

# ROOF Scale: 1/4" = 1'-0"

#### \*ALL RAFTERS SHALL BE 2' X 6' #2 @ 16' D.C., UNLESS NOTED OTHERWISE.

SEE DETAIL 7/S3.2 FOR ALTERNATE RAFTER BEARING DETAIL WHEN RAFTERS ARE REQUIRED TO BEAR HIGHER THAN THE VALL DOUBLE TOP PLATE.

Flashing NDTE:

DRIP EDGE, VALLEYS AND FLASHINGS TO BE METAL CLAD.

RDDF NDTES: RDDF DESIGNED FOR LIGHT RDDF COVERING 30psf TDTAL LDAD [10psf DL, 20psf LL (SL)]

\* RAFTERS (HEM-FIR, DDUG-FIR, DR EQUAL): SEE SPAN CHARTS BELDV

CODE NINIMUM

	<u>CUDE MINI</u>	MUM		_
	RAFTERS	SPACING	MAX HORIZONTAL CLEARSPAN	
	#2-2x6	@24″ D.C.	11′-7 <b>′</b>	
>>>	#2-2x6	<b>@16″</b> D.C.	14'-2 <b>'</b>	] ‹‹‹
	#2-2x8	@24″ D.C.	14'-8"	
	#2-2x8	<b>@16″</b> D.C.	17'-11 <b>'</b>	
	#2-2x10	@24″ D.C.	17'-10 <b>'</b>	
	#2-2x10	<b>0</b> 16″ D.C.	21′-11 <b>′</b>	
	NOTE: COD	E MINIMUM ALL	N/S END & DAFTED DEFLECTION	TE 1 /190

Note: Code Minimum Allows for a rafter deflection of L/180 total Load

### HIGHER PERFORMANCE (RECOMMENDED)

RAFTERS	SPACING	MAX HORIZONTAL CLEARSPA
#2-2x6	@24″ D.C.	8′-6 <b>′</b>
#2-2x6	<b>@16″</b> D.C.	9′-9 <b>′</b>
#2-2x8	@24″ D.C.	11′-3 <b>′</b>
#2-2x8	<b>@16″</b> D.C.	12′-9 <b>′</b>
#2-2x10	@24″ D.C.	14'-3"
#2-2x10	<b>@16″</b> D.C.	16'-3 <b>'</b>
DEFLECTIO	N = L/360 LI	VE LOAD, L/240 TOTAL LOAD

\* VAULTS TO BE 2×10 DEPTH

\* RIDGE BDARDS ARE: (UNLESS OTHERWISE NOTED) - #2- 2X8 UP TO 10/12 PITCH

+ #2- 2X10 DVER 10/12 PITCH
\* ALL HIPS & VALLEYS ARE: (UNLESS DTHERWISE NOTED)
- #2- 2X8 UP TO 10/12 PITCH

- #2- 2X10 DVER 10/12 PITCH

\* PURLINS ARE 2X6 MIN. - PURLIN STRUTS ARE AT 4'-0' D.C.

- PURLIN STRUTS SHALL BE INSTALLED AT NOT LESS THAN A

45 degree angle with the Horizontal – All Purlins struts shall have a maximum unbraced length of 8'-0'

- Purlins struts shall be constructed in a "t" configuration and per the following chart:

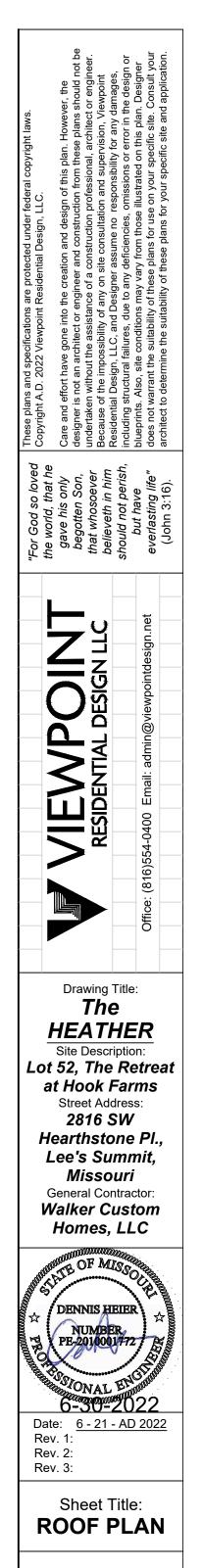
purlin strut	MAX PURLIN STRUT LENGTH
(2) 2x4	8'-0 <b>'</b>
(1) 2x4 & (1) 2x6	12'-0 <b>'</b>
(1) 2x6 & (1) 2x8	20'-0 <b>'</b>
(2) 2x6 & (1) 2x8	30'-0 <b>'</b>
CONSULT ARCH./ENGR. >	30'-0 <b>'</b>
	(2) 2x4 (1) 2x4 & (1) 2x6 (1) 2x6 & (1) 2x8 (2) 2x6 & (1) 2x8

 \* RIDGE BRACES ARE SAME AS PURLIN BRACES-SPACING, SIZE, CONFIGURATION, & INSTALLATION (SEE PURLIN BRACE NDTES ABOVE)
\* HIP & VALLEY BRACES ARE SAME AS PURLIN SIZE, CONFIGURATION, & INSTALLATION (SEE PURLIN BRACE NDTES ABOVE)

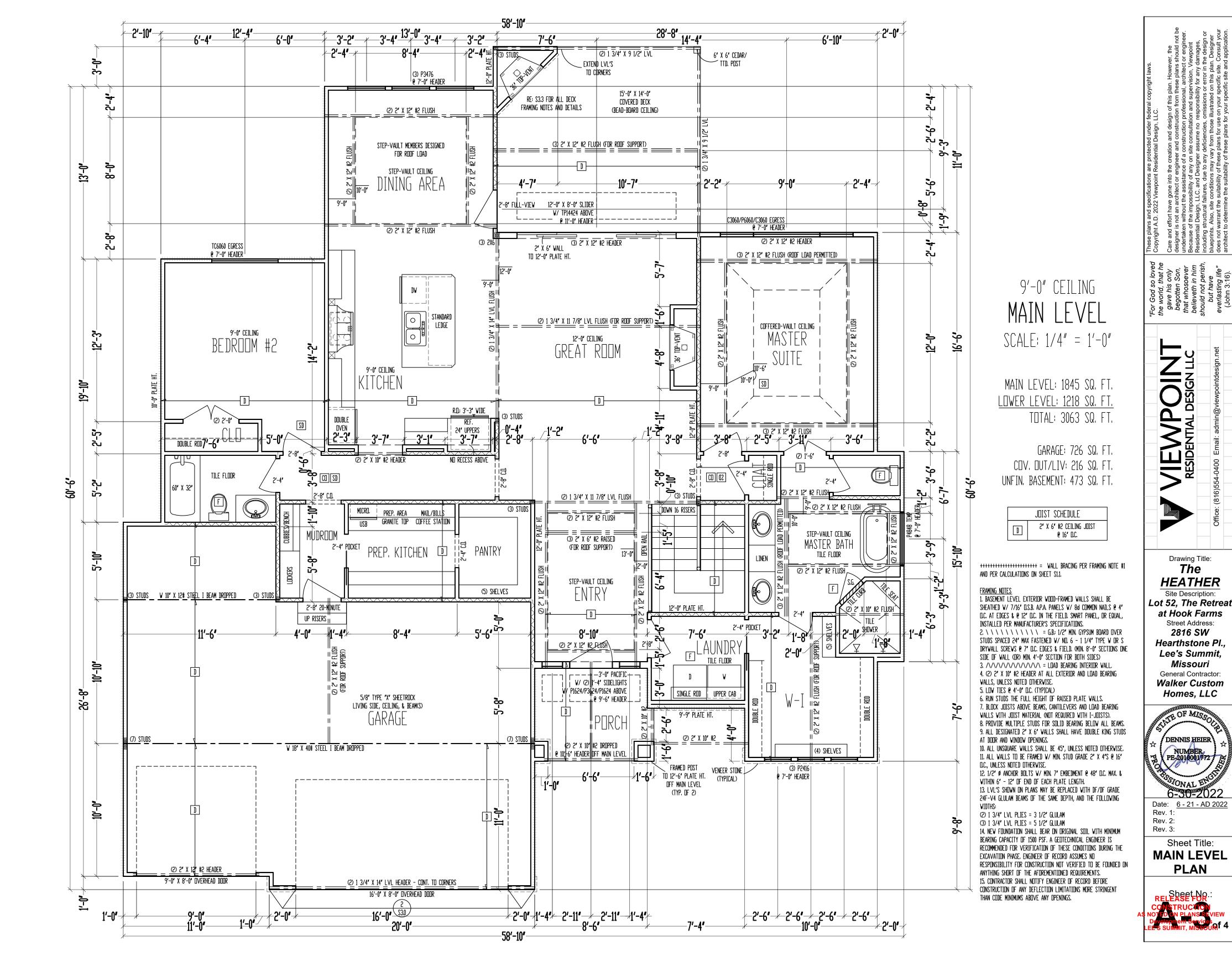
\* vertical brace if dot is under hip or valley \* slash is top end of brace ( / ),

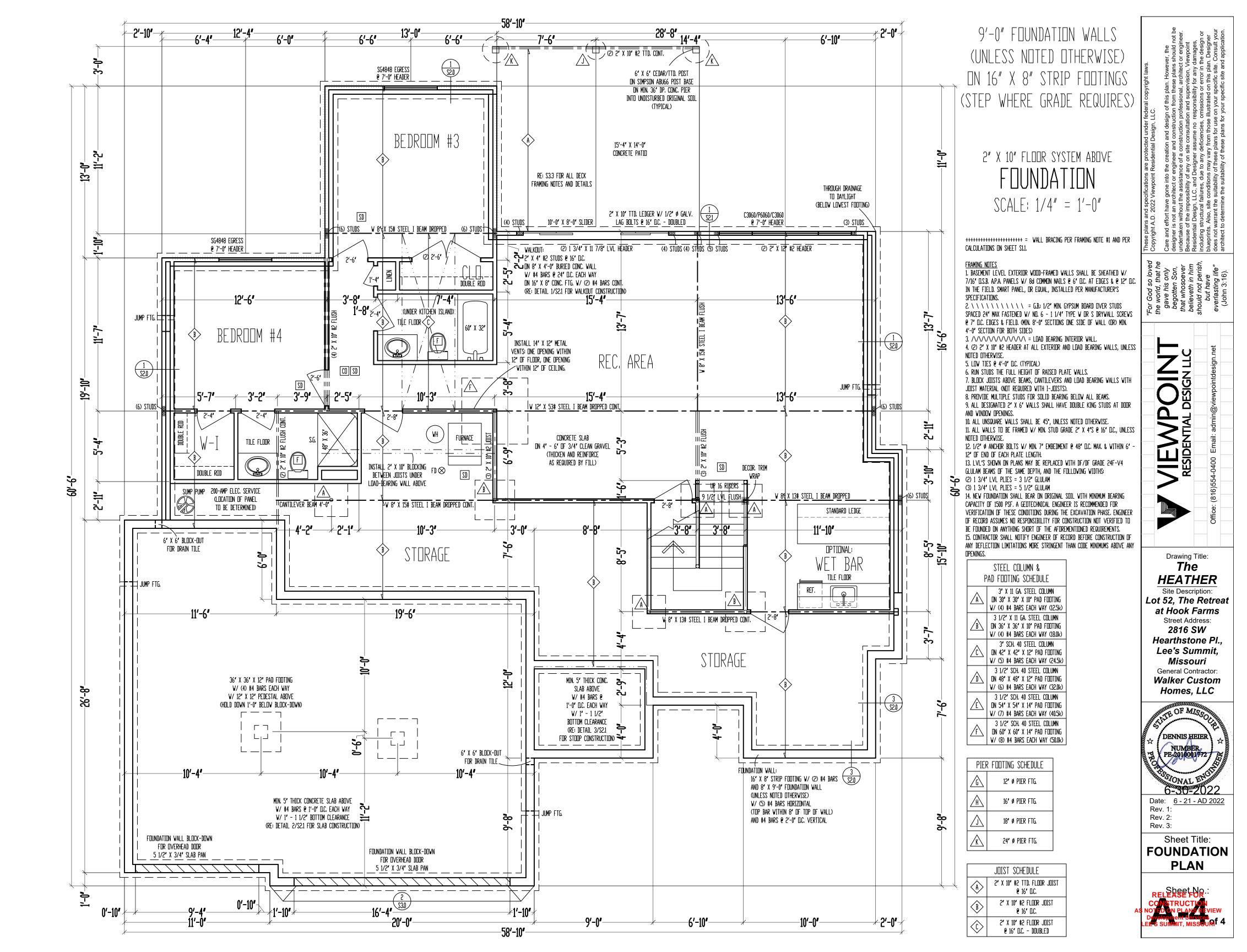
DOT IS BOTTOM OF BRACE ( o ).	
* ~~~~~ DENDITES BEARING WA	LL
* DENDTES ROOF BRACE	
* Denotes Purlin	

\*----- DENDITES BEARING STRUCTURE









	FASTENER SCHEDULE FOR STRUCTURAL MEMBERS	
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
	ROOF <sup>1</sup>	
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOE NAIL	4-8d (2 <mark>½</mark> " x 0.113")	TOENAIL
CEILING JOISTS TO PLATE, TOE NAIL	4-8d (2½" x 0.113")	PER JOIST, TOENAIL
CEILING JOISTS NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS, FACE NAIL	4-10d (3" x 0.128")	FACE NAIL
CEILING JOIST TO PARALLEL RAFTER (HEEL JOINT)	TBLE R802.5.2	FACE NAIL
COLLAR TIE TO RAFTER, FACE NAIL OR 1 $\frac{1}{4}$ " x 20 GA. RIDGE STRAP TO RAFTER	4-10d (3" x 0.128")	FACE NAIL, EACH RAFTER
RAFTER OR ROOF TRUSS TO PLATE	3-16d BOX NAILS (3½" x 0.135") OR 3-10d COMMON NAILS (3" x 0.148")	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS
ROOF RAFTERS TO RIDGE, VALLEY, OR HIP RAFTERS OR ROOF RAFTER TO MINIMUM 2" RIDGE BEAM	4-16d (3 ½" x 0.135") - TOENAIL; 3-16d BOX (3 ½" x 0.135") - END NAIL	TOENAIL, END NAIL
	WALL	
STUD TO STUD (NOT AT BRACED WALL PANELS)	10d (3" x 0.128")	16" O.C. FACE NAIL
STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d (3 <b>½</b> " x 0.135")	12" O.C. FACE NAIL
BUILT-UP HEADER, TWO PIECES WITH 🔏 "SPACER	16d (3 <b>½</b> " x 0.135")	12" O.C. EACH EDGE FACE NAIL
CONTINUOUS HEADER TO STUD	4-8d (2½" x 0.131")	TOENAIL
TOP PLATE TO TOP PLATE	10d (3" x 0.128")	12" O.C. FACE NAIL
DOUBLE TOP PLATE SPLICE	8-16d COMMON (3 ½" x 0.162")	FACE NAIL ON EACH SIDE OF END JOINT (MIN. 24' LAP SPLICE LENGTH EACH SIDE OF END JOINT)
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON (3 <del>1</del> /2" x 0.162")	16" O.C. FACE NAIL
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING (AT BRACED WALL PANEL)	3-16d BOX (3 <del>2</del> " x 0.135")	3 EACH 16" O.C. FACE NAIL
TOP OR SOLE PLATE TO STUD, END NAIL	4-8d BOX (2 ½" x 0.113") - TOENAIL; 3-16d BOX (3 ½" x 0.135") - END NAIL	TOENAIL, END NAIL (SEE LEFT)
TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	3-10d BOX (3" x 0.128")	FACE NAIL
1" BRACE TO EACH STUD AND PLATE	3-8d BOX (2 <del>1</del> /2" x 0.113")	FACE NAIL
1"x6" SHEATHING TO EACH BEARING	3-8d BOX (2 <del>1/</del> " x 0.113")	FACE NAIL
1"x8" SHEATHING TO EACH BEARING	3-8d BOX (2 ½" x 0.113") - FACE NAIL; WIDER THAN 1"x8" - 4-8d BOX (2 ½" x 0.113")	FACE NAIL
	FLOOR	
JOIST TO SILL, TOP PLATE, OR GIRDER	4-8d BOX (2 <del>1</del> /2" x 0.113")	TOE NAIL
RIM JOIST, BAND JOIST, OR BLOCKING TO SILL OR TOP PLATE (ROOF APPLICATIONS ALSO)	8d BOX (2 <del>1</del> /2" x 0.113")	4" O.C. TOE NAIL
1" x 6" SUBFLOOR OR LESS TO EACH JOIST	3-8d BOX (2 <sup>1</sup> / <sub>2</sub> " x 0.113")	FACE NAIL
2" SUBFLOOR TO JOIST OR GIRDER	3-16d BOX (3 ½" x 0.135")	BLIND AND FACE NAIL
2" PLANKS (PLAN & BEAM - FLOOR AND ROOF)	3-16d BOX (3 ½" x 0.135")	AT EACH BEARING, FACE NAIL
BAND OR RIM JOIST TO JOIST	3-16d COMMON (3 ½" x 0.162")	END NAIL
BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS	10d BOX (3" x 0.128")	24" O.C. FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES
LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	4-16d BOX (3 ½" x 0.135")	AT EACH JOIST OR RAFTER, FACE NAIL
BRIDGING OR BLOCKING TO JOIST	2-10d BOX (3" x 0.128")	EACH END, TOENAIL

SCRIPTION OF BUILDING MATERIALS	FASTNER SCHEDULE FOR DESCRIPTION OF FASTENER	STRUCTURAL MEMBERS EDGE SPACING (INCHES)	INTERMEDIATE SUPPORTS (INCHES)
WOOD STRUCTURAL PANELS, SUB	FLOOR, ROOF AND INTERIOR WALL SHE	ATHING TO FRAMING AND PARTICLEBOA	ARD WALL SHEATHING TO FRAMING <sup>1</sup>
¥8" - ¥2"	6d COMMON (2" x 0.113") NAIL (SUBFLOOR, WALL) 8d COMMON NAIL (ROOF)	6	12
<sup>19</sup> <b>%</b> 32" -  1"	8d COMMON NAIL (21/2" x 0.131")	6	12
1 <b>%</b> "- 1 <b>%</b> "	10d COMMON (3" x 0.148") NAIL OR 8d (21/2" x 0.131") DEFORMED NAIL	6	12
	OTHER WALL	SHEATHING	•
2" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1 ½" GALVANIZED ROOFING NAIL, 7 HEAD DIAMETER, OR 1 ¼" LONG 16 GA. STAPLE WITH 75 "OR 1" CROWN	3	6
2巻" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1 दें" GALVANIZED ROOFING NAIL, <del>7</del> HEAD DIAMETER, OR 1 <del>1</del> र्" LONG 16 GA. STAPLE WITH <del>7</del> 6" OR 1" CROWN	3	6
∦" GYPSUM SHEATHING	1½" GALVANIZED ROOFING NAIL; STAPLE GALVANIZED, 1½" LONG; 1¼" SCREWS, TYPE W OR S	7	1 7
<b>%</b> " GYPSUM SHEATHING	1¾" GALVANIZED ROOFING NAIL; STAPLE GALVANIZED, 1½" LONG; 1½" SCREWS, TYPE W OR S	7	7
wo	OD STRUCTURAL PANELS, COMBINATIO	N SUBFLOOR UNDERLAYMENT TO FRAN	ling
ע" AND LESS	6d DEFORMED (2" x 0.120") NAIL OR 8d COMMON (2 <sup>2</sup> / <sub>2</sub> " x 0.131") NAIL	6	12
<b>∛</b> 8" - 1"	8d COMMON (2 <sup>1</sup> / <sub>2</sub> " x 0.131") NAIL OR 8d DEFORMED (2 <sup>1</sup> / <sub>2</sub> " x 0.120") NAIL	6	12
1 <b>½</b> " - 1 <b>¼</b> "	10d COMMON (3" x 0.148") NAIL OR 8d DEFORMED (22" x 0.120") NAIL	6	12

1. IF INFORMATION LISTED ON PLAN SHEETS CONTRADICTS INFORMATION IN THIS TABLE, INFORMATION ON PLANS TAKES PRECEDENCE OVER INFORMATION LISTED IN THIS TABLE

#### FOUNDATION NOTES

- PSI FOR BASEMENT AND INTERIOR FLOOR SLABS-ON-GRADE, 3000 PSI FOR FOUNDATION WALLS, AND 3500 PSI FOR PORCHES AND GARAGE FLOOR SLABS
- STANDARDS PROVIDE A MINIMUM 4"-DIAMETER PERFORATED DRAIN PIPE ALONG PERIMETER OF USABLE SPACE AT FOOTING LEVEL OR OTHER EQUIVALENT MATERIALS PER IRC SECTION R405.1. THE PIPE SHALL BE COVERED WITH A MINIMUM
- MINIMUM 20 GALLON SUMP PIT FOUNDATION SHALL BE DESIGNED FOR A BEARING CAPACITY OF 1500 PSF AND FOUNDED ON COMPETENT ORIGINAL SOIL AS DETERMINED AND CONFIRMED BY A LICENSED GEOTECHNICAL ENGINEER OR ENGINEERING GEOLOGIST. ENGINEER OF RECORD ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION NOT VERIFIED TO BE FOUNDED ON ANY
- SOIL WITH THE AFOREMENTIONED MINIMUM PROPERTIES. 5. FOOTINGS SHALL BE A MINIMUM OF 16" WIDE x 8" DEEP AND SHALL HAVE A MINIMUM OF (2) CONTINUOUS GRADE 40 #4 BARS WITH 3" BOTTOM CLERANCE. BOTTOM OF FOOTING SHALL BE LOCATED A MINIMUM OF 3'-0" BELOW GRADE FOR FROST PROTECTION.
- CONCRETE PADS SUP0PORTING COLUMN LOADS SHALL BE NO SMALLER THAN 2'-0" x 2'-0" x 1'-0" DEEP WITH A MINIMUM OF (4) GRADE 40 #4 BARS EACH WAY WITH 3" BOTTOM CLEARANCE
- FOUNDATION WALLS SHALL BE A MINIMUM OF 8" NOMINAL WIDTH AND SHALL HAVE HOIZONTAL GRADE 40 #4 BARS AT 2'-0" O.C. MAX. WITH VERTICAL #4 BARS AS REQUIRED ON FOUNDATION CROSS SECTION ON SHEET S2.0 REINFORCEMENT SHALL LAP A MINIMUM OF 2'-0" (CLASS B SPLICE)
- INTERIOR BEARING WALLS AND COLUMNS SHALL BE ISOLATED FROM THE BASEMENT FLOOR SLAB 10. BASEMENT FLOOR SLAB SHALL BE A MINIMUM OF 4" THICK ON A MINIMUM BASE COURSE OF 4" TO 6" OF SAND, GRAVEL OR CRUSHED ROCK. BETWEEN THE BASE COURSE AND FLOOR SLAB SHALL BE PLACED A 6-MIL POLY
- VAPOR RETARDER WITH MINIMUM OVERLAP OF 6" AT DISCONTINUITIES 11. IF A FLOOR IS TO BE SUPPORTED BY A MINIMUM OF 2'-0" OF GRANULAR FILL OR 8" OF EARTH, BASEMENT SLAB SHALL BE DESIGNED BY A LICENSED ENGINEER
- SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WALL WITH 1/2" Ø ANCHOR BOLTS EMBEDDED A MINIMUM OF 12. 7" INTO CENTER OF WALL STEM AND SHALL BE INSTALLED AT A MAXIMUM OF 6'-0" O.C. (OR AS NOTED ON PLANS) AND SHALL BE INSTALLED WITHIN 6" TO 12" OF EACH END OF EACH SILL PLATE LENGTH, PER IRC SECTION R403.1.6
- 13. FOUNDATION WINDOW WELLS SHALL BE PROVIDED WITH MINIMUM DIMENSIONS AS SHOWN IN DETAIL ON SHEET 14. THE GARAGE FLOOR SHALL SLOPE TOWARD THE VEHICLE DOORS OR TO A TRENCH OR UNTRAPPED DRAIN THAT

# DISCHARGES TO THE EXTERIOR, ABOVE GRADE

- FRAMING NOTES 15. ALL DIMENSIONAL LUMBER SHALL BE DOUGLAS-FIR-LARCH GRADE #2, UNLESS NOTED OTHERWISE ON PLANS 16. ALL INTERIOR LOAD-BEARING AND EXTERIOR WALL HEADERS SHALL BE (2) #2 - 2x10's, UNLESS NOTED OTHERWISE
- ON PLANS BLOCK OVER BEAMS AND AT CANTILEVERS AND DOOR JAMBS 17. 18. INTERIOR NON-BEARING WALLS RESTING ON BASEMENT SLAB SHALL BE ISOLATED FROM ABOVE FRAMING BY A
- MINIMUM OF 1/2 ALL HEADERS/BEAMS SHALL BEAR ON A MINIMUM OF (2) 2x4 POSTS (KING AND JACK STUDS), UNLESS NOTED 19. OTHERWISE
- 20. WHERE JOISTS SPAN PARALLEL TO FOUNDATION, BLOCKING SHALL BE PROVIDED IN THE TWO SPACES MOST ADJACENT TO THE FOUNDATION WALL AT 4'-0" O.C. FOR THE PURPOSE OF TRANSFERRING LATERAL FOUNDATION WALL LOAD TO THE FLOOR DIAPHRAGM. FASTEN JOISTS AND BLOCKING TO SILL PLATE WITH (4) 10d NAILS. IF MECHANICAL DUCTWORK IS INSTALLED IN ONE OF THESE FIRST TWO BAYS, FASTEN 2x4's FLAT AT 4'-0" O.C. BETWEEN JOIST(S) AND/OR SILL AND PROVIDE BLOCKING AS PRESCRIBED ABOVE IN THE NEXT TWO JOIST BAYS. SECURE 2x4's TO JOIST(S)/SILL PLATE WITH (4) 10d NAILS. 21. ALL WOOD MATERIAL SUPPORTED ON CONCRETE OR MASONRY SHALL BE TREATED OR OF DECAY-RESISTANT
- MATERIAI 22. JOISTS UNDER BEARING PARTITIONS ON PLANS HAVE BEEN SIZED TO SUPPORT THE DESIGN LOAD.
- JOISTS FRAMING INTO THE FACE OF A STEEL OR WOOD BEAM SHALL BE SUPPORTED WITH APPROPRIATE 23. COLD-FORMED STEEL JOIST HANGERS
- JOISTS FRAMED ON TOP OF STRUCTURAL MEMBER SHALL BE SUPPORTED AT EN DS BY FULL-DEPTH SOLID 24. BLOCKING MIN 1%" IN THICKNESS OR BY FASTENING RIM TO JOISTS PER FASTENING TABLE TO LEFT ALL WALL COVERINGS SHALL COMPLY WITH IRC SECTION R702.3 25.
- 26. ALL RAFTERS AND COLLAR TIES SHALL COMPLY WITH IRC SECTION R802.3. 27. ALL RAFTERS SHALL HAVE 2x4 COLLAR TIES @ 4-0" O.C. IN UPPER ½ OF VERTICAL DISTANCE BETWEEN CEILING AND ROOF
- BLOCKING BETWEEN JOISTS UNDER A LOAD-BEARING WALL IS NOT REQUIRED 28. PER IRC SECTION 501.3, BOTTOM OF ALL FLOOR ASSEMBLIES ABOVE UNFINISHED AREAS SHALL BE PROVIDED WITH 29. A ½" GYPSUM BOARD MEMBRANE OR RESIDENTIAL FIRE SPRINKLER SYSTEM WHEN FLOOR SYSTEM IS CONSTRUCTED OF OTHER THAN DIMENSION LUMBER OR STRUCTURAL COMPOSITE LUMBER EQUAL TO OR GREATER THAN 2x10 NOMINAL DIMENSION(WHERE REQUIRED BY ENFORCING JURISDICTION)
- ENGINEERED LVL's SHALL HAVE MINIMUM PROPERTIES OF Fb = 2600 psi, E=1900 ksi, AND Fv=285 psi 30 31. ENGINEERED PARALLAMS SHALL HAVE MINIMUM PROPERTIES OF Fb = 2600 psi, E = 2000 ksi, AND Fv = 290 psi
- 32. COLUMN CONNECTION TO STEEL BEAMS SHALL BE WITH A CLIP POST CAP WITH ALL FOUR TAB EARS BENT AROUND THE BOTTOM FLANGE OF THE BEAM. FOR A BEARING PLATE, FOUR HOLES SHALL BE DRILLED IN THE BOTTOM FLANGE OF THE STEEL BEAM TO MATCH THE HOLE PATTERN OF THE PLATE. ½" x 2" BOLTS SHALL THEN BE INSTALLED WITH A FLAT WASHER, LOCK WASHER, AND A NUT IN EACH OF THE HOLES. THE POST CAP MAY BE WELDED TO THE STEEL BEAM IN ACCORDANCE WITH AWS D1.1-92 AS AN ALTERNATIVE, AND WOULD NEED TO BE INSPECTED BY AN AWS-CERTIFIED INSPECTOR.
- 33. WHEN MECHANICAL EQUIPMENT IS LOCATED IN AN ENCLOSED ROOM, THERE SHALL BE (2) 14"x12" VENTS LOCATED IN A WALL COMMON WITH ADDITIONAL LIVING AREA. ONE VENT SHALL BE LOCATED SUCH THAT THE BOTTOM OF THE VENT BEGINS 12" FROM THE FLOOR AND THE OTHER VENT SHALL BE LOCATED SUCH THAT THE TOP OF THE VENT BEGINS 12" FROM THE CEILING.
- 34. ALL ROOF SHEATHING SHALL BE  $\frac{7}{16}$  OSB WITH 8d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND @ 12" O.C. IN FIELD

# GLAZING NOTES

- 35. GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC SECTION R308.4 SHALL BE OF APPROVED SAFETY GLAZING MATERIALS. GLASS IN STORM DOORS, INDIVIDUAL FIXED OR OPENABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 2'-0" ARC OF THE DOOR IN A CLOSED POSITION AND FOR WHICH THE BOTTOM EDGE IS WITHIN 5'-0" OF THE FLOOR, WALLS ENCLOSING STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 5'-0" OF THE TOP OR BOTTOM OF THE STAIR, ENCLOSURES FOR SPAS, TUBS, SHOWERS, AND WHIRLPOOLS, GLAZING IN FIXED OR OPENABLE PANELS EXCEEDING NINE SQUARE FEET AND FOR WHICH THE BOTTOM EDGE IS LESS THAN 1'-6" ABOVE THE FLOOR OR WALKING SURFACE WITHIN 3'-0"
- 36. ALL OPERABLE WINDOWS SHALL HAVE FALL PROTECTION PER IRC SECTION R612.2

# ATTIC VENTILATION

37. ENCLOSED ATTICS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATING OPENINGS SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE MESH, WITH 1/4" TO 1/4" OPENINGS. THE TOTAL FREE VENTILATING AREA SHALL NOT BE LESS THAN  $\lambda_{50}$  OF THE AREA OF SPACE VENTILATED, EXCEPT WHERE THE VENTILATORS ARE LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED - THE REQUIRED AREA MAY BE REDUCED TO 1/300.

# **EMERGENCY EGRESS**

- 38. PROVIDE A MINIMUM OF ONE WINDOW FOR EACH BEDROOM THAT HAS A MINIMUM OPENABLE AREA OF 5.7 SQUARE FEET WITH A MINIMUM OPENABLE HEIGHT OF 2'-0" AND A MINIMUM WIDTH OF 1'-9". IN ADDITION, THE OPENABLE
- 39. PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING AREA AND ON EACH FLOOR, INCLUDING BASEMENT (IF APPLICABLE). ALARMS SHALL BE HARDWIRED TOGETHER SO THAT THE ACTIVATION OF ONE SMOKE ALARM WILL ACTIVATE ALL SMOKE ALARMS IN THE DWELLING. PROVIDE CARBON MONOXIDE DETECTORS OUTSIDE EACH SLEEPING AREA.

# MASONRY VENEER

- 40. MASONRY VENEER SHALL BE ANCHORED TO THE SUPPORTING WALL STUDS WITH CORROSION-RESISTANT METAL TIES EMBEDDED IN MORTAR OR GROUT AND EXTENDING INTO THE VENEER A MINIMUM OF 1/2", WITH NOT LESS THAN 5/" MORTAR OR GROUT COVER TO OUTSIDE FACE 41. VENEER TIES, IF STRAND WIRE, SHALL NOT BE LESS IN THICKNESS THAN NO. 9 U.S. GAGE WIRE AND SHALL HAVE A
- HOOK EMBEDDED IN THE MORTAR JOINT, OR IF SHEET METAL, SHALL BE NOT LESS THAN NO. 22 U.S. GAGE BY 7/4" CORRUGATED 42. EACH TIE SHALL SUPPORT NOT MORE THAN 2.67 SQUARE FEET OF WALL AREA AND SHALL BE SPACED NOT MORE
- THAN 32 INCHES ON CENTER HORIZONTALLY AND 24 INCHES ON CENTER VERTICALLY. VENEER TIES AROUND WALL OPENINGS: ADDITIONAL METAL TIES SHALL BE PROVIDED AROUND ALL WALL OPENINGS GREATER THAN 16 INCHES IN EITHER DIMENSION. METAL TIES AROUND THE PERIMETER OF OPENINGS

# GARAGE NOTES

44. DOOR(S) BETWEEN THE GARAGE AND DWELLING SHALL BE MINIMUM 1%" SOLID CORE OR HONEY-COMBED STEEL DOOR WITH 20-MINUTE FIRE RATING EQUIPPED WITH A SELF-CLOSING DEVICE 45. VEHICLE DOORS AND FRAMES SHALL BE DESIGNED AND INSTALLED TO MEET THE 115-MPH 3-SECOND GUST LOADING PER DASMA 108 AND ASTM E 330-96 PER IRC 2018

CONCRETE SHALL BE AIR-ENTRAINED BETWEEN 5%-7% WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2500

THE FOUNDATION DESIGN SHALL COMPLY WITH THE ENFORCING JURISDICTION'S RESIDENTIAL FOUNDATION

OF 6" OF GRAVEL OR CRUSHED ROCK. THE DRAIN SHALL DAYLIGHT BELOW FOOTING LEVEL OR TERMINATE IN A

PORTION OF EGRESS WINDOWS SHALL NOT EXCEED 3'-8" ABOVE THE ADJOINING FLOOR OR PERMANENT STEP.

SHALL BE SPACED NOT MORE THAN 3 FEET ON CENTER AND PLACED WITHIN 12 INCHES OF THE WALL OPENING.

#### GARAGE NOTES (CONTINUED)

45.

- THE GARAGE SHALL BE SEPARATED FROM THE DWELLING AND ITS ATTIC AREAS BY MINIMUM %" GYP. BOARD APPLIED TO THE GARAGE SIDE OF FRAMING. WHERE HABITABLE SPACE OCCURS ABOVE THE GARAGE. THE GARAGE CEILING ASSEMBLY SHALL BE PROTECTED WITH A MINIMUM 5/8" TYPE X GYP. BOARD. WHERE A FLOOR/CEILING SPACE IS PROVIDED ABOVE THE GARAGE COLUMNS AND BEAMS SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED WITH 5/" GYP. BOARD.
- GARAGE DOOR H-FRAME FOR THE ATTACHMENT OF THE TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING: 2x6 VERTICAL JAMBS RUNNING FROM FLOOR TO CEILING AND SHALL BE FASTENED WITH 21/2"" x 0.120" NAILS AT 7" O.C. STAGGERED WITH (7) 31/4" x 0.120" NAILS THROUGH THE JAMB INTO THE HEADER. MINIMUM 2x8 HEADER FOR ATTACHMENT OF COUNTER BALANCE SYSTEM.

#### **DESIGN LOADING (PER TABLE R301.5)**

MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (PSF)						
USE	LIVE LOAD	DEAD LOAD				
UNINHABITABLE ATTICS WITHOUT STORAGE	10	10				
UNINHABITABLE ATTICS WITH LIMITED STORAGE	20	10				
HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS	30	10				
BALCONIES (EXTERIOR) AND DECKS	40	10 <sup>d</sup>				
FIRE ESCAPES	40	10				
GUARDRAILS AND HANDRAILS <sup>a</sup>	200 <sup>°</sup>	-				
GUARDRAIL IN-FILL COMPONENTS <sup>b</sup>	50 <sup>c</sup>	-				
PASSENGER VEHICLE GARAGES	50	DEPENDENT UPON SLAB CONSTRUCTION				
ROOMS OTHER THAN SLEEPING ROOM	40	10 <sup>d</sup>				
SLEEPING ROOM	30	10 <sup>d</sup>				
STAIRS	40	10 <sup>d</sup>				

a. A single concentrated load applied in any direction at any point along the top b. Guard in-fill components (all those except the handrail), ballusters and panel fillers shall be designed to

withstand a horizontally applied normal load of 50 pounds on an area equal to one square foot. This load need not be assumed to act concurrently with any other live load requirement. c. Glazing used in handrail assemblies and guards shall be designed with a safety factor of 4. The safety

factor shall be applied to each of the concentrated loads applied to the top of the rail, and to the load on the infill components. These loads shall be determined independently of one another, and loads are assumed not to occur with any other live load. d. An additional dead loading of 10 psf shall be applied where thinset tile floor is to be installed. An

additional dead loading of 50 psf shall be applied where mudset tile floor is to be installed

#### INSULATION/EFFICIENCY

- 1. BUILDING ENVELOPE INSULATION SHALL COMPLY WITH IRC TABLE N1102.1.1 OR THE 2012 IECC (SEE SHEET S3.1 FOR FRAMING DETAILS AND TABLES ON THIS SHEET FOR MORE INFORMATION)
- CATHEDRAL -VAULTED CEILING FRAMING SHALL BE FRAMED WITH A MINIMUM INSULATION VALUE OF R-38. IF VAULTED RAFTERS DO NOT PROVIDE REQUIRED DEPTH TO ACHIEVE R-38 INSULATION BUILDER SHALL FUR DOWN RAFTERS PER DETAILS PROVIDED ON SHEET S3.1.

INSULATION AND FENESTRATION REQUIRE	
CLIMATE ZONE	4-A
FENESTRATION U-FACTOR	0.35
SKYLIGHT U-FACTOR	0.55
GLAZED FENSTRATION SHGC	0.40
CEILING R-VALUE	49
WOOD FRAME WALL R-VALUE	15
MASS WALL R-VALUE	8 / 13
FLOOR R-VALUE	19
BASEMENT WALL R-VALUE	10-CONTINUOUS OR 13-CAVITY
SLAB R-VALUE AND DEPTH	10 AT 2'-0"
CRAWL SPACE WALL R-VALUE	10-CONTINUOUS OR 13-CAVITY
DUCTWORK EXPOSED TO OUTSIDE AIR R-VALUE	8
DUCTWORK NOT EXPOSED TO OUTSIDE AIR R-VALUE	6
CATHEDRAL VAULTED CEILING R-VALUE	38

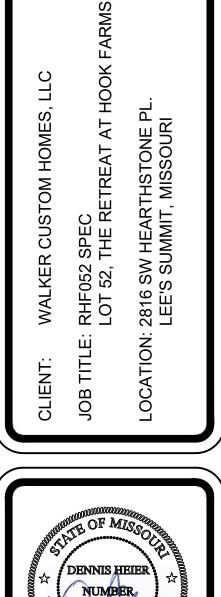
#### DUCT SEALING

N1103.2.2 (R403.2.2) SEALING (MANDATORY), DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH SECTION M1601.4.1 OF 2018 IRC EXCEPTIONS:

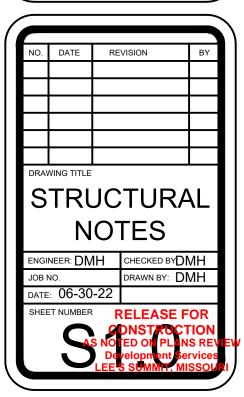
- AIR-IMPERMEABLE SPRAY FOAM PRODUCTS SHALL BE PERMITTED TO BE APPLIED WITHOUT ADDITIONAL JOINT SEALS
- WHERE A DUCT CONNECTION IS MADE THAT IS PARTIALLY INACCESSIBLE, THREE 2. SCREWS OR RIVETS SHALL BE EQUALLY SPACED ON THE EXPOSED PORTION OF THE JOINT SO AS TO PREVENT A HINGE EFFECT.
- CONTINUOUSLY WELDED AND LOCKING-TYPE LONGITUDINAL JOINTS AND SEAMS IN 3. DUCTS OPERATING AT STATIC PRESSURES LESS THAN 2 INCHES OF WATER COLUMN PRESSURE CLASSIFICATION SHALL NOT REQUIRE ADDITIONAL CLOSURE SYSTEMS.
- DUCT TIGHTNESS SHALL BE VERIFIED BY EITHER OF THE FOLLOWING: POST-CONSTRUCTION TEST: TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO 4 CFM 1. PER 100 SQUARE FEET OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. ACROSS THE ENTIRE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. ALL REGISTER BOOTS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST.
- ROUGH-IN TEST: TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO 4 CFM PER 100 2. SQUARE FEET OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. ACROSS THE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. ALL REGISTERS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST. IF THE AIR HANDLER IS NOT INSTALLED AT THE
- TIME OF THE TEST, TOTAL LEAKAGE SHALL BE LESS THAN OR EQUAL TO 3 CFM PER 100 SQUARE FEET OF CONDITIONED FLOOR AREA EXCEPTION: THE TOTAL LEAKAGE TEST IS NOT REQUIRED FOR DUCTS AND AIR HANDLERS LOCATED ENTIRELY WITHIN THE BUILDING THERMAL ENVELOPE.

MECHANICAL VENTILATION SYSTEM FAN EFFICACY								
FAN LOCATION	AIR FLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY (CFM/WATT)	AIR FLOW RATE MAXIMUM (CFM)					
RANGE HOODS	ANY	2.8	ANY					
IN-LINE FAN	ANY	2.8	ANY					
BATHROOM, UTILITY ROOM	10	1.4	90					
BATHROOM, UTILITY ROOM	90	2.8	ANY					

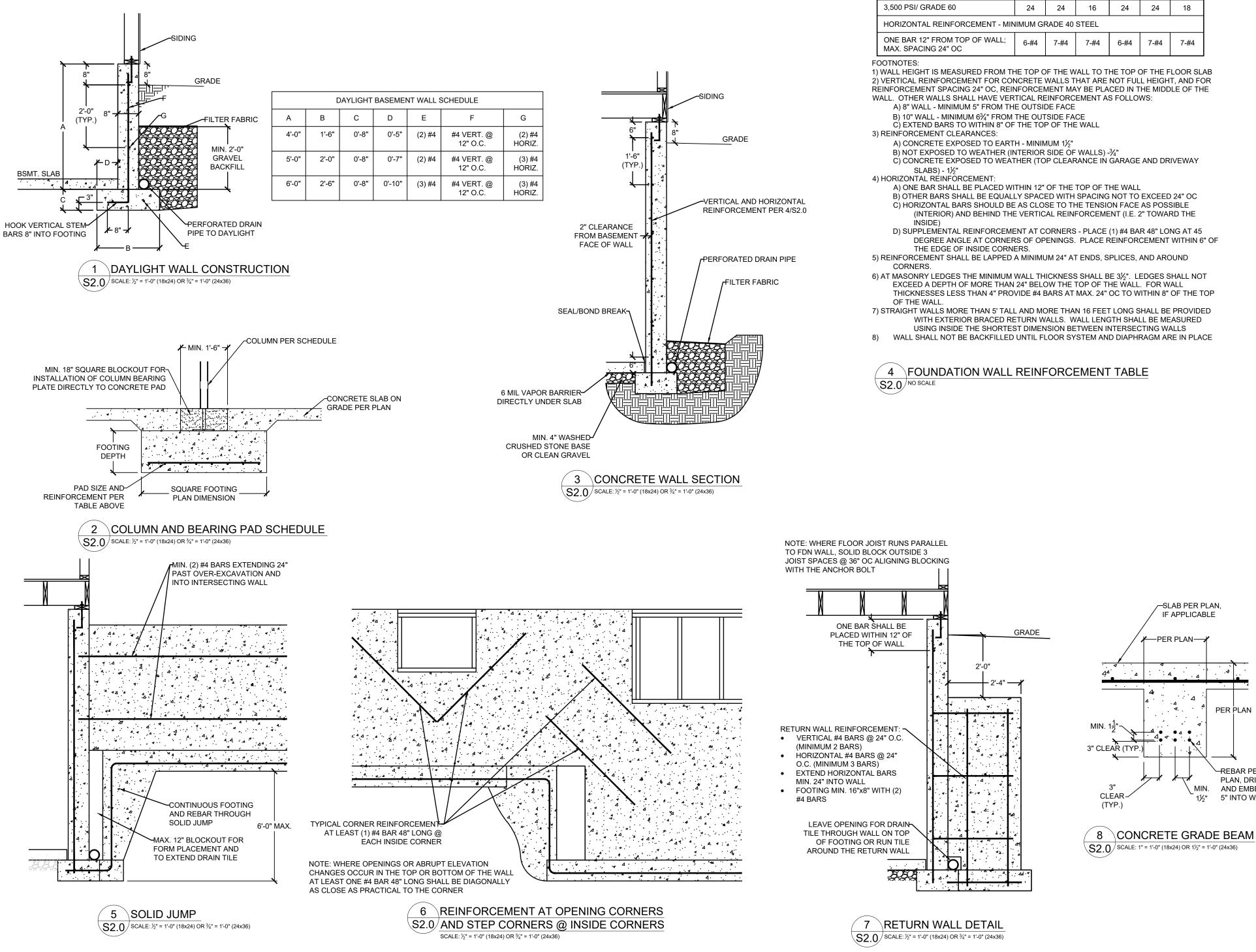






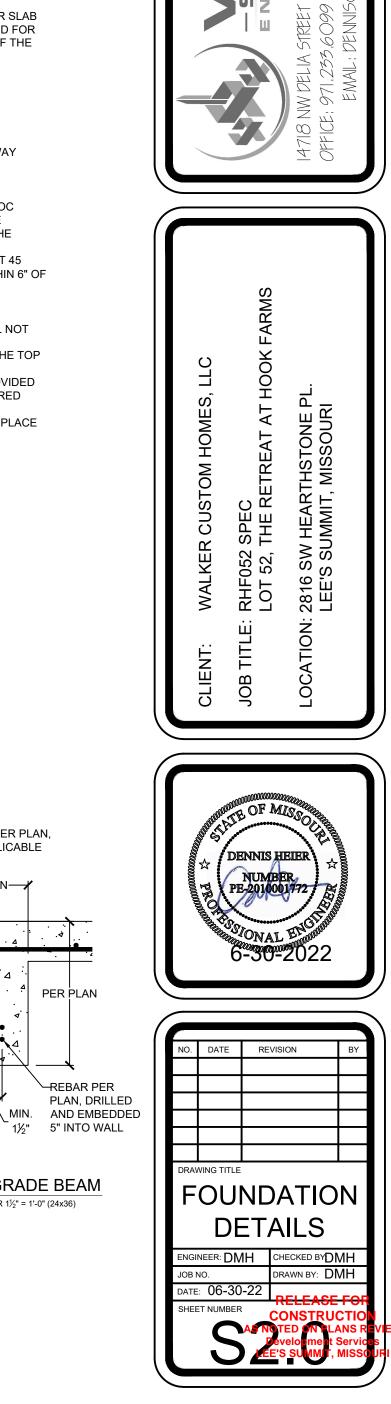


FIRST FLOOR INT. PARTITION WALL DL     6     2787     16722       PROJECTED AREAS (WIND DESIGN PER 115 MPH 3-SECOND GUST, EXPOSURE C AND MEAN ROOF HEIGHT	Image:
$ \begin{array}{c} 12.0\% \\ F_{a} (from ASCE7 Table 11.4-1) \\ S_{DS} (= 2/3 * S_{B} * F_{a}) \end{array} \end{array} \qquad $	
6.5	
SEISMIC SHEAR     From ASCE7 (Eq. 12.8-1):     V (= 1.2 * S <sub>DS</sub> * W / R) (lbs.)	S
1ST FLOOR     1599       BASEMENT     1599	MAN
Sheathing Location     Min. Sheathing Schedule     Fastening Schedule     Allowable Shear (#/LF)     Code Reference       Exterior (Option \$1)     7/16" APA Rated Plywood/OSB     1-1/2" 18ga. Staples w/ 1" penetration@ 6" OC Edges, 6" OC Field For 24" stud spacing, 12" OC Field For 16" stud spacing     155     per IBC, Table 2306.3(1)	L K
Extention Protection for 24" stud spacing, 12" OC Field For 16" stud spacing 2306.3(1)   Extention 00/000/02 20 1-1/2" 16ga. Staples w/ 1" penetration@ 4" OC Edges, 6" OC Field For 24" stud spacing, 12" OC Field For 16" stud spacing per IBC, Table 2306.3(1)	
Exterior (Option #3) 7/18" APA Rated Plywood/OSB 1-1/2" 18gs. Staples w/ 1" penetration@ 3" OC Edges, 6" OC Field For 24" stud spacing, 12" OC Field For 16" stud spacing 310 2306.3(1)	
Exterior (Option #4)   7/16" APA Rated Plywood/OSB or shiplap panel sheathing, or 3/8" shiplap panel sheathing with Field for 7/16" APA-rated plywood/OSB or shiplap panel sheathing   8d Common Nails w/ 1-3/8" penetration @ 6" O.C. Edges, 12" O.C.     AF&PA SDPWS Table 4 30	
Exterior (Option #4) sheathing, or 3/8" shiplap panel sheathing with tighter nail spacing OR @ 4" O.C. Edges, 12" O.C. Field for 3/8" shiplap panel sheathing Table 4.3A	FOM HOMES, ETREAT AT H THSTONE PL , MISSOURI
Exterior (Option #5)   7/16" APA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing   8d Common Nails w/ 1-3/8" penetration @ 4" O.C. Edges, 12" O.C. Field for 7/16" APA-rated plywood/OSB or shiplap panel sheathing or 3/8" shiplap panel sheathing with tighter nail spacing   8d Common Nails w/ 1-3/8" penetration @ 4" O.C. Edges, 12" O.C. Field for 3/8" shiplap panel sheathing or 3/8" shiplap panel sheathing or 3/8" shiplap panel sheathing or 3/8" shiplap panel sheathing   320     OR @ 3" O.C. Edges, 12" O.C. Field for 3/8" shiplap panel sheathing   320   AF&PA SDPWS Table 4.3A	
Per 2012 IRC Section G2407.5     Sheathing, or 3/8" shiplap panel sheathing with tighter nail spacing and double studs at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double studs at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double studs at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double studs at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double studs at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double studs at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double studs at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double studs at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double studs at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double studs at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double studs at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double stude at each panel   Af & PA Rated Plywood/OSB or shiplap panel sheathing with tighter nail spacing and double stude at each panel   Af & PA PR SDPWS Tighter	WALKER CI RHF052 SPI LOT 52, THE 2816 SW HE LEE'S SUMI
edge Appliance #2   Interior 1/2" Gypsum Board No. 6 - 1 <sup>1</sup> /4" Type W or S Screws @ 8" O.C. Edges, 12" O.C. Field 60 per IBC, Table   SOB C 4.4 500000 BTU/h	WAL LOT 2816 LEE'
Interior 16 Ga. Simpson/USP Type WB Steel X-Brace (or (3) 16d @ end studs & (1) 8d @ intermediate studs (per manufacture 325	
equal) specifications - see detail on sheet S3) Total BTU/hr   150000 BTU/h	NT: ATION
EXTERIOR SHEATHING OPTION FOR FIRST FLOOR   5     WIDTH OF 1ST STORY (FT.)   58.83     DEPTH OF 1ST STORY (FT.)   60.5     BACK WALL OF GARAGE (FT.)   0     GAR. WALL: 1=F-B, 2=S-S   2	CLIENT: JOB TITI LOCATIO
EXTERIOR STRUCTURAL WALL LENGTHS (ft.) & RESISTANCES   Note: Per 2012 IRC Section G2407.5.3.2, The volumes of spaces in different stories     SEISMIC   WIND	
FRONT-TO-BACK   RESISTANCE (lbs.)   SIDE-TO-SIDE   one or more openings in doors or floors having a total minimum free area of 2 square	
IST FLOOR491862024912049260682412768BASEMENT0020.557400020.58036	JUNION ATE OF MISSOUR
ADDITIONAL RESISTANCE REQUIREDAnchor Bolt Spacing (in.)16d Nail Spacing req'd at bottom plate (in)1ST FLOOR FRONT-TO-BACK0001st Floor F-B311ST FLOOR SIDE-TO-SIDE0001st Floor S-S204.4BASEMENT FRONT-TO-BACK00018t Floor S-S204.400018t Floor S-S204.41st Floor S-S000018t Floor S-S18t.618t.6	
BASEMENT SIDE-TO-SIDE 0 0 0 0 Per 2012 IRC Section G2407.5.1 (Standard Method), the minimum	PE-2010001772 E
ADDITIONAL PORTAL FRAMES OR INTERIOR X-BRACES INTERIOR X-BRACES INTERIOR WALL LENGTH W/ 1/2" INT. WALL LENGTH BHEATHED W/ OSB ADDITIONAL METHODS A	6-30-2022
REQUIRED (POUNDS) RESISTANCE (325#/BRACE) GTPSUM BOARD PER TABLE (FT.) (TOTAL LENGTH, ONE SIDE, FT.) (TOTAL LENGTH, ONE SIDE, FT.) (TOTAL LENGTH, ONE SIDE, FT.)	6-30-2022
IST FLOOR SIDE-TO-SIDE 0 YES Required all space in combined aleas. 7500 rt	
BASEMENT FRONT-TO-BACK 0 BASEMENT SIDE-TO-SIDE 0 **NOTES: 1) SEE ATTACHED CALCULATIONS FOR PORTAL FRAME OR PERFORATED SHEAR WALL RESISTANCE CAPACITIES (IF APPLICABLE), 2) SEE SHEET S1 FOR INTERIOR STEEL X-BRACE INSTALLATION, 3) INTERIOR WALLS SHEATHED WITH OSB SHALL BE ATTACHED WITH SAME STAPLE/NAILING 882 ft <sup>2</sup>	
PATTERN AS EXTERIOR OSB ON SAME FLOOR (SEE TABLE ABOVE) AND ARE ONLY APPLICABLE FOR FULL-HEIGHT SECTIONS OF 2-8" OR LONGER ALL LATERAL BRACING ACHIEVED AT EXTERIOR WALLS AND WALLS DIRECTLY ON FOUNDATIONS; THEREFORE, NO INTERIOR BRACING PER 2012 IRC SECTION R502.2.1 IS REQUIRED	NO. DATE REVISION BY
Wind UPLIFT ANALYSIS   Area of Combined Space > Required combined area?   UK     X/12   DEGREES   OK     ROOF PITCH (MAX)   4   18.4   PITCH OF 6 OR LESS: EOH -13.3, E -7.2, G -5.2   OK	
ASCE 7     LENGTH (FT.)   PRESSURE (PSF)   LINEAL FT. OF OH   UPLIFT PER FT* (LBS)     OVERHANG   1   16.56   240.66   16.56	
OVENIANC   Contract of the contraction of the contracting of all of the contracting of the contracting of all of the contracting of all of the contracting of the contrecontracting of the	
*ALONG PERIMETER TOTAL UPLIFT PER LINEAL FOOT ALONG EXTERIOR (POUNDS) 163.3 UPLIFT OK **INSIDE EXTERIOR WALLS resistance due to dead weight & (3) 10d TOENAILS 251.6	
Iteration   Resistance due to bead weight & (3) 10d toenalls   251.6     Note for construction:   shall commence within 12 inches of the bottom of the enclosure.     The continuous structural panel sheathing bracing method requires use of the above table for sheathing of the entire structure. In addition, framing members shall be @ 16" O.C. MAX.,   The minimum dimension of air openings shall be not less than 3 inches.     UNBLOCKED, AND W/ SHEathing applied Directly to Framing members   Shall commence within 12 inches of the bottom of the enclosure.	STRUCTURAL CALCULATIONS
Note For Design:Minmum required opening area:150ALL WALLS USED IN THE CALCULATION OF THE RESISTANCE FOR THIS STRUCTURE SHALL HAVE A MINIMUM UNINTERRUPTED HEIGHT OF 8'-0" AND LENGTH OF 2'-8". ALLOWABLE RESISTANCES HAVE BEEN #/FT AND INCREASED BY 40% FOR WIND LOADS, PER VALUES IN 2012 IBC SECTION 2306 AND AF&PA SDPWS TABLE 4.3A. FOR EXAMPLE, 7/16" APA-RATED SHEATHING WITH 8d @ 6" & 12" HAS A SEISMIC SHEAR VALUE OF 240Minmum grill size:14 x 11(inches)	ENGINEER: DMH CHECKED BYDMH JOB NO. DRAWN BY: DMH
A WIND SHEAR VALUE OF 335#/FT - 40% GREATER THAN THAT OF SEISMIC) NOTE: SOIL SITE CLASS ASSUMED TO BE CLASS D. IF SITE CONDITIONS ARE	DATE: 06-30-22 SHEET NUMBER RELEASE FOR
DETERMINED TO BE CLASS ASSUMED TO BE CLASS D. IF SITE CONDITIONS ARE DETERMINED TO BE CLASS E OR F, CONSULT ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION	CONSTRUCTION ASNOTED ON PLANS REVIEW Development Services UEE'S SUMMIT, MISSOURI



	8"	THICK W	ALL	10" THICK WALL		/ALL
REINFORCEMENT (#4 BARS)	8'	9'	10'	8'	9'	10'
3,000 PSI/ GRADE 40	24	24	16	24	24	18
3,500 PSI/ GRADE 40	24	24	16	24	24	18
3,000 PSI/ GRADE 60	24	24	16	24	24	18
3,500 PSI/ GRADE 60	24	24	16	24	24	18
HORIZONTAL REINFORCEMENT - MIN	IMUM GI	RADE 40	STEEL			
ONE BAR 12" FROM TOP OF WALL; MAX. SPACING 24" OC	6-#4	7-#4	7-#4	6-#4	7-#4	7-#4
C) CONCRETE EXPOSED TO WEAT SLABS) - 1½"						
SLABS) - 1½" HORIZONTAL REINFORCEMENT: A) ONE BAR SHALL BE PLACED WI B) OTHER BARS SHALL BE EQUAL C) HORIZONTAL BARS SHOULD BE (INTERIOR) AND BEHIND THE INSIDE) D) SUPPLEMENTAL REINFORCEME DEGREE ANGLE AT CORNEF THE EDGE OF INSIDE CORN REINFORCEMENT SHALL BE LAPPED CORNERS. AT MASONRY LEDGES THE MINIMUM	LY SPACI E AS CLO E VERTIC ENT AT C RS OF OP ERS. A MINIMU WALL TH	ED WITH SE TO TH AL REINI ORNERS PENINGS. JM 24" AT	TOP OF T SPACING HE TENSIG FORCEME - PLACE PLACE F FLACE F CENDS, S SHALL B	NOT TO DN FACE NT (I.E. 2 (1) #4 BA REINFOR PLICES, 2 E 3½". LI	EXCEED AS POSS " TOWAI R 48" LO CEMENT AND ARC EDGES S	9 24" OC SIBLE RD THE NG AT 45 WITHIN 6 DUND SHALL NO
SLABS) - 1½" HORIZONTAL REINFORCEMENT: A) ONE BAR SHALL BE PLACED WI B) OTHER BARS SHALL BE EQUAL C) HORIZONTAL BARS SHOULD BE (INTERIOR) AND BEHIND THE INSIDE) D) SUPPLEMENTAL REINFORCEME DEGREE ANGLE AT CORNEF THE EDGE OF INSIDE CORN REINFORCEMENT SHALL BE LAPPED CORNERS. AT MASONRY LEDGES THE MINIMUM EXCEED A DEPTH OF MORE THAN THICKNESSES LESS THAN 4" PRO OF THE WALL. STRAIGHT WALLS MORE THAN 5' TAL	LY SPACI E AS CLO E VERTIC ENT AT C RS OF OP ERS. A MINIMU WALL TH 24" BELC VIDE #4 E	ED WITH SE TO TH CAL REINI ORNERS PENINGS. JM 24" AT UICKNESS DW THE BARS AT DRE THAI	TOP OF T SPACING HE TENSIG FORCEME PLACE F PLACE F TENDS, S S SHALL B TOP OF TI MAX. 24" N 16 FEET	NOT TO DN FACE ENT (I.E. 2 (1) #4 BA REINFOR PLICES, E 3½". LI HE WALL OC TO W	EXCEED AS POSS 2" TOWAI R 48" LO CEMENT AND ARC EDGES S . FOR W ITHIN 8" HALL BE	24" OC SIBLE RD THE NG AT 45 WITHIN 6 OUND HALL NO ALL OF THE T PROVIDE
SLABS) - 1½" IORIZONTAL REINFORCEMENT: A) ONE BAR SHALL BE PLACED WI B) OTHER BARS SHALL BE EQUAL C) HORIZONTAL BARS SHOULD BE (INTERIOR) AND BEHIND THE INSIDE) D) SUPPLEMENTAL REINFORCEME DEGREE ANGLE AT CORNEF THE EDGE OF INSIDE CORN EINFORCEMENT SHALL BE LAPPED CORNERS. T MASONRY LEDGES THE MINIMUM EXCEED A DEPTH OF MORE THAN THICKNESSES LESS THAN 4" PRO OF THE WALL.	LY SPACI E AS CLO E VERTIC ENT AT C RS OF OP ERS. A MINIMU VALL TH 24" BELC VIDE #4 E L AND MC ETURN W ST DIMEN	ED WITH SE TO TH CAL REINI ORNERS PENINGS. JM 24" AT UICKNESS DW THE BARS AT ORE THAI VALLS. W ISION BE	TOP OF T SPACING TE TENSIG FORCEME PLACE F FENDS, S S SHALL B TOP OF TI MAX. 24" N 16 FEET (ALL LENC TWEEN IN	NOT TO DN FACE ENT (I.E. 2 (1) #4 BA REINFOR PLICES, A HE WALL OC TO W G LONG S GTH SHAI NTERSEC	EXCEED AS POSS TOWAI R 48" LO CEMENT AND ARC EDGES S FOR W THIN 8" HALL BE L BE ME CTING W/	24" OC SIBLE RD THE NG AT 45 WITHIN 6 DUND HALL NO ALL OF THE T PROVIDE ASURED ALLS

4 FOUNDATION WALL REINFORCEMENT TABLE



-SLAB PER PLAN, IF APPLICABLE

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PER PLAN

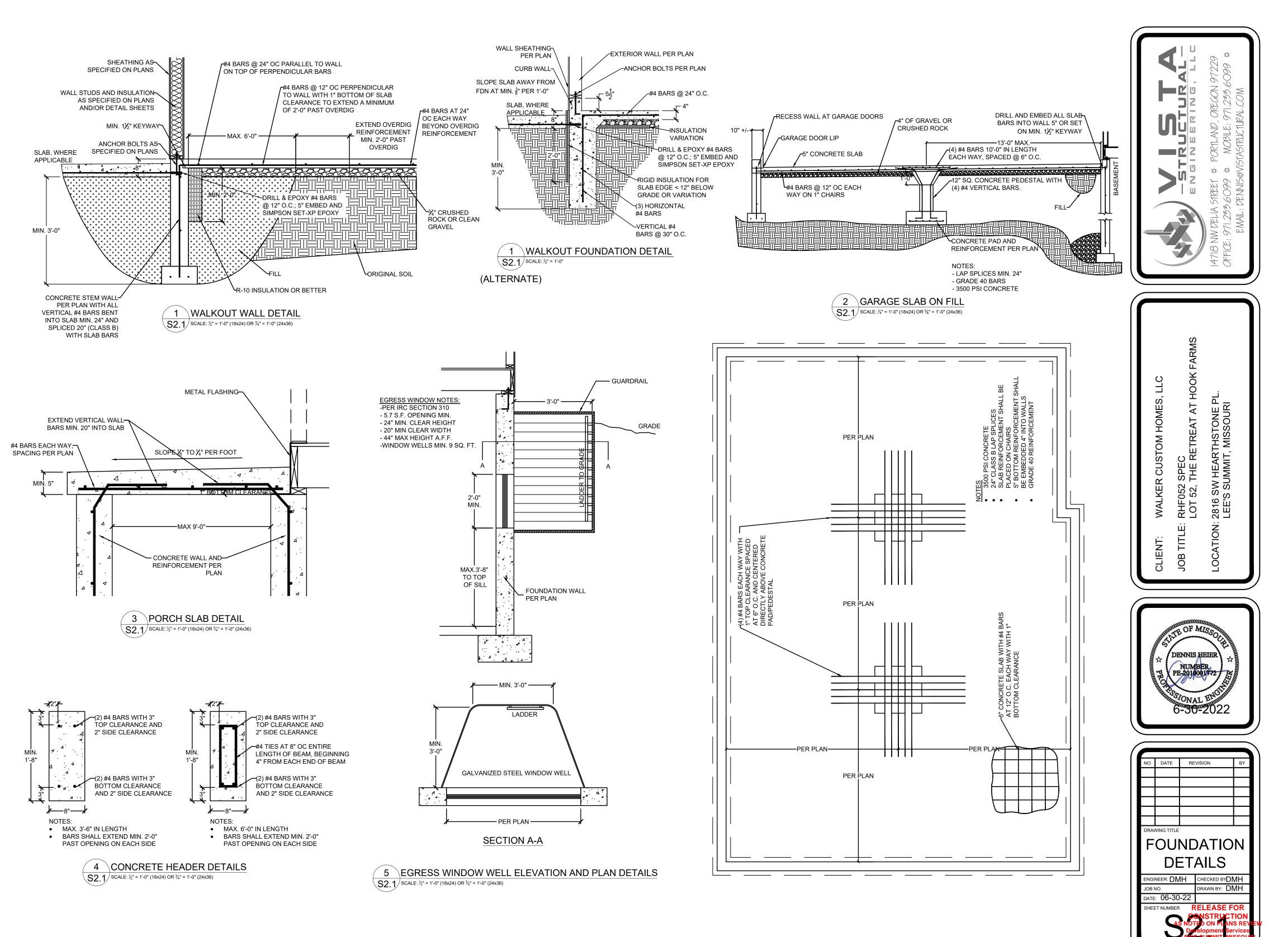
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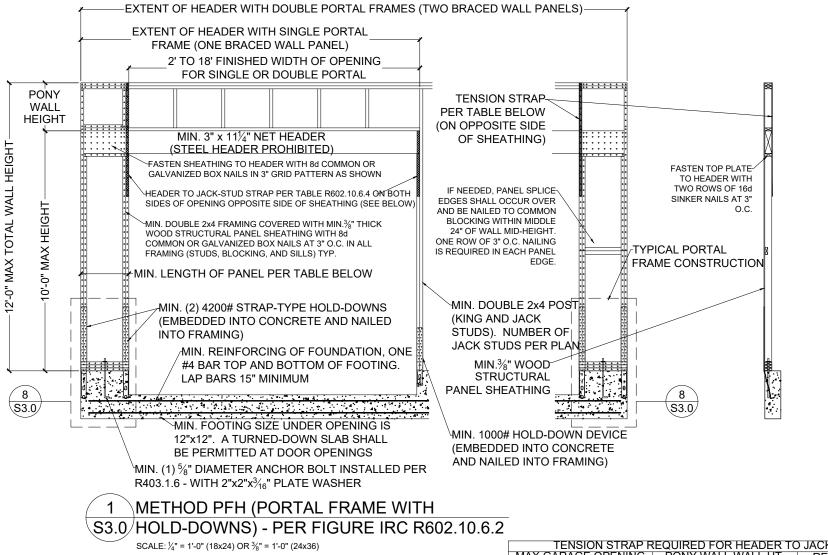
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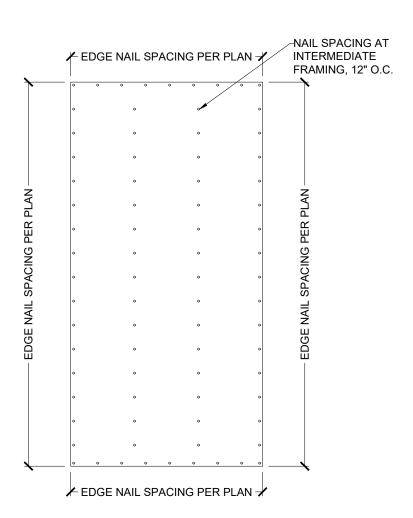




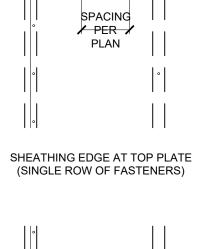
	MINIMUM PANEL LENGTH FOR DETAIL 1/S3.0 (INCHES)						
	WALL HEIGHT						
	8 FEET	9 FEET	10 FEET	11 FEET	12 FEET		
SUPPORTING ROOF ONLY	16	16	16	18	20		
SUPPORTING ONE STORY AND ROOF	24	24	24	27	29		

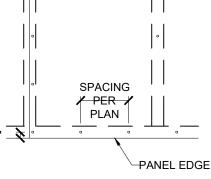
<u>3</u>"

TENSION STRAP REQUIRED FOR HEADER TO JACK STUD FOR DETAILS 1/S3.0 AN			
MAX GARAGE OPENING (FT.)	PONY WALL WALL HT. (FT.)	REQUIRED SIMPSON STRAP	MIN. STRA
18'-0"	0'-0"	CS20	
9'-0"	1'-0"	CS20	
18'-0"	1'-0"	CS14	
9'-0"	2'-0"	CS18	
18'-0"	2'-0"	CMSTC16	
9'-0"	4'-0"	CMSTC16	
16'-0"	4'-0"	CMST14	



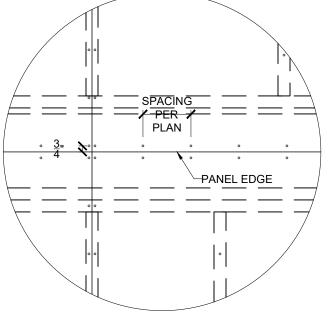




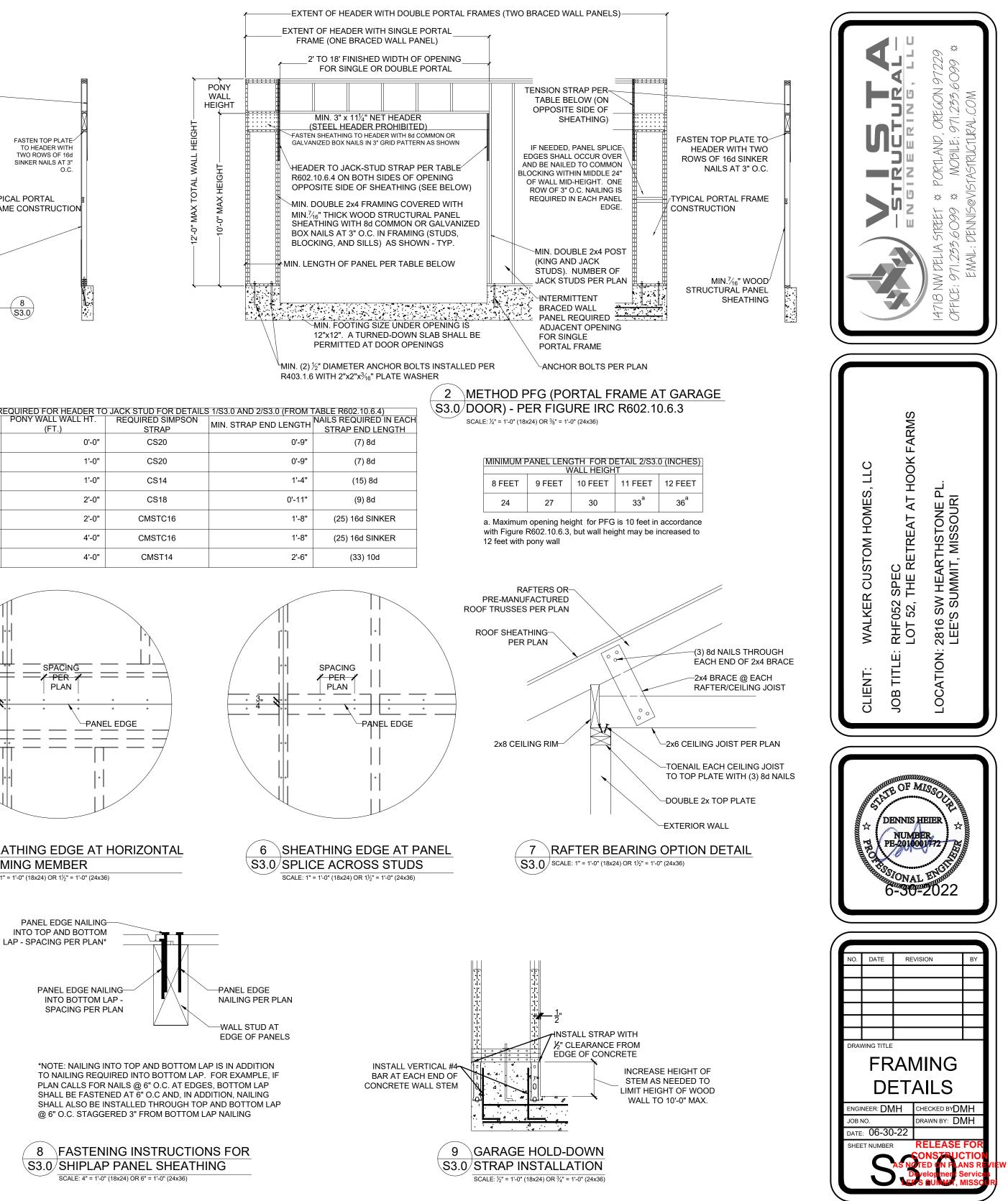


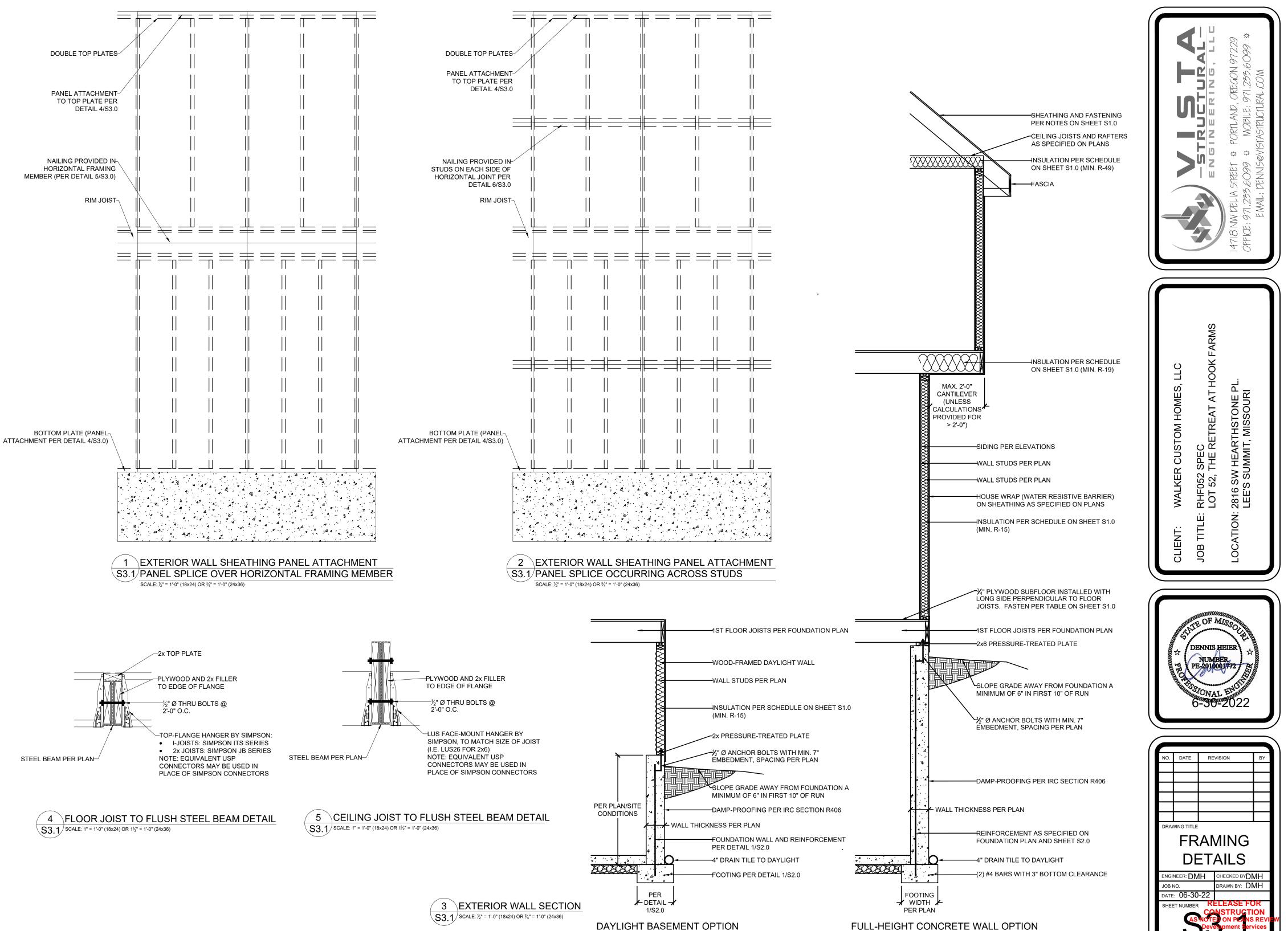
SHEATHING EDGE AT BOTTOM PLATE (SINGLE ROW OF FASTENERS)



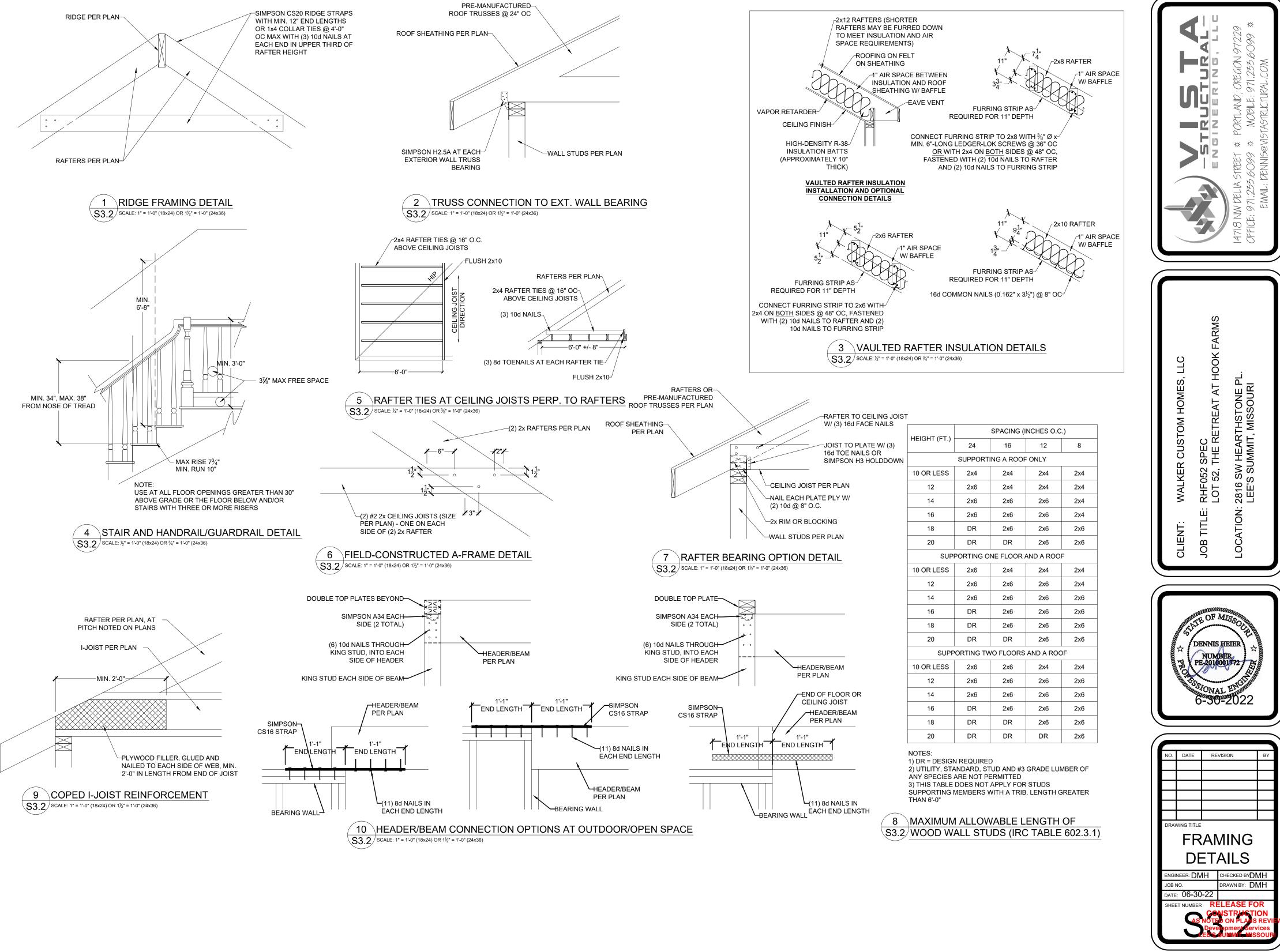


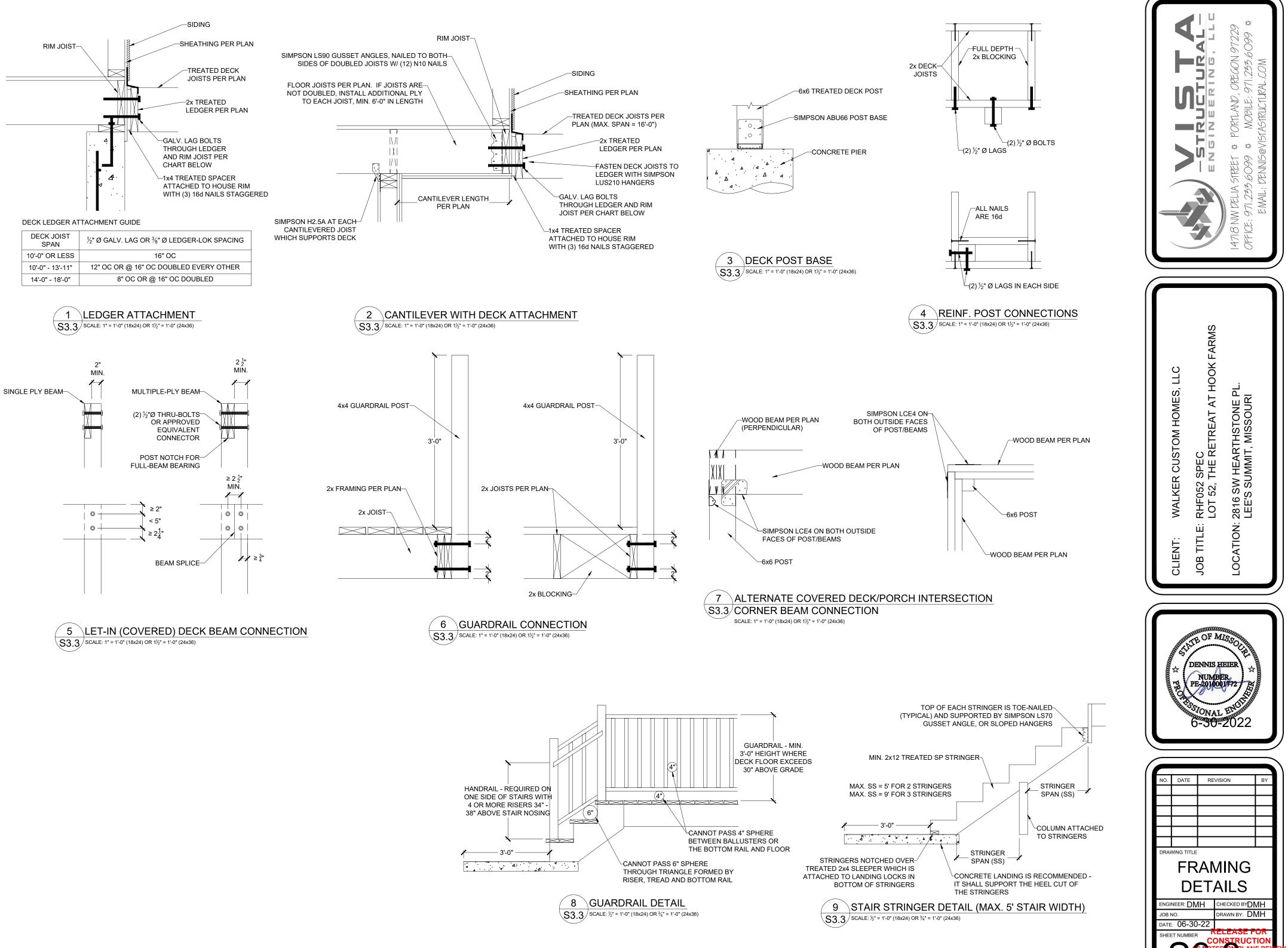
5 SHEATHING EDGE AT HORIZONTAL S3.0/FRAMING MEMBER SCALE: 1" = 1'-0" (18x24) OR 1<sup>1</sup>/<sub>2</sub>" = 1'-0" (24x36)

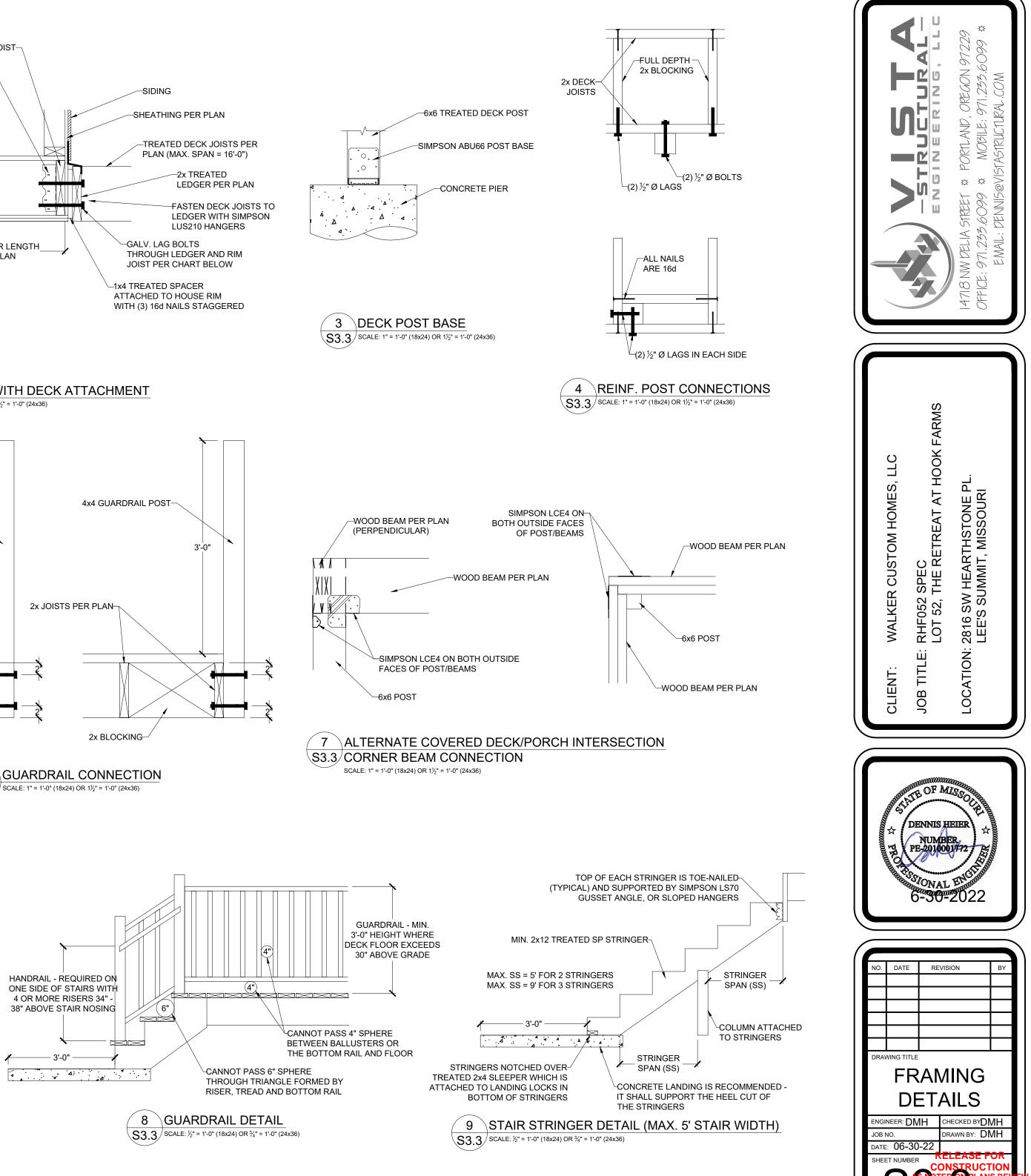




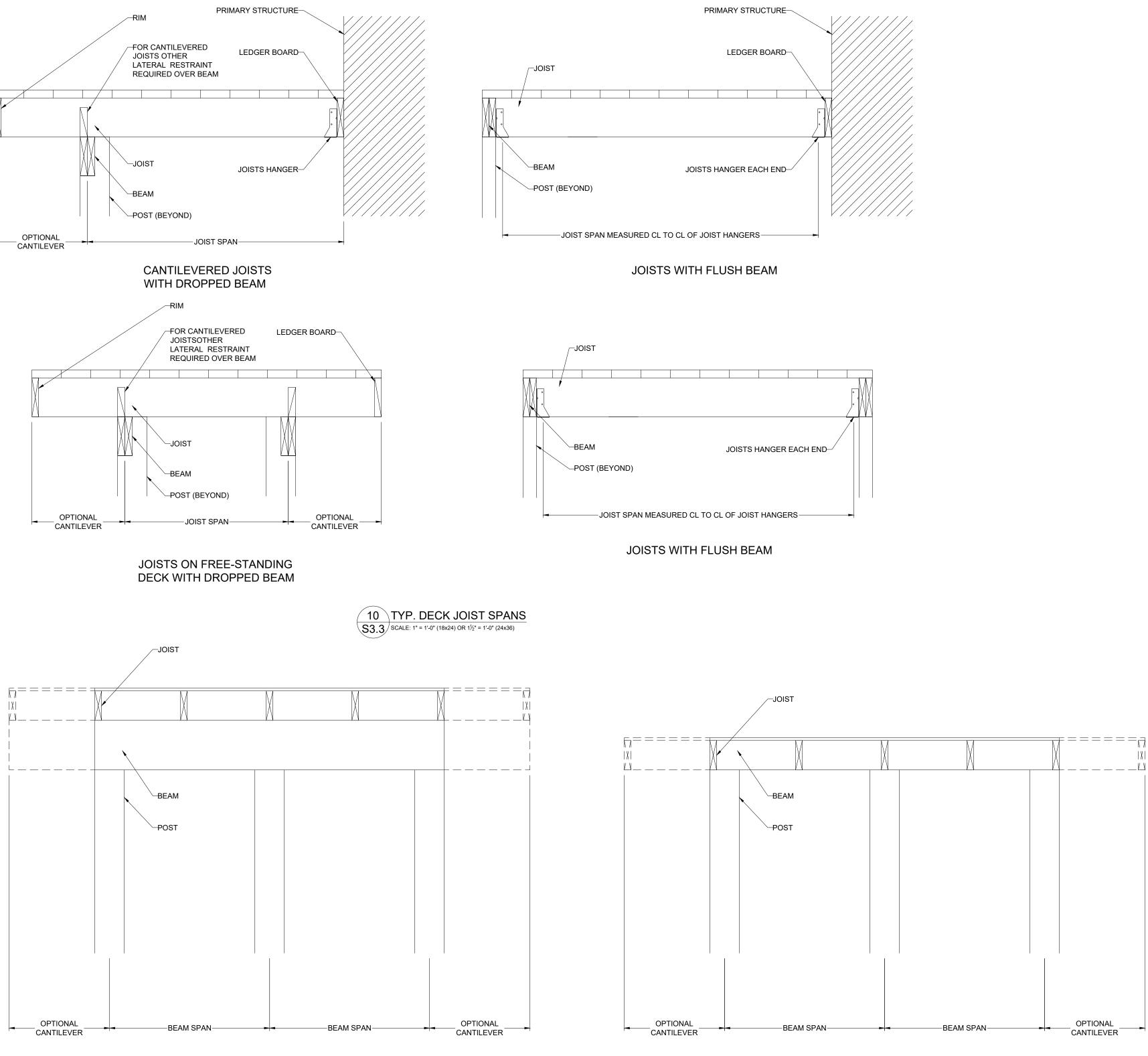
FULL-HEIGHT CONCRETE WALL OPTION







# DROPPED BEAM



Þ 7229 99 \* 6 GON ם 🎦 🗉 AR MAR Ē AND ٦lu POR1L,  $\geq$ U ¢ ¢ *77 77* Ш FARMS RHF052 SPEC LOT 52, THE RETREAT AT HOOK C WALKER CUSTOM HOMES, LL 2816 SW HEARTHSTONE PL LEE'S SUMMIT, MISSOURI JOB TITLE: LOCATION: CLIENT: DE OF MISS DENNIS HEIER PE-2010001772 6-30-2022 DATE REVISION BY RAWING TITLE FRAMING DETAILS ENGINEER: DMH CHECKED BYDMH DRAWN BY: DMH JOB NO. DATE: 06-30-22 HEET NUMBER