3

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/06/2021

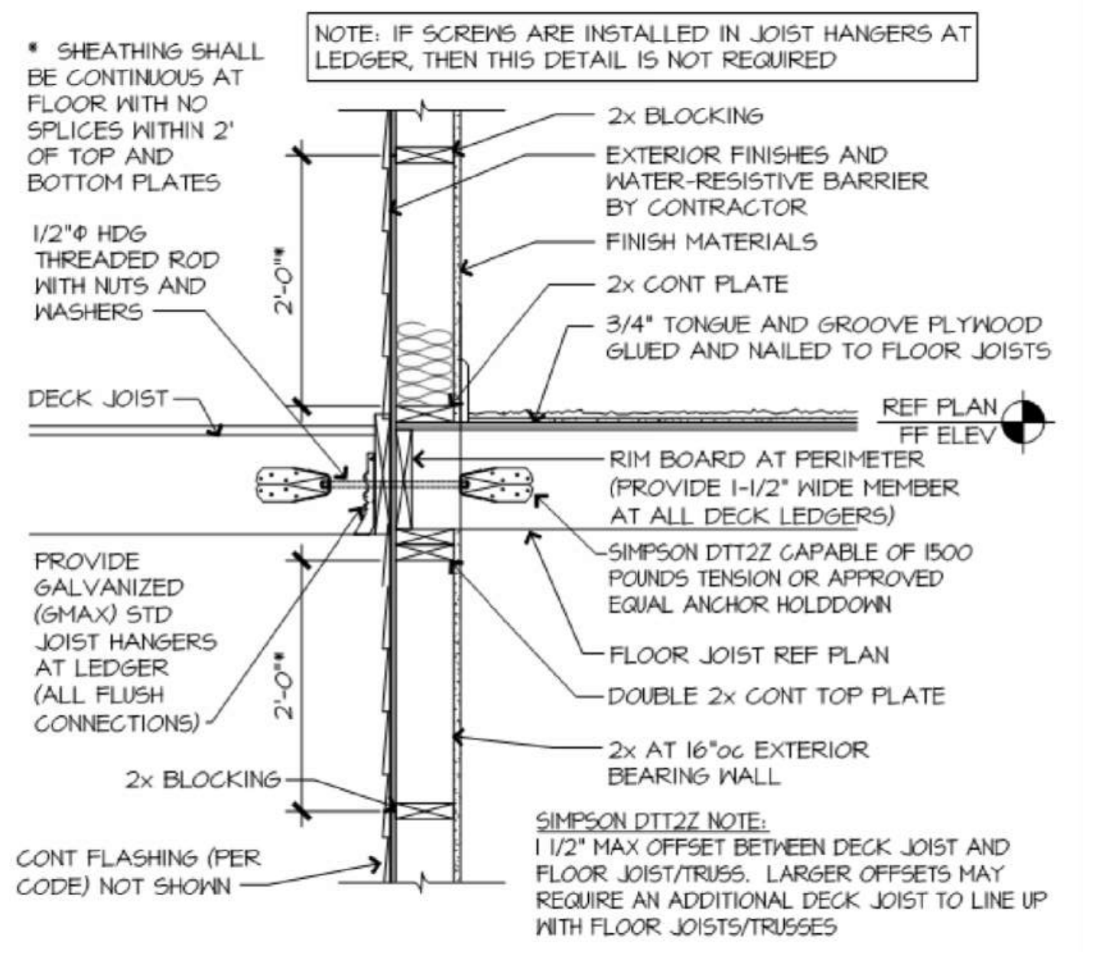


WALL DESIGNED AT L/240 FOR 120-MPH WIND GUST

F TALL WALL FRAMING DETAIL

N.T.S.

NOTE: IF SCREWS ARE INSTALLED IN JOIST HANGERS AT LEDGER, THEN THIS DETAIL IS NOT REQUIRED

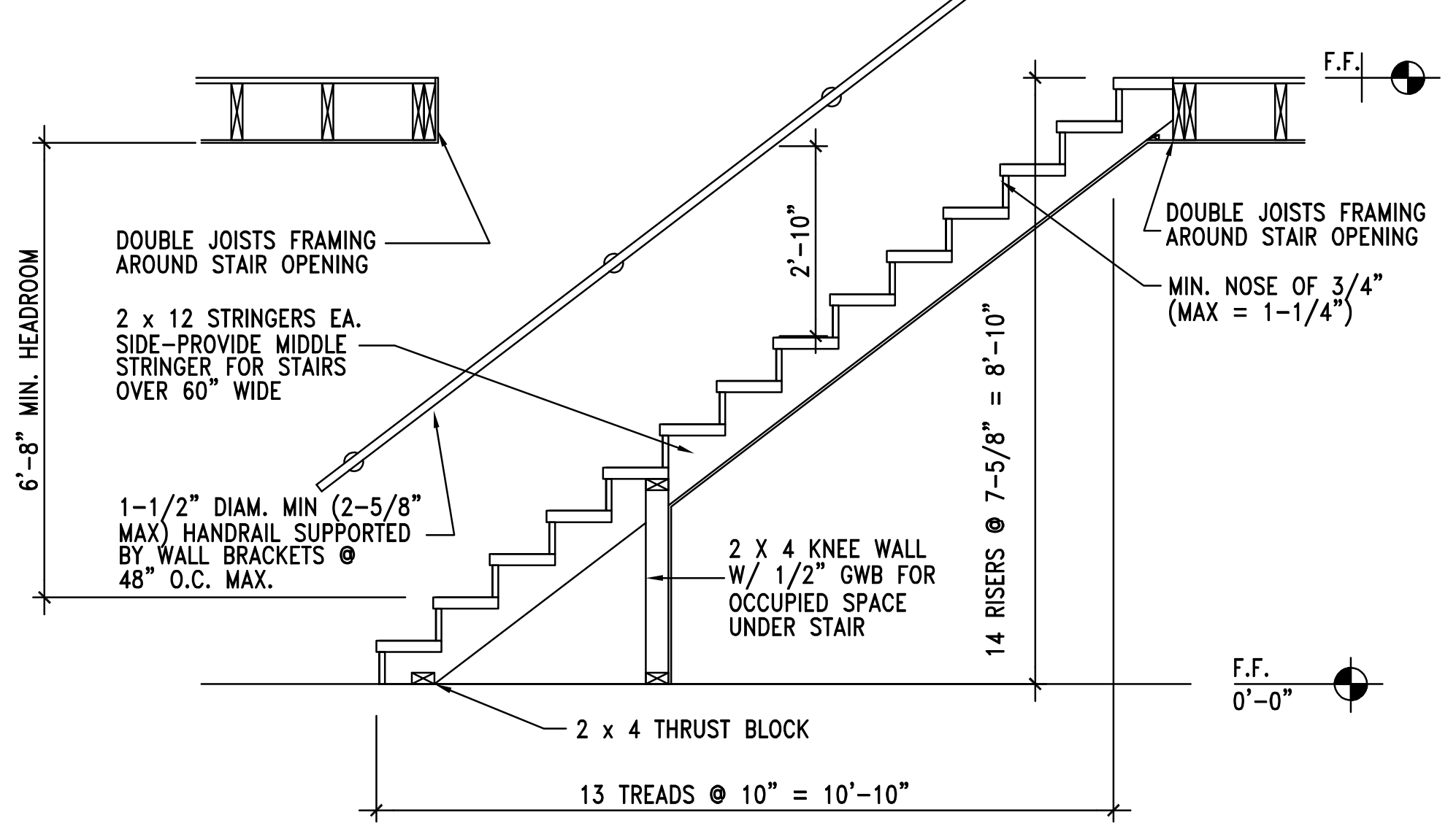


SIMPSON DTT2Z NOTE:
1 1/2" MAX OFFSET BETWEEN DECK JOIST AND FLOOR JOIST/TRUSS. LARGER OFFSETS MAY REQUIRE AN ADDITIONAL DECK JOIST TO LINE UP WITH FLOOR JOISTS/TRUSSES

D LATERAL DECK CONNECTION PER IRC

N.T.S.

PER IRC: THE MAX. RISSE ALLOWED IS 7.75 INCHES AND THE MIN TREAD IS 10 INCHES MEASURED NOSE TO NOSE

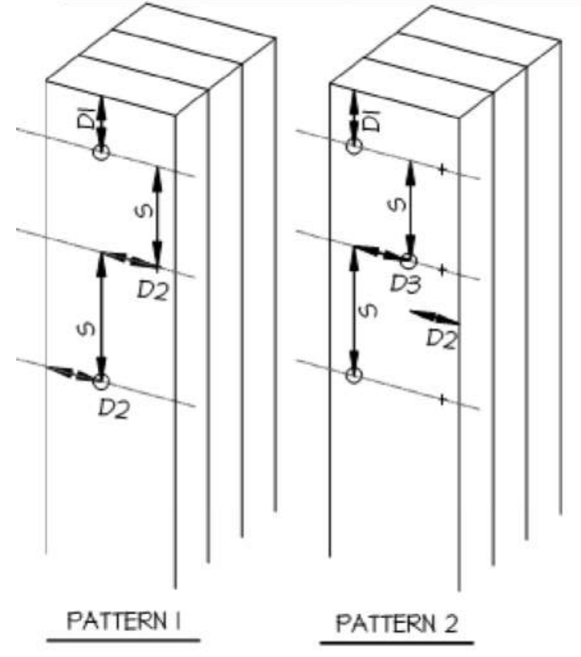


C TYP. STAIR SECTION/REQUIREMENTS

N.T.S.

NOTE: U.N.O. ALL BUILT UP STUDS (NOT WALL STUDS) SHALL BE DF #2.

BUILT UP COLUMN NAILING SCHEDULE							
BUILT UP COL. DESIG.	BUILT UP SECTION	PATTERN	END DISTANCE	EDGE DISTANCE	ROW SPACING	NAIL SPACING	NAIL SIZE
			D1	D2	D3	S	
BC26	(2) 2x6	2	2 1/2"	1 1/2"	2 1/2"	9"	10d
BC36	(3) 2x6	2	3 1/2"	1 1/2"	2 1/2"	9"	30d
BC46	(4) 2x6	2	4"	1 1/2"	2 1/2"	9"	50d
BC24	(2) 2x4	1	2 1/2"	1"	---	6"	10d
BC34	(3) 2x4	1	3 1/2"	1 1/2"	---	8"	30d



NOTE:

1. ADJACENT NAILS ARE DRIVEN FROM OPPOSITE SIDES OF COLUMN

2. CONTRACTOR MAY SUBSTITUTE ½" DIA BOLTS WITH METAL PLATE OR WASHER IN PLACE OF 30d OR 50d NAILS

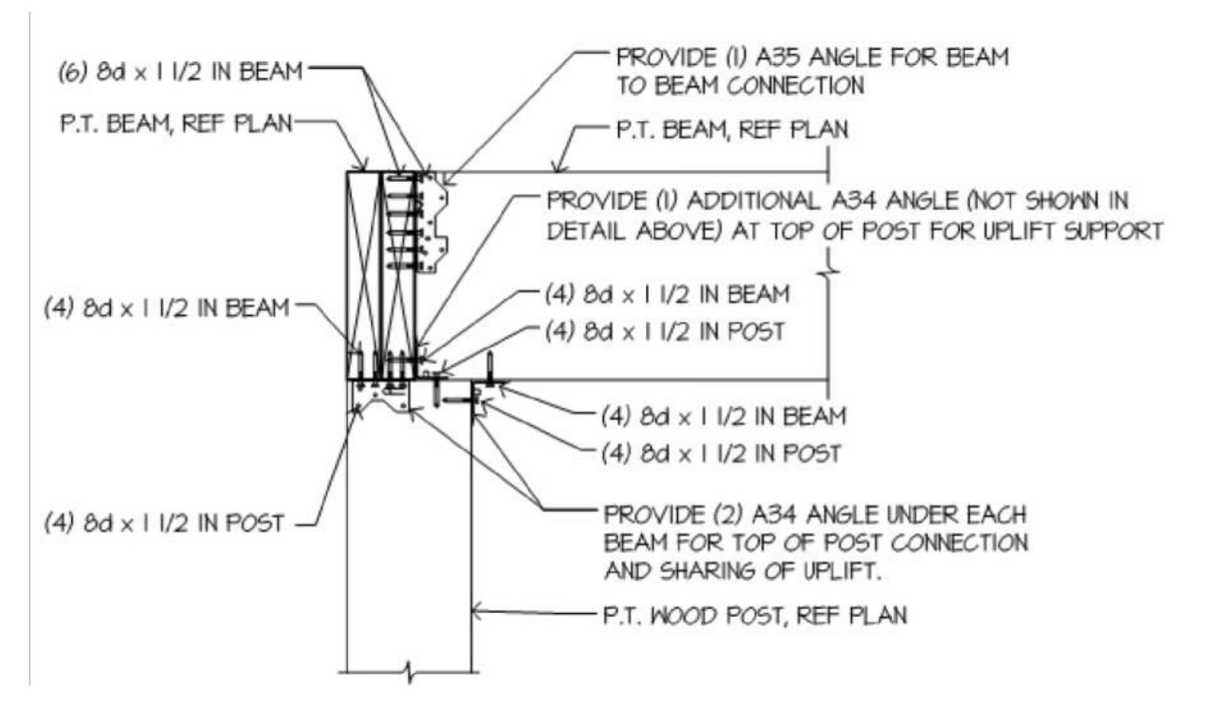
3. CONTRACTOR SHALL PRE-DRILL STUDS WITH ⅛" DRILL BIT WHEN USING 30d AND 50d NAILS TO PREVENT SPLITTING OF WOOD

4. CONTRACTOR SHALL PRE-DRILL STUDS WITH ⅛" DRILL BIT WHEN USING 30d AND 50d NAILS TO PREVENT SPLITTING OF WOOD

○ ---INDICATES NAILS DRIVEN FROM NEAR FACE
+ ---INDICATES NAILS DRIVEN FROM FAR FACE

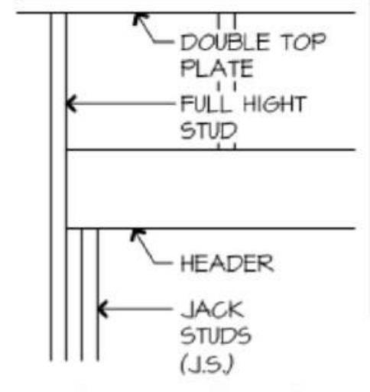
H BUILT-UP COLUMN DETAIL REQUIREMENTS

N.T.S.



G POST TO BEAM CONNECTION

N.T.S.



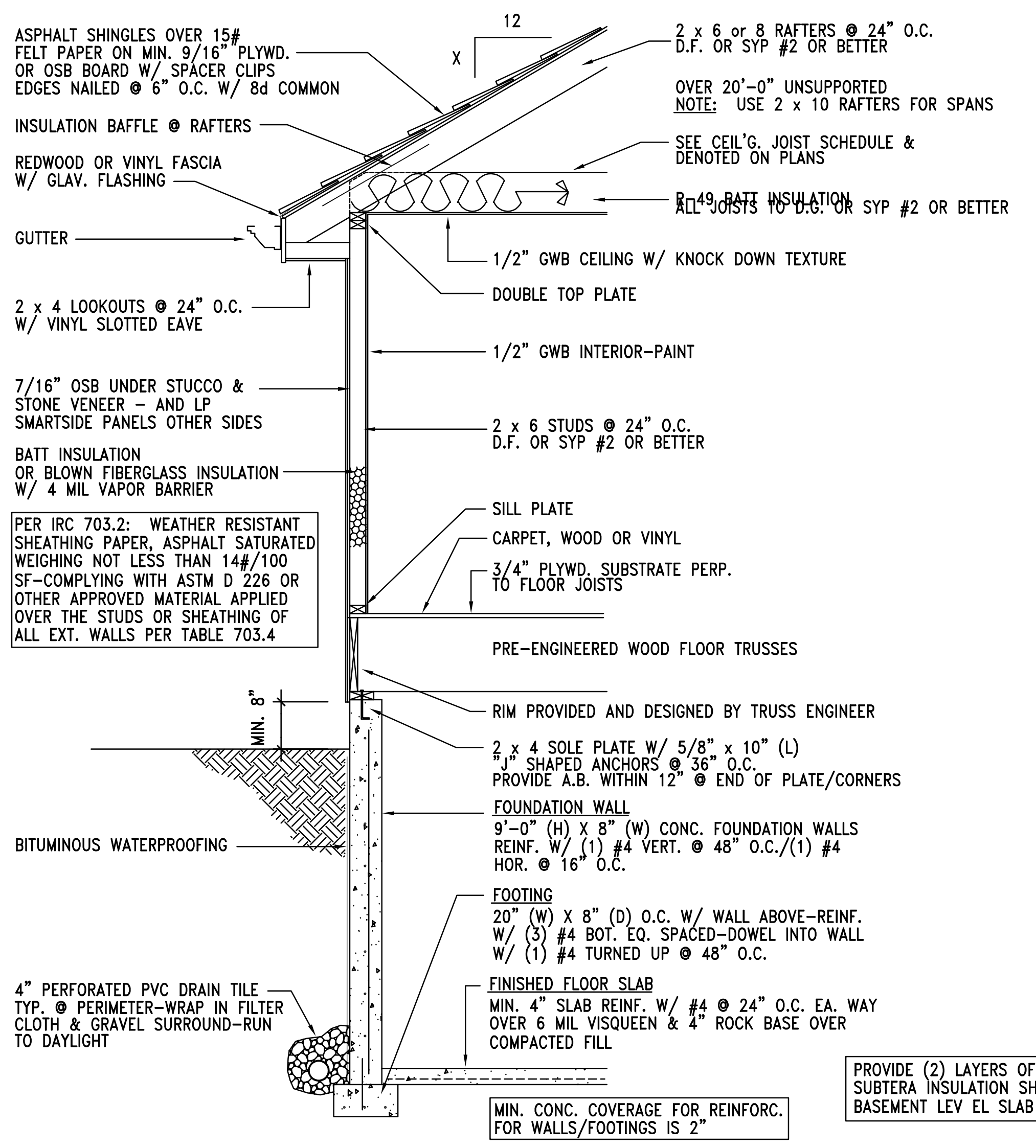
TYPICAL HEADER

BEARING WALL HEADERS					
INTERIOR WALL (1 FLOOR)3			EXTERIOR WALL (ROOF ONLY)		
SPAN	SIZE	NO. J.S.	SPAN	SIZE	NO. J.S.
0'-0" - 4'-5"	(2) 2x8	2	0'-0" - 5'-4"	(2) 2x8	2
4'-6" - 5'-5"	(2) 2x10	2	5'-5" - 6'-6"	(2) 2x10	2
5'-6" - 6'-3"	(2) 2x12	2	6'-7" - 7'-6"	(2) 2x12	2
INTERIOR WALL (2 FLOORS)3			EXTERIOR WALL (ROOF + FLOOR)		
0'-0" - 3'-2"	(2) 2x8	2	0'-0" - 4'-6"	(2) 2x8	2
3'-3" - 3'-10"	(2) 2x10	3	4'-7" - 5'-6"	(2) 2x10	2
3'-11" - 4'-5"	(2) 2x12	3	5'-7" - 6'-5"	(2) 2x12	2
			EXTERIOR WALL (ROOF + 2 FLOORS)		
			0'-0" - 3'-9"	(2) 2x8	2
			3'-10" - 4'-7"	(2) 2x10	2
			4'-8" - 5'-3"	(2) 2x12	2

NOTES:
1. NOT FOR OPEN WEB FLOOR TRUSS SYSTEMS
2. BASED ON A MAXIMUM JOIST SPAN OF 18FT
3. HEADERS SUPPORT FLOOR LOADS ONLY. RE: PLANS OR CONTACT ENGINEER IF ROOF LOADS NEED TO BE SUPPORTED.
4. FRAMER SHOULD CONSULT IRC TABLE R502.5(1) FOR LOAD BEARING HEADERS USING 30PSF GROUND SNOW LOAD AND THE MAX. BUILDING WIDTH. FRAMER SHALL PROVIDE THE MORE STRINGENT CHOICE BETWEEN THE IRC TABLE AND THIS DETAIL.
5. FRAMER SHALL CONTACT ENGINEER IF ENGINEERED LUMBER IS TO BE UTILIZED.

E BEARING WALL HEADER SCHEDULE

N.T.S.



PER IRC 703.2: WEATHER RESISTANT SHEATHING PAPER, ASPHALT SATURATED WEIGHING NOT LESS THAN 14#/100 SF-COMPLYING WITH ASTM D 226 OR OTHER APPROVED MATERIAL APPLIED OVER THE STUDS OR SHEATHING OF ALL EXT. WALLS PER TABLE 703.4

MIN. CONC. COVERAGE FOR REINFORC. FOR WALLS/FOOTINGS IS 2"

PROVIDE (2) LAYERS OF 2" HALO SUBTERA INSULATION SHEETS UNDER BASEMENT LEV EL SLAB

B TYP. WALL FRAMING SECTION

N.T.S.

ALL STUD PACKS NOT SHOWN ARE TO BE MIN (2) 2 x 4(6)'S U.S.O.

- ╳ INTERIOR POINT LOADS-NOT ON FOUNDATION
- ▨ INTERIOR LOAD BEARING WALL
- ⊏ ⊐ LOAD BEARING WALL FROM ABOVE
- ┐┌ SIMPSON STRONG TIE HUS410, 412 OR 414 OR EQUAL. W/ LVL REQUIRED FASTENING

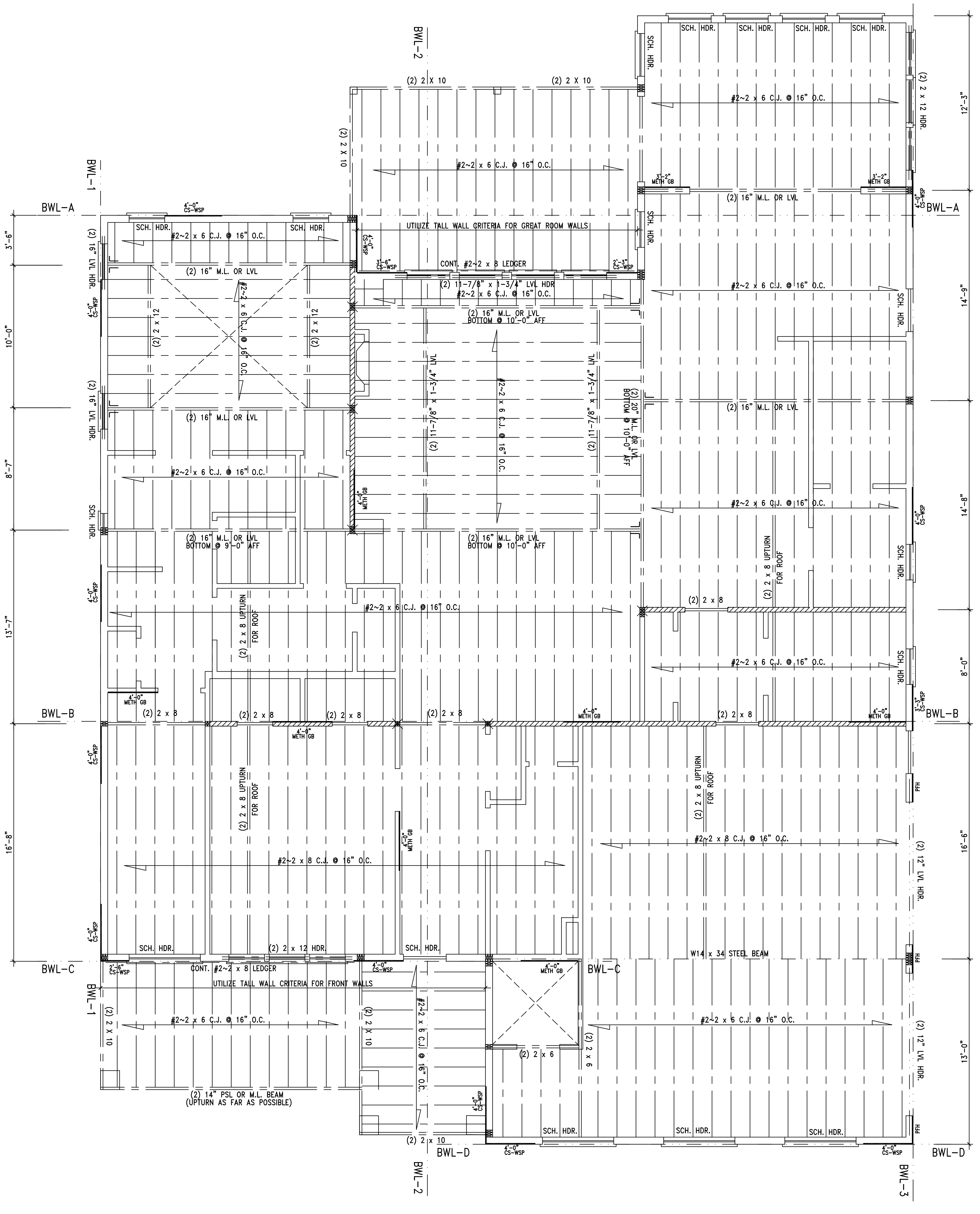
SIMPSON STRAP/SADDLE HANGERS @ LVL'S & BEAMS
ALL BEAMS/HEADERS ARE ASSUMED FLUSH U.N.O.

LVL REQUIRED BEARING (PARALELL W/ BEARING WALL)
MIN. 50% OF TOTAL LVL THICKNESS (I.E. 9-1/4" LVL = 4.6")

LVL REQUIRED FASTENING
2 PLY LVL CONNECTED WITH SIMPSON ASSEMBLY A STRONG-DRIVE SCREWS (2) 1-3/4" SDS x 1/4" x 3-1/2" W/ (2) ROWS NAILING PATTERN AT 12" O.C.

LVL TO LVL BEAM CONNECTION
SIMPSON STRONG TIE HUS410 OR EQ. W. LVL REQ. FASTENING

CEILING JOIST/ATTIC LOADS
CEILING JOIST ALLOWABLE SPANS ARE BASED ON IRC TABLE R802.4(1) FOR UNHABITABLE ATTICS WITH NO STORAGE UTILIZING L.L. = 10 PSF AND D.L. = 5 PSF



A MAIN LEVEL FRAMING PLAN

1/4" = 1'-0"

STATE OF MISSOURI
AARON H. BROWN
NUMBER A-7215
REGISTERED ARCHITECT

AOR: AARON BROWN
MO #: A-7215
4334 QUARTER HORSE LANE
BATES CITY, MO 64011
816-588-1178

BOYER RESIDENCE
725 SW 15TH CIRCLE
LEE'S SUMMIT, MISSOURI 64081

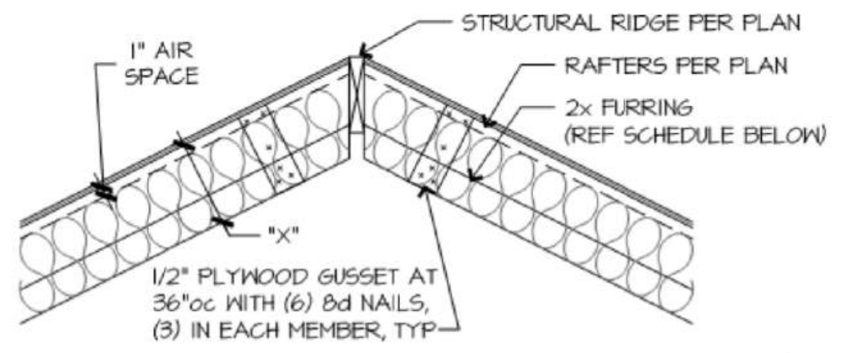
DATE: 07-22-2021
SUBDIVISION: ______________
PLOT #: ________________

REVISION	DATE

ISSUED: PERMIT/CONSTRUCTION

A4

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/06/2021



FURR OUT SCHEDULE		
RAFTER SIZE	R-30C INSULATION ("X"=9¼")	R-38C INSULATION ("X"=11¼")
2x6	2x6	2x8
2x8	2x4	2x6
2x10	NOT REQUIRED	2x4
2x12	NOT REQUIRED	NOT REQUIRED

C FUR DOWN RAFTER REQUIREMENTS

N.T.S.

ROOF RAFTER SCHEDULE						
GRADE	MEMBER SIZE / SPACING	MAX SPAN CEILING JSTS AT TOP PLATE	MAX SPAN H_C/H_R=0.16	MAX SPAN H_C/H_R=0.20	MAX SPAN H_C/H_R=0.25	MAX SPAN H_C/H_R=0.33
#2 DF/L	2x6 / 16"oc	14'-1"	12'-8"	11'-8"	10'-9"	9'-5"
#2 DF/L	2x8 / 16"oc	18'-2"	16'-4"	15'-1"	13'-9"	12'-2"
#2 DF/L	2x10 / 16"oc	22'-3"	20'-0"	18'-5"	16'-8"	14'-8"
#2 DF/L	2x12 / 16"oc	25'-9"	23'-2"	21'-4"	19'-7"	17'-3"

CEILING JOISTS AND RAFTER CONNECTIONS

CEILING JOISTS AND RAFTERS SHALL BE TED TO ONE ANOTHER PER TABLES R602.3(1) AND R802.5.1(9) AND THE ASSEMBLY SHALL BE NAILED TO THE TOP PLATE PER R602.3(1)

CEILING JOIST NOT PARALLEL TO RAFTERS USE SUBFLOORING OR METAL STRAPS ATTTACHED TO END OF THE RAFTERS TO PROVIDE A CONT. TIE ACROSS THE STRUCTURE

TIE DOWN REQUIREMENTS (R802.11)

FOR RAFTER SPANS OVER 20'-0" INTERPOLATING TABLE 802.11 PROVIDE RATER TIE-DOWNS CAPABLE OF RESISTING OVER 226 POUNDS AT EACH RAFTER

PER TABLE R802.5.1(2) THE MAX RAFTER SPAN FOR D.F.L. 2 x 6 RAFTERS #2 GRADE = 14'-1" AND IS THE BASIS OF DESIGN FOR PURLIN PLACEMENT

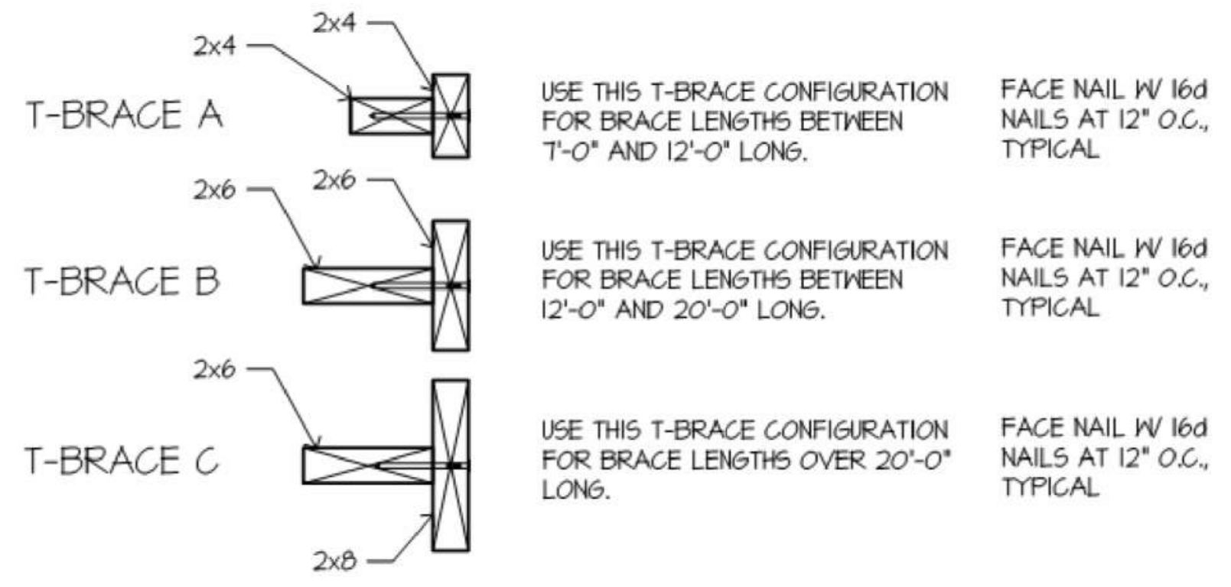
ALL RIDGE BEAMS TO BE 2 x 12 OR 2 x 10
RAFTER TIES/COLLARS REQUIRED AT ALL LOCATIONS

RAFTER/CEILING JOIST HEEL CONNECTIONS

PROVIDE (5) 16D NAILS AT EACH HEEL JOINT (RAFTER-JOIST, RAFTER-TIE) CONNECTION. ALSO DENOTED IN DETAIL FOR TYP. ROOF/ RAFTER FRAMING. THIS MEETS/EXCEEDS TABLE 802.5.1(9) FOR ROOF SPANS UP TO 28'-0" MAX. 9/12 PITCH AND RAFTERS 16" O.C.

ROOF FRAMING CONNECTION TO BEAMS

WHERE LVL IS BE INSTALLED IN PLANE, PROVIDE SIMPSON STRONG TIE LRU28Z RAFTER HANGERS EA. RAFTER TO LVL. EACH END OF LVL TO BE SECURED TO SUPPORTING CONSTRUCTION WITH SST LSTA15 OR EQUIVALENT STRAP W/ 1100 LBS. CAPACITY. STRAPPING SHALL BE REQUIRED AT ALL NON-CONT. MEMBERS BETWEEN BEAM & TOP OF FLOOR



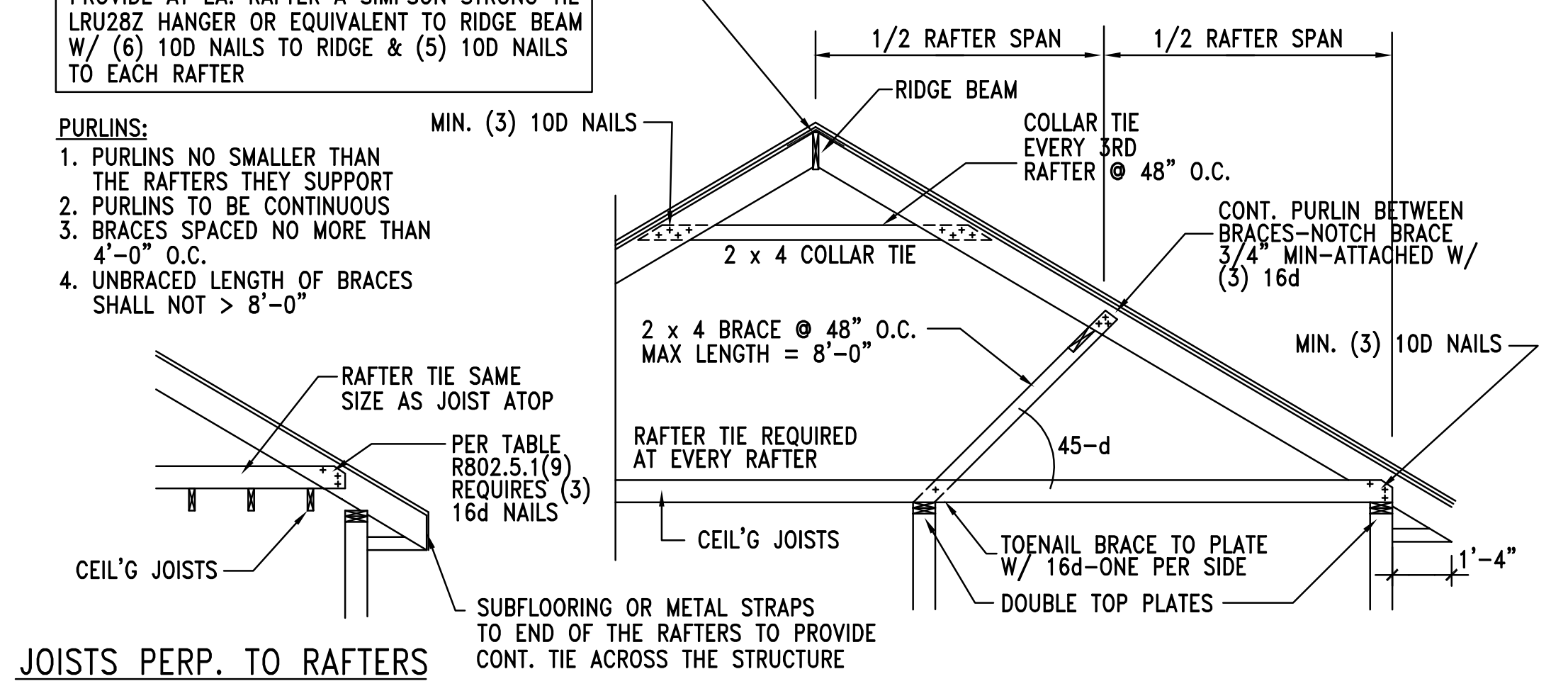
T-BRACE A	USE THIS T-BRACE CONFIGURATION FOR BRACE LENGTHS BETWEEN 7'-0" AND 12'-0" LONG.	FACE NAIL W/ 16d NAILS AT 12" O.C., TYPICAL
T-BRACE B	USE THIS T-BRACE CONFIGURATION FOR BRACE LENGTHS BETWEEN 12'-0" AND 20'-0" LONG.	FACE NAIL W/ 16d NAILS AT 12" O.C., TYPICAL
T-BRACE C	USE THIS T-BRACE CONFIGURATION FOR BRACE LENGTHS OVER 20'-0" LONG.	FACE NAIL W/ 16d NAILS AT 12" O.C., TYPICAL

RAFTER TIES:
1. REQUIRED AT ALL RAFTERS
2. MIN. OF 2 x 4 AND SPACED NO GREATER THAN 48" O.C.

FOR FULL VAULT

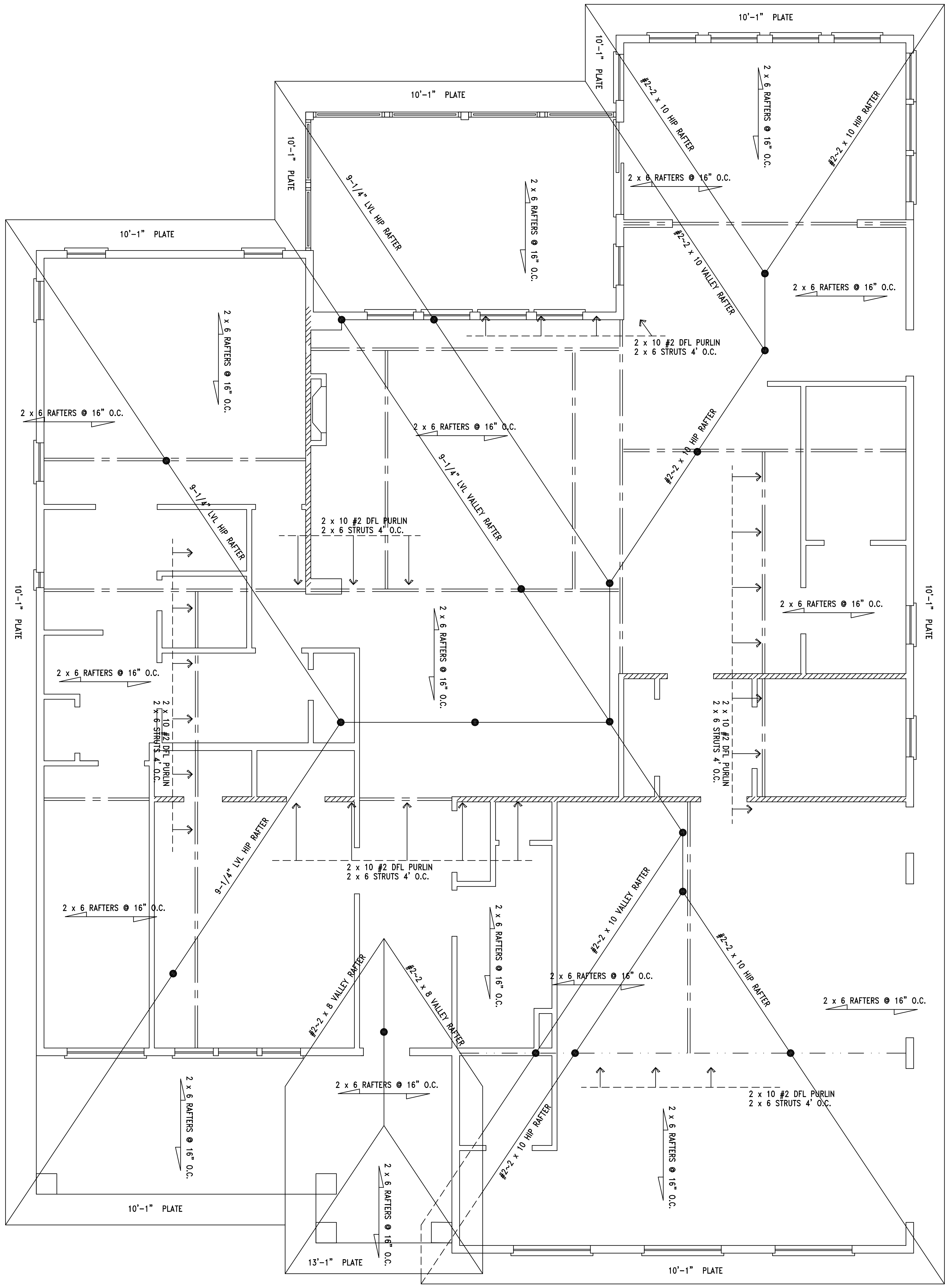
WHERE NO COLLAR TIES CAN BE INSTALLED, PROVIDE AT EA. RAFTER A SIMPSON STRONG TIE LRU28Z HANGER OR EQUIVALENT TO RIDGE BEAM W/ (6) 10D NAILS TO RIDGE & (5) 10D NAILS TO EACH RAFTER

PURLINS:
1. PURLINS NO SMALLER THAN THE RAFTERS THEY SUPPORT
2. PURLINS TO BE CONTINUOUS
3. BRACES SPACED NO MORE THAN 4'-0" O.C.
4. UNBRACED LENGTH OF BRACES SHALL NOT > 8'-0"



B TYP. ROOF/RAFTER FRAMING

N.T.S.



A ROOF PLAN

1/4" = 1'-0"

AOR: AARON BROWN
MO #: A-7215
4334 QUARTER HORSE LANE
BATES CITY, MO 64011
816-588-1178

BOYER RESIDENCE
725 SW 15TH CIRCLE
LEE'S SUMMIT, MISSOURI 64081

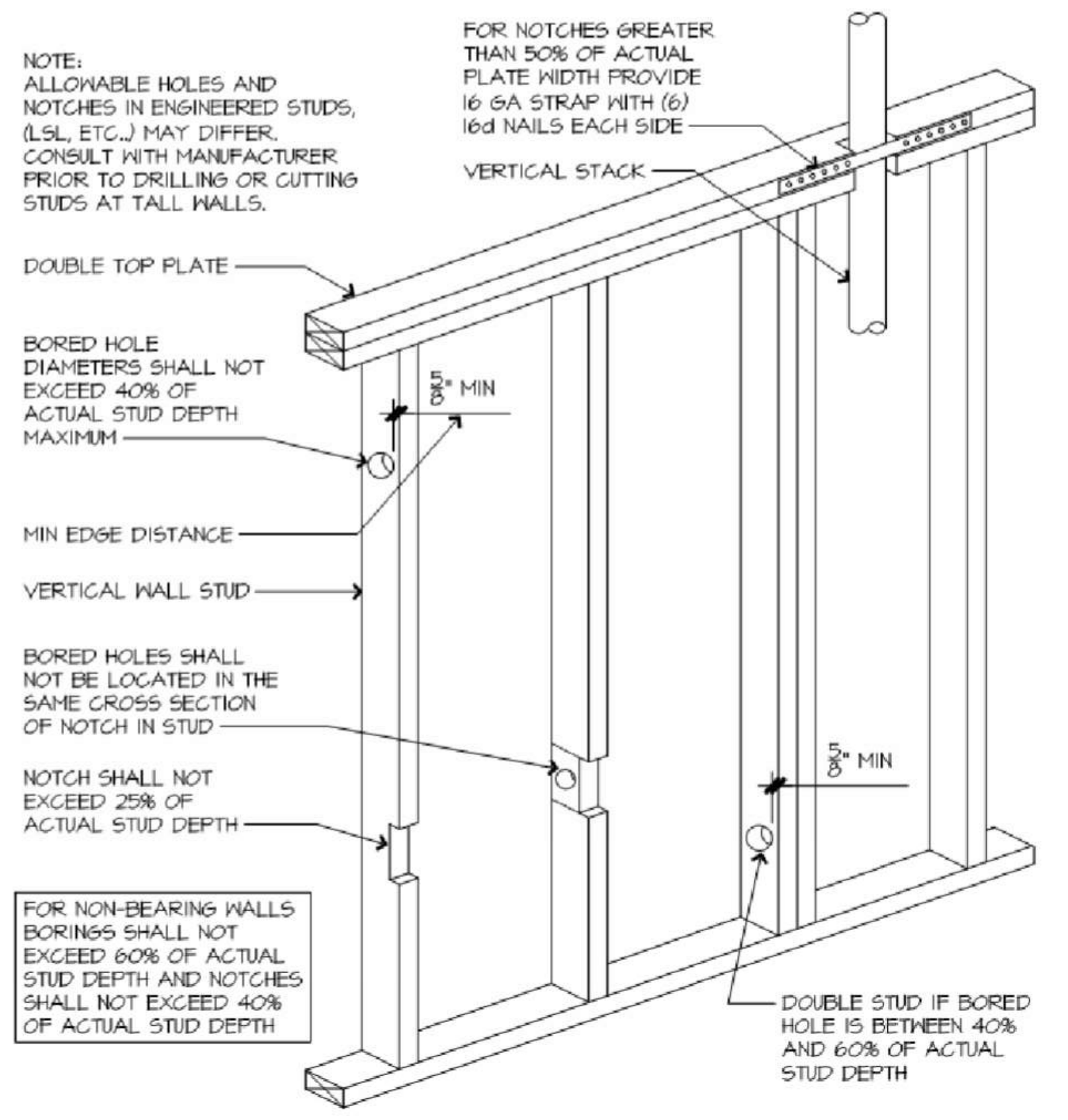
DATE: 07-22-2021
SUBDIVISION: ________________
PLOT #: ________________

REVISION	DATE

ISSUED: PERMIT/CONSTRUCTION

A5

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/06/2021



E PARTITION NOTCHING REQUIREMENTS

N.T.S.

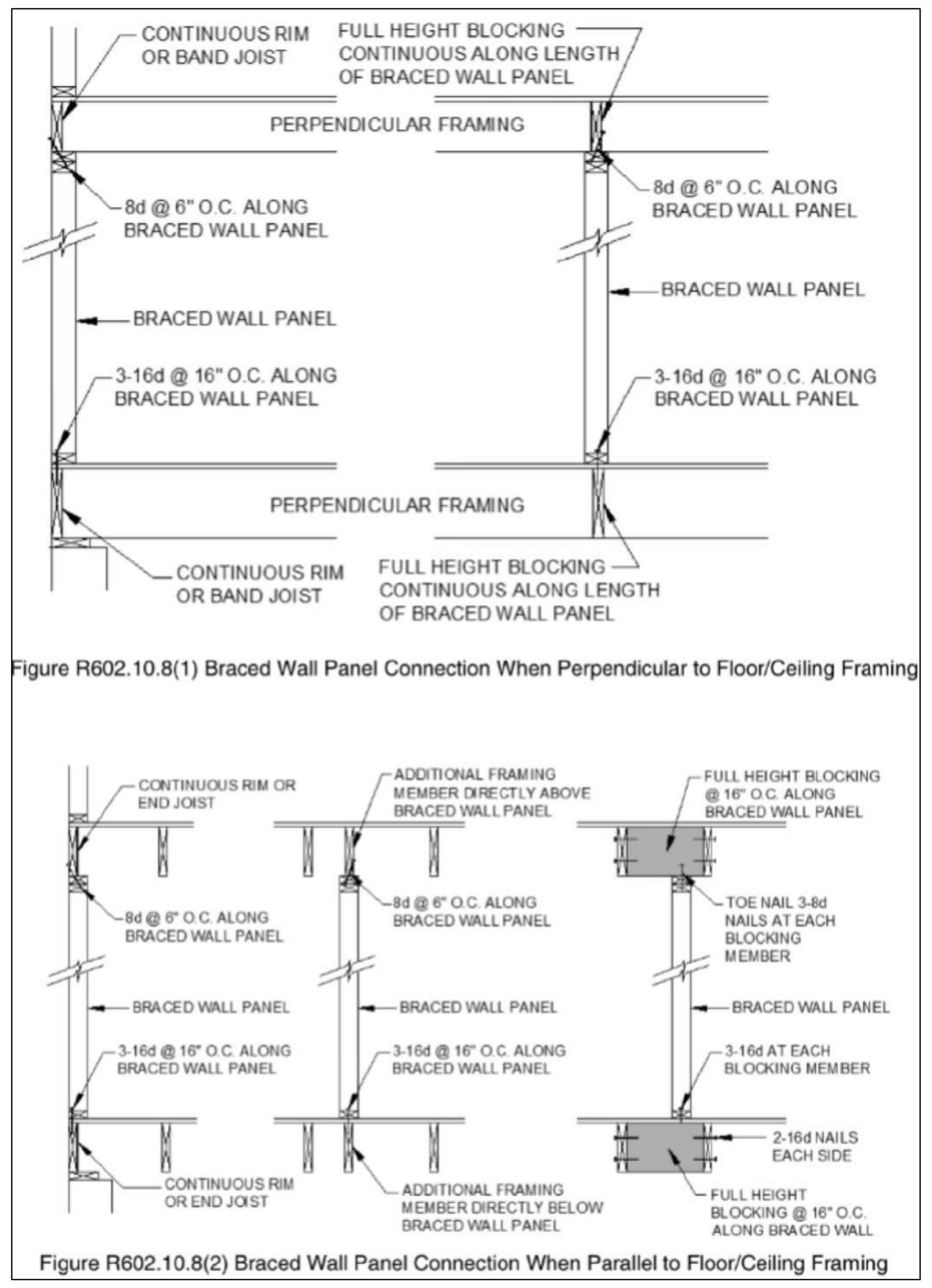


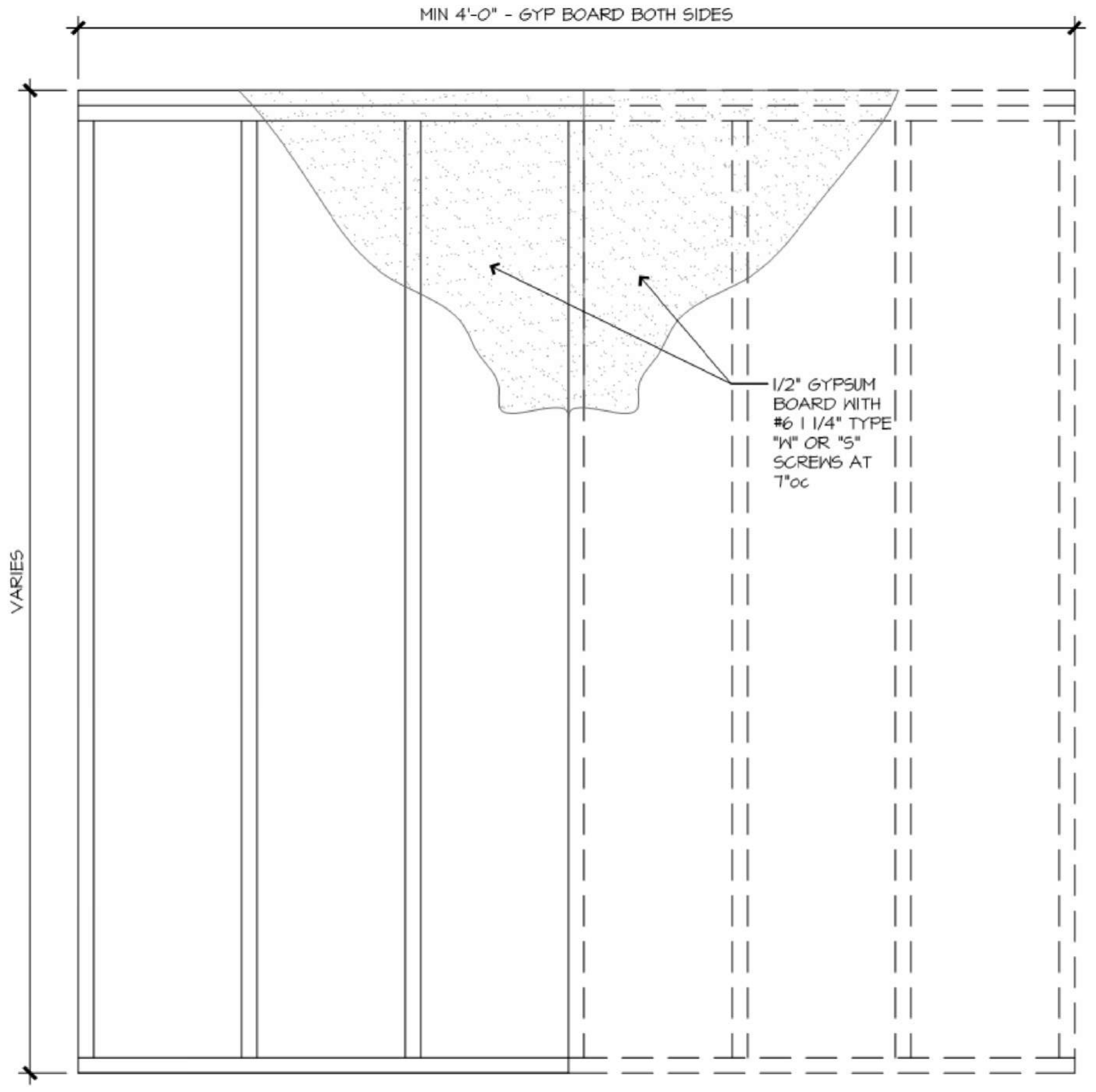
Figure R602.10.8(1) Braced Wall Panel Connection When Perpendicular to Floor/Ceiling Framing

Figure R602.10.8(2) Braced Wall Panel Connection When Parallel to Floor/Ceiling Framing

D BRACED WALL SEGMENT ATTACHMENT CEILING/FLOOR

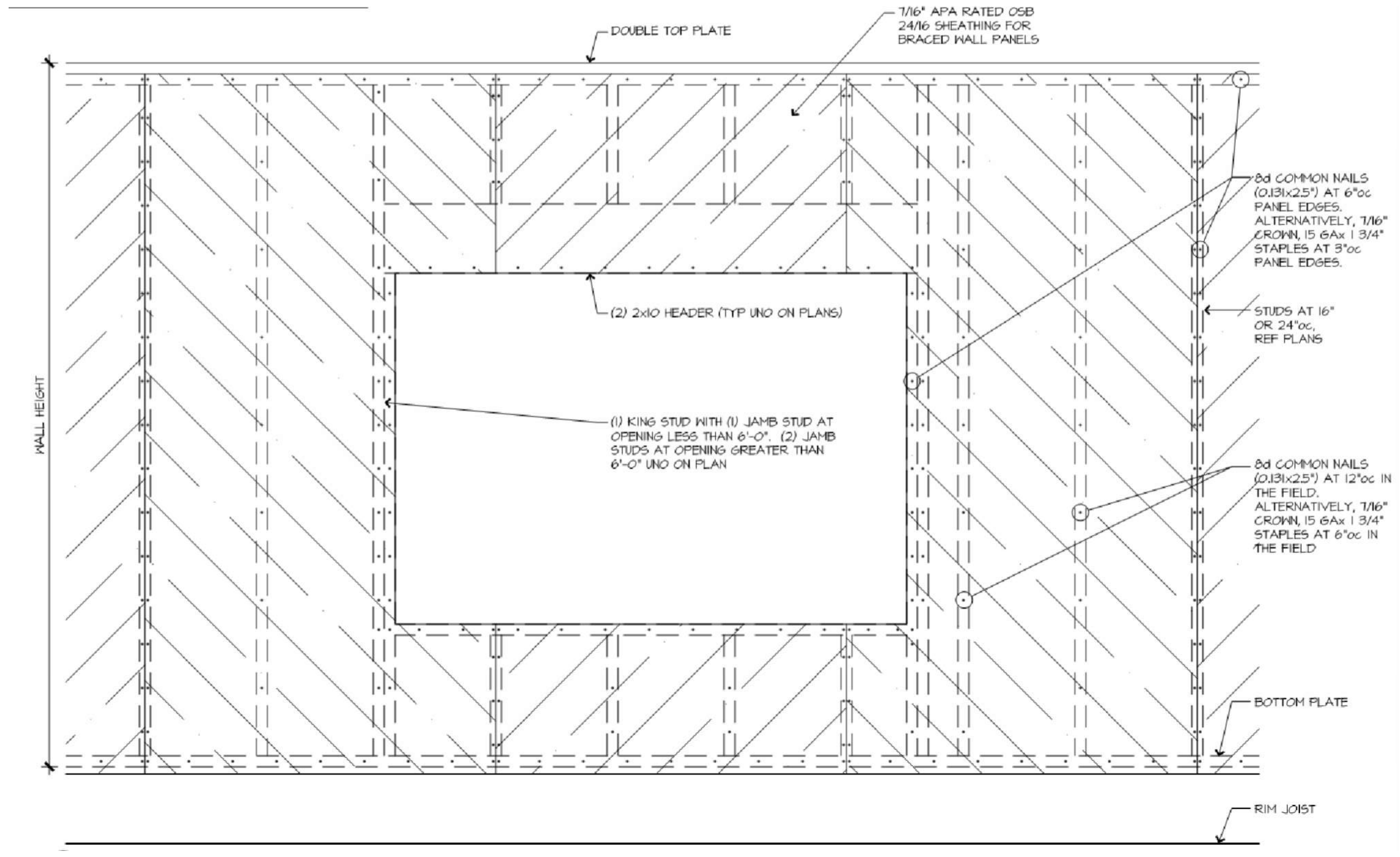
2012 IRC SECTION R602.10.8

N.T.S.



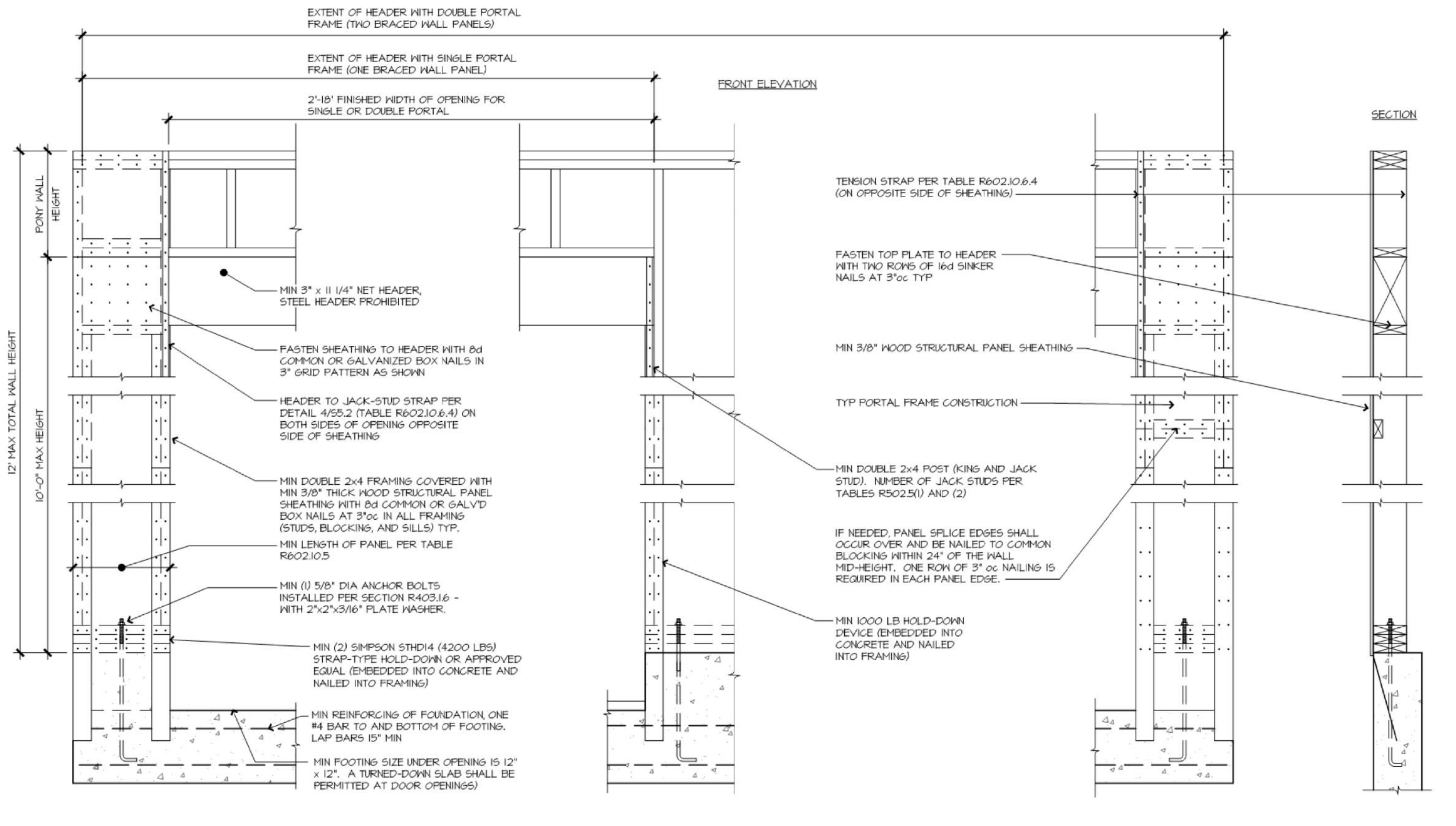
C METHOD GB CRITERIA

N.T.S.



B METHOD CS-WSP CRITERIA

N.T.S.



A PORTAL FRAME W/ HOLD-DOWN (PFH)

PER 2012 IRC R602.10

NUMBER A-7215

AOR: AARON BROWN
MO #: A-7215
4334 QUARTER HORSE LANE
BATES CITY, MO 64011
816-588-1178

BOYER RESIDENCE
725 SW 15TH CIRCLE
LEE'S SUMMIT, MISSOURI 64081

DATE: 07-22-2021

SUBDIVISION: ______________
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REVISION	DATE

ISSUED: PERMIT/CONSTRUCTION

A6

RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
08/06/2021