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	STRUCTURAL MEMBER R	REVIEW AND CERTIFICATION:
EASE FOR CONSTRUCTION NOTED ON PLANS REVIEW	PE-1008019580	CIVIL ENGINEERING 1805 WATERS ROAD, HARRISC PH: (816) 380 - 5150 FAX: (816) 884 - 3250 MO. CERTIFICATE OF AUTHORITY #30050
EVELOPMENT SERVICES EE'S SUMMIT, MISSOURI 2/21/2025 5:08:26	INTERNATIONAL RESIDENTIAL CODE, AI WITH THE REQUIREMENTS OF THE 2018 MODIFICATIONS TO STRUCTURAL ITEMS CAPABLE OF CERTIFYING COMPLIANCE	FOR STRUCTURAL ITEMS NOT OTHERWISE ADD LL CONSTRUCTION, MATERIALS, FASTENING NO BIRC AND THEREIN REFERENCED STANDARDS. S SHALL BE APPROVED BY THE ENGINEER OF R WITH THE MINIMUM STANDARDS OF THE APPL AND OMISSIONS IN PLAN OR ELEVATION OF PRO

GINEERING, P.C. CIVIL ENGINEERING CONSULTANTS 1805 WATERS ROAD, HARRISONVILLE, MISSOURI 64701 PH: (816) 380 - 5150 FAX: (816) 884 - 3250 EMAIL: MAIL@REOENGINEERING.COM MO. CERTIFICATE OF AUTHORITY #3005002187

AARON D. OBERMILLER, P.E. M0-2008919589 IYS-25237 CERTIFICATION IS PROVIDED HEREON FOR STRUCTURAL ITEMS NOT OTHERWISE ADDRESSED IN THE REQUIREMENTS OF THE 2018 INTERNATIONAL RESIDENTIAL CODE. ALL CONSTRUCTION, MATERIALS, FASTENING NOT SPECIFICALLY DENOTED SHALL COMPLY WITH THE REQUIREMENTS OF THE 2018 IRC AND THEREIN REFERENCED STANDARDS. ANY REQUIRED CLARIFICATIONS OR MODIFICATIONS TO STRUCTURAL ITEMS SHALL BE APPROVED BY THE ENGINEER OF RECORD OR OTHER LICENSED PROFESSIONAL CAPABLE OF CERTIFYING COMPLIANCE WITH THE MINIMUM STANDARDS OF THE APPLICABLE CODE. ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR DRAWING ERRORS AND OMISSIONS IN PLAN OR ELEVATION OF PROVIDED PLANS.

APALCE CALLED	HOME		
scale: 1/4"=1'	APPROVED BY:	5	DRAWN BY
date: 12-23-24			REVISED
4331 NE HIDEAWAY DR.			
LEE'S SUMMIT, M	O LOT 368 PARK RID	GE	
			DRAWING NUMBER

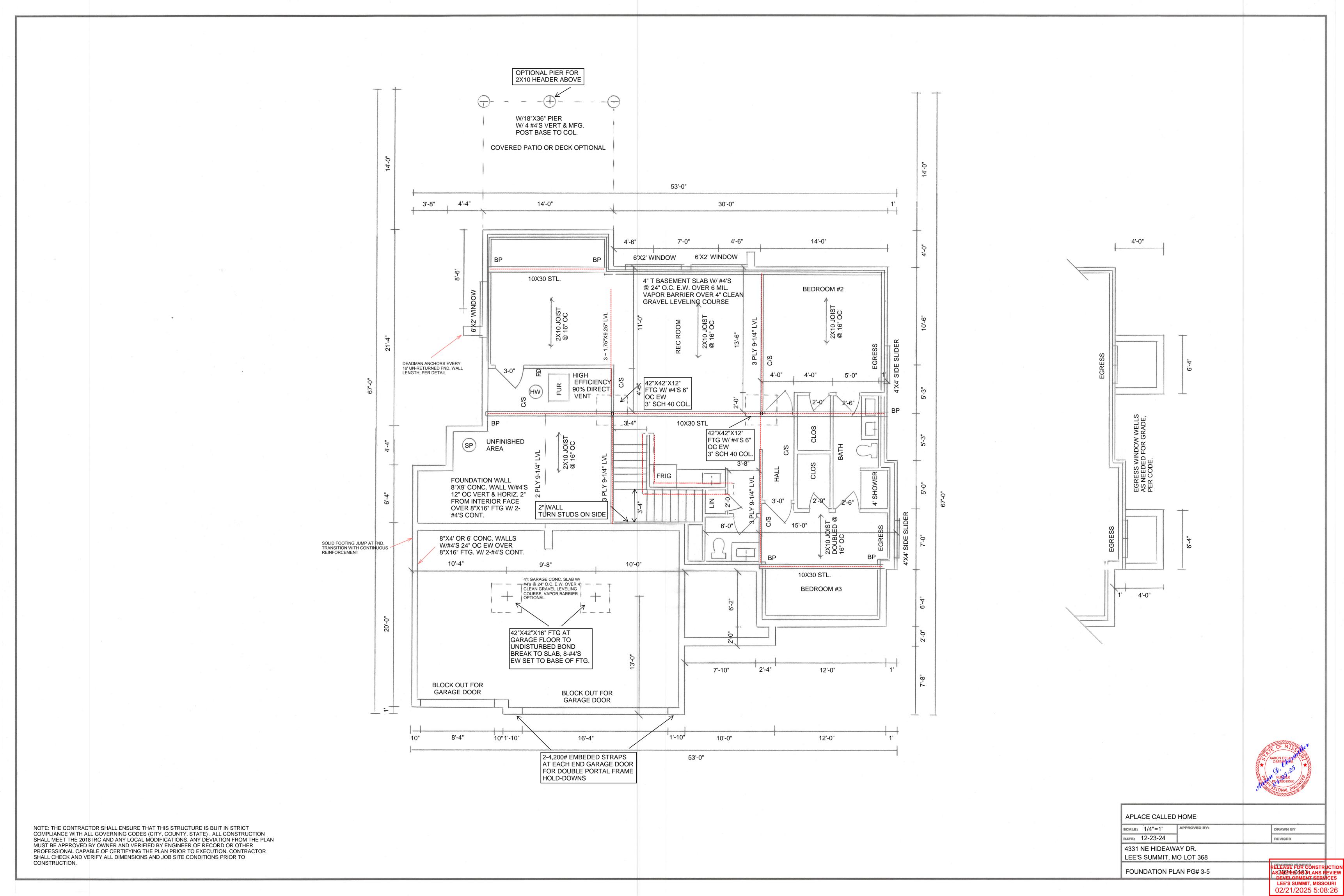
MAIN LIVING AREA -1588' LOWER LEVEL FINISHED AREA - 1288' GARAGE - 620' COVERED PORCH - 196' UNFINISHED AREA 211'

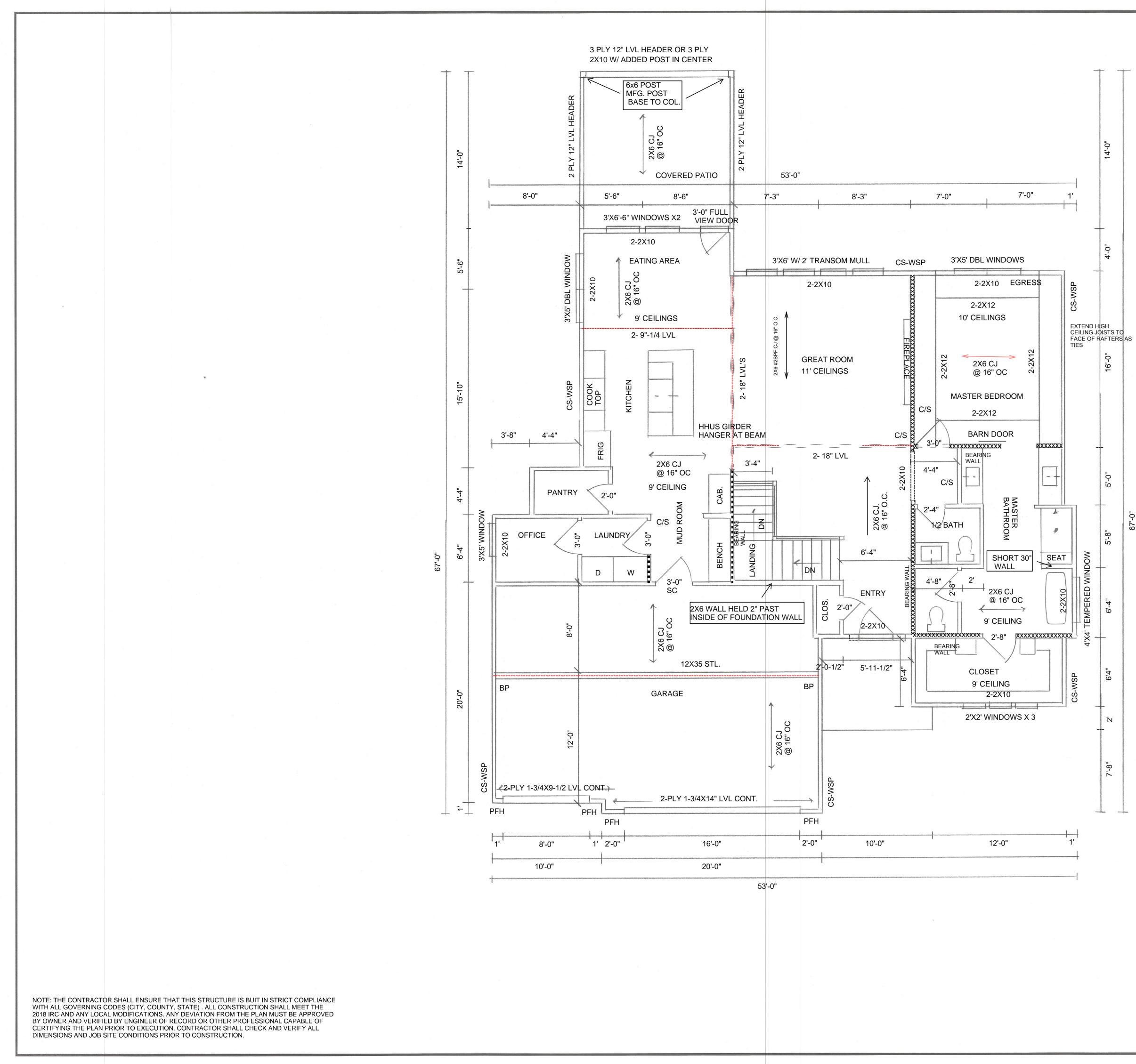
FRONT ELEVATION PG # 1-5

2024-0153



APLACE CALLED HOME		
SCALE: 1/4"=1' 12-23 APPROVED BY:	DRAWN BY	
date: 24	REVISED	
4331 NE HIDEAWAY DR.		
LEE'S SUMMIT, MO LOT 368		
BACK & 2 SIDES ELEVATIONS PG # 2-5	DRAWING NUMBER RELEASE FOR CONSTRU- AS NOTED ON PLANS RE DEVELOPMENT SERVIC	VIEW
	LEE'S SUMMIT, MISSO 02/21/2025 5:08	URI





	APLACE CALLED	HOME		
	scale: 1/4"=1'	APPROVED BY:	DRAWN BY	
	date: 12-23-24		REVISED	
	4331 NE HIDEAWAY DR. LEE'S SUMMIT, MO LOT 368 MAIN FLOOR PLAN PG# 4-5			
			RELEASE FOR CONSTRU	EVIEW
			LEE'S SUMMIT, MISSO 02/21/2025 5:08	URI



WALL METHOD HAS BEEN USED ON ALL EXTERIOR WALLS PER THE I.R.C.
*7/16 APA-RATED PLYWOOD/ OSB WITH 8D NAILS
@ 6' OC AT EDGES & @ 12" OC IN THE FIELD.
*7/16 SHIPLAP PANEL SHEATHING (IE LP SMARTSIDING
OR EQUIVALANT) WITH 8D NAILS @ 6" OC AT EDGES & @
12" OC FIELD * 2/8 SHIDI AD DANEL SHEATING (IE LD SMARTSIDING
* 3/8 SHIPLAP PANEL SHEATING (IE LP SMARTSIDING OR EQUIVALENT) WITH 6D NAILS @ 4" OC AT EDGES & @
12" OC IN THE FIELD

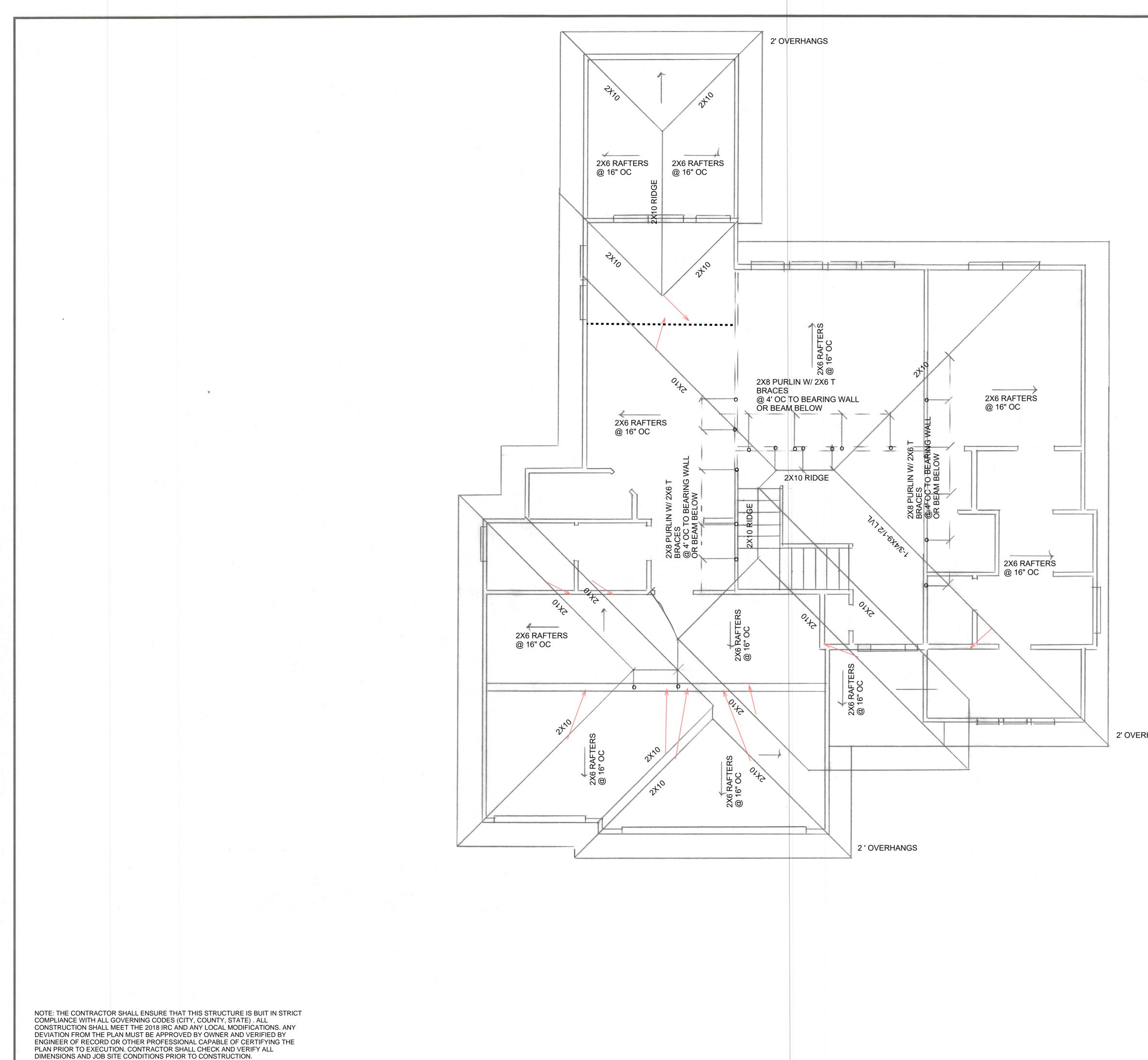
THE CONTINUOUSLY SHEATHED (CS-WSP) BRACED

BP- SOLID BEARING FOR BEAM SUPPORT

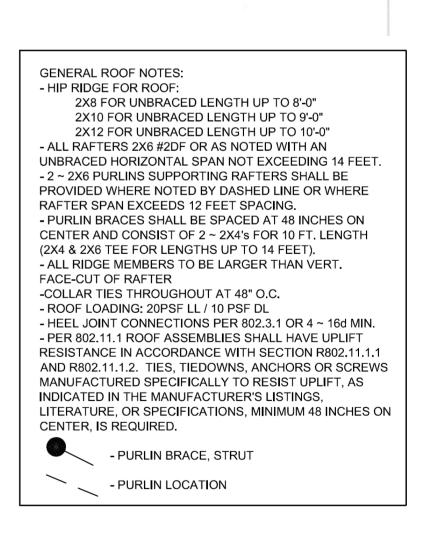
SYMBOL- LEGEND INTERIOR LOAD BEARING WALLS- XXXXX

SMOKE & CARBON MONOXIDE ALARM C/S

BRACED WALL DESIGN:



2' OVERHANGS





APLACE CALLED	HOME		
CALE: 1/4"=1'	APPROVED BY:	DRAWN BY	
ATE: 12-23-24		REVISED	
4331 NE HIDEAW/ LEE'S SUMMIT, M			
ROOF PLAN PG#	5-5	RELEASE FOR CONSTRUCT ASAWAEDON PLANS RE DEVELOPMENT SERVICE	VIEW
~		LEE'S SUMMIT, MISSON 02/21/2025 5:08	URI

FOUNDATION NOTES S1.1 SCALE: N.T.S.

FOUNDATION REQUIREMENTS:

CONCRETE

Concrete strength shall comply with the following minimum strength requirements at 28 days and shall be 6% (+/- 1.5%) entrained air for footings, wa or exterior flatwork and no air added (entrapped air) for interior flatwork: 2,500 psi for basement floor slabs on undisturbed grade. 3,000 psi for footings, foundation walls, structural floor slabs. 3,500 psi for carport and garage floor slabs on undisturbed grade. 3,500 psi for structural floor slabs or per engineered design, whichever is greater. Recommendation: Minimum allowable footing concrete cure time prior to wall placement is 24 hours.

REINFORCEMENT

Footing and pier reinforcement throughout project shall be minimum grade 40. All foundation wall reinforcement shall be minimum Grade 60.

FOOTINGS Exterior walls, bearing walls, columns and piers shall be supported on continuous concrete footings, or other approved structural system to safely support the imposed loads and shall be 18 inches in width per Table 403.1.(1), 8" in depth or as noted otherwize in size and reinforced with 2 ~ #4's continuous. Footings under foundation walls shall be continuous around the structure and from one level to the next. The continuous transitions between footings at different levels enclosing usable space shall be made by approved solid jumps or support systems to provide safe support of the structure. Any jumps to be reinforced with at minimum, one #4 barx48" as near as possible to the corner.

FOOTINGS - MINIMUM DEPTH

The minimum frost footing depth shall be not less than 36" below grade. Footings for freestanding accessory structures with an area of 600 square fe or less and an eave height of 10 feet or less are permitted to extend below grade 12" and have a minimum width of 12".

DAMP PROOFING

One coat (minimum) of damp proofing or equivalent foundation membrane shall be applied to exterior wall surfaces below grade. Sealing tie holes, voids and honeycombed areas with sealant before damp proofing is recommended. Waterproofing in accordance with IRC section 406.2 will not be required unless a groundwater investigation indicates excessive hydrostatic Pressure, a high water table, or other severe soil-water conditions are known to exist and the foundation walls retain earth. Recommendation: The use of waterproofing in accordance with IRC section R406.2 combined with a minimum 4"perforated foundation drainage pipe.

FOUNDATION DRAINAGE

Installation of a continuous foundation drain consisting of a minimum 4 inch perforated pipe around the entire structure is required where habitable or usable space for any portion of the structure is located below grade. The top of the perforated pipe shall be at or below the area being protected. The pipe shall be placed with positive or neutral slope to minimize the accumulation of deposits in the drainage pipe. Placement of the drain tile on top of the footing is acceptable. Vertical drains shall be installed in window wells and connected directly to the perimeter foundation drain. Coarse, clean, ro shall extend 2 inches below and 6 inches above the perforated pipe, and extend 12 inches beyond the outside edge of the footing and covered with a approved filter membrane. The perforated pipe shall terminate to grade or be connected to a minimum 24 inch diameter or 20 inch square sump pit which shall extend a minimum 24 inches below the bottom of the basement floor per IRC section R405.2.3. The sump shall be capable of positive gravity or mechanical drainage to remove any accumulated water and discharge to daylight.

BACKFILL

Placing backfill prior to bracing or supporting the top of the foundation wall may cause foundation walls to become displaced or cracked. Backfilling and wall before seven days to allow the wall to gain sufficient strength to support the imposed loads is prohibited. Inspectors may require engineering certification and correction of any cracked or bowed wall conditions observed. Recommendation: Do not backfill an unsupported straight run of wall over 16 feet in length between corners and cross walls unless adequate bracing is provided or the floor framing has been set and nailed in place and anchor bolts tightened. To improve foundation drainage, backfill with washed gravel or clean crushed rock at least one sieve size larger than drain pig perforations, to a point not less than 2' below finished grade. Encase bottom, dirt side and top of backfill with approved filter membrane. Backfill high enough so there is a minimum 6" fall in the first 10' away from the house.

FOUNDATION ANCHORAGE

Where floor joist and/or blocking are connected to the sill to provide top of wall bracing anchor bolts shall be spaced not more than 3 feet on center. Walls with monolithic slabs may have anchor bolts spaced at 3 feet on center. Sill plates shall be bolted to the foundation with minimum 1/2-inch diameter anchor bolts embedded at least 7 inches into the concrete. A bolt shall be placed within 12 inches, and not closer than 7 bolt diameters, of end of each plate section. A properly sized nut and washer shall be tightened on each bolt to the plate. For walls over 9 feet use a minimum 2x6 plate and blockings shall be in line with anchor bolts. Design specific anchoring may be required by the designer for walls 9 feet tall or more. These anchoring devices may be required to be secured in place to the forms prior to concrete placement. Recommendation: It is recommended that a minimum 2x6 inch sill plate be used to ensure sufficient strength is provided to transfer loads from the anchor bolts to the floor system.

TOP OF WALL RESTRAINT

Where joists run perpendicular to foundation walls, they shall be fastened to plates with three 8d toenails. Where joists run parallel to full height foundation walls, solid blocking for a minimum of three joist spaces shall be provided at a maximum of 3 feet centers to transfer lateral loads on the wall to the floor diaphragm. The blocking shall be securely nailed to the joists and flooring. If ducts are installed in a joist space(s), nail 2 x 4's flat 3 foot o.c. within the joist space(s) and then provide the solid blocking as noted below in a total of 3 joist spaces. Secure each 2x4 to the sill plate with 3-8d nails.



GENERAL NOTES - CONSTRUCTION SHALL COMPLY WITH 2018 IRC; LOADING - 20PSF LL, 115MPH, Vult; ALL ADOPTED NATIONAL ELECTRIC, MECHANICAL, PLUMBING CODES SHALL BE MET:

WINDOW GLAZING

GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC SECTION R308,4 SHALL BE APPROVED SAFTY GLAZING MATERIALS: GLASS IN STORM DOORS. INDIVIDUAL FIXED OR OPENABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARCH OF THE DOOR IN CLOSED POSITION AND WHOSE BOTTOM EDGE IS WITHIN 60" OF THE FLOOR: WALLS ENCLOSED STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTOM OF THE STAIR: ENCLOSURES FOR SPAS, TUBS, SHOWERS, AND WHIRLPOOLS: GLAZING IN FIXED OR OPENABLE PANELS EXCEEDING 9 SQ. FT. AND WHOSE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR WALKING SURFACE WITH IN 36"

EMERGENCY EGRESS

PROVIDE ONE WINDOW FROM EACH BEDROOM THAT HAS A MIN. OPENING AREA OF 5.7 SR. FT. WITH A MIN. OPENING HEIGHT OF 24" AND WIDTH OD 21"

INSULATION VALUES: CONSTRUCTION TO COMPLY WITH THE 2018 ENERGY CONSERVATION CODE, 2018 IRC. TABLE R1102.1.1 MIN. INSULATION SHALL BE PROVIDED ADJACENT TO HABITABLE AREAS AS FOLLOWS: EXTERIOR FRAMED WALLS

	1110
FLOOR OVER HEATED SPACE	R-19
FLOOR OVER OUTSIDE AIR (UNCONDITIONED)	R-19
ATTIC - BLOWN IN	R-49
CATHEDRAL CEILING	R-38
DUCT WORK	R-8
BASEMENT WALLS (CAVITY)	R-13
BASEMENT WALLS (CONTINUOUS)	R-10
SLABS (FOR A MIN. DEPTH OF 2')	R-10
WINDOW U-FACTOR	0.35 OR BETTER

GARAGE

THE GARAGE FLOOR SHALL BE SLOPED TOWARD GARAGE DOORS DOORS BETWEEN GARAGE AND DWELLING - MIN 1 3/4" SOLID CORE OR HONEY COMBED STEEL DOOR OR 20 MIN. RATED; SELF-CLOSING GARAGE TO HAVE 5/8" TYPE X GYPSUM THROUGHTOUT THE H-FRAME SHALL CONSIST OF 2X6 FRAMING

FRAMING

- ALL LUMBER SIZES ARE FOR #2 DF OR AS SPECIFIED IN PLAN/DETAILS.

- ALL WOOD FRAMING MEMBERS IN CONTACT WITH CONCRETE SHALL BE TREATED TO PREVENT DECAY - ALL HEADERS TO BE MIN. (2) #2-2X10 OR AS NOTED IN PLAN, BLOCK CANTILEVERS, DOOR JAMBS, AND OVER BEAMS. - ALL HEADERS TO BEAR ON MIN. OF (2) 2X4 STUDS FOR 6' AND GREATER OPENINGS

JOIST UNDER BEARING PARTITIONS SHALL BE DOUBLED AND COMPLY WITH IRC SEC. R502.4 WATER-RESISTIVE BARRIER SHALL BE PROVIDED OVER ALL EXTERIOR WALL PER IRC SEC. R703 - WHERE CEILING JOIST ARE NOT INSTALLED CONNECTED TO THE RAFTERS AT THE TOP PLATE AND/OR WHERE CEILING JOIST

ARE NOT INSTALLED IN THE LOWER 1/3 OF ATTIC SPACE, RAFTER TIES SHALL BE INSTALLED IN THE LOWER 1/3 OF ATTIC SPACE COLLAR TIES SHALL BE PROVIDED IN THE ATTIC SPACE IN UPPER 1/3 OF ATTIC

- ROOF IS DESIGNED FOR 20 P.S.F. ROOF SNOW LOAD (MIN.) - MIN 20 YR. ASPHALT SHINGLES

- RAFTER TIES SHALL NOT BE REQUIRED WHEN A STRUCTURAL RIDGE HAS BEEN PROVIDED AND ADEQUATELY DESIGNED (AS IN A FULLY VAULTED ROOM) SUCH SHALL BE NOTED AS "STRUCTURAL" ON THE PLAN. PER IRC SEC. 802.3 - SHEATHING SHALL BE ATTACHED PER IRC TABLE, WOOD STRUCTURAL PANELS FOR BRACED WALL REQUIREMENTS SHALL BE APA RATED AND ATTACHED WITH 8d COMMON NAILS 6" O.C. PERIMETER, 12" FIELD - GYPSUM BOARD PANELS IN BRACED WALL METHOD GB (R602.10.2 2018 IRC) : MIN. 1/2" GYPSUM BOARD WITH NO. 6 1-1/4" TYPE W OR S SCREWS @ 7" O.C. EDGES AND WALL (4'-0" LONG, BOTH FACES OF WALL

R312.2 GUARD OPENING LIMITATIONS. REQUIRED GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOOR AREAS, BALCONIES, AND PORCHES SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES THAT DO NOT ALLOW PASSAGE OF A SPHERE 4" OR MORE IN DIAMETER.

DETECTORS

SECTION R315 CARBON MONOXIDE ALARMS R315.1 CARBON MONOXIDE ALARMS. FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS WITHIN WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. R315.2 CARBON MONOXIDE DETECTION SYSTEMS. CARBON MONOXIDE DETECTION SYSTEMS THAT INCLUDE CARBON MONOXIDE DETECTORS AND AUDIBLE NOTIFICATION APPLIANCES. INSTALLED AND MAINTAINED IN ACCORDANCE WITH THIS SECTION FOR CARBON MONOXIDE ALARMS AND NFPA 720, SHALL BE PERMITTED. THE CARBON MONOXIDE DETECTORS SHALL BE LISTED AS COMPLYING WITH UL 2075. WHERE A HOUSEHOLD CARBON MONOXIDE DETECTION SYSTEM IS INSTALLED, IT SHALL BECOME A PERMANENT FIXTURE OF THE OCCUPANCY, OWNED BY THE HOMEOWNER AND SHALL BE MONITORED BY AN APPROVED SUPERVISING STATION.

R314 PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING ROOM AND ON EACH FLOOR, INCLUDING BASEMENT. ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE DWELLING, (SECTION R314.5)

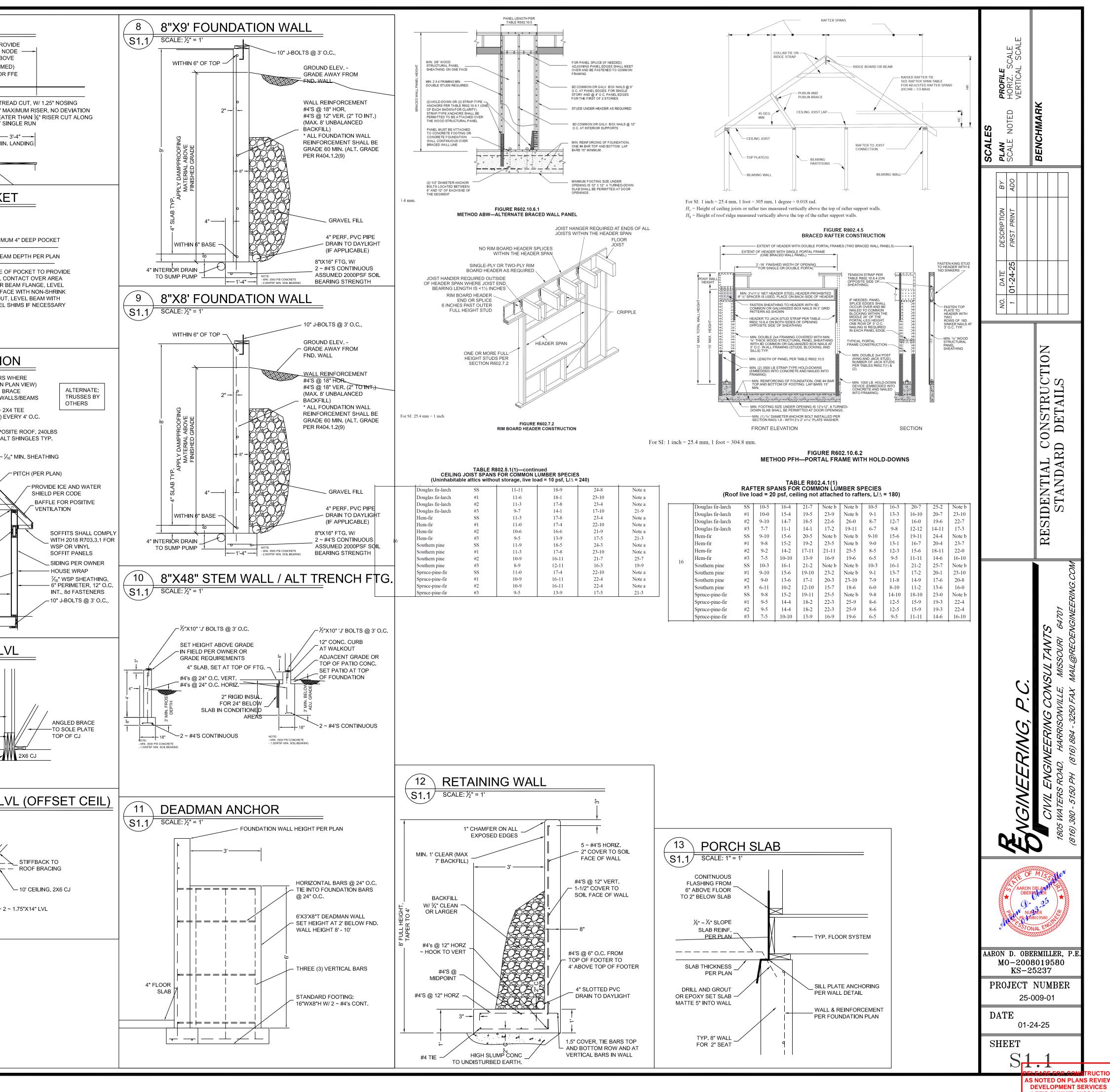
FROST OR 48" FOUNDATION WALL:

FROST DEPTH FOUNDATION WALLS TO HAVE 2 ~ #4's CONTINUOUS HORIZONTAL, 3" COVER TO TOP, 3" COVER TO BASE OF WALL (TOP OF FOOTING); VERTICAL REINFORCEMENT #4's @ 36" O.C. BASE OF FOOTING TO BE 36" BELOW ADJACENT GRADE, CURB WALL ABOVE GRADE (TO PORCH SLAB OR GARAGE WALL) AS NECESSARY IN FIELD

STAIRWELL OPENING TO P MIN. 80" HEADROOM FROM	
TO FINISHED SURFACE A FLOOR SYSTEM (10" ASSU	JN
34" SUBFLOOR, ADJUST FO	C
	ΞÆ
	_
	41
3~2X12 STRINGERS EACH STAIR RUN	=
	<
S1.1 SCALE: ½" = 1'	
2X8 SILL PLATE - TYPICAL.	IN
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	F
SNICA BARA BARA BARA BARA BARA BARA BARA BA	
STANDARD 8" FND. WALL -	
5 TYPICAL WALL SECT	l
S1.1 SCALE: ¹ / ₂ " = 1' PURLINS @ RAFTER UNBRACED SPAN (I	١N
ALL INSULATION VALUES	
SHALL COMPLY WITH IRC OR AMENDED CODE	
2~2X6 PURLINS FOR UNBRACED LENGTH ASPH	
OF 4' R-49 INSUL. ATTIC SPACE,	_
R-38 AT VAULTED AREAS 2X6 #2DF RAFTERS @ 16" O.C.	
UNLESS NOTED OTHERWISE 2X6 CJ @ 16" O.C.	/
OR AS NOTED IN PLAN	\
PROVIDE TIES, TIEDOWNS, ANCHORS OR SCREWS MFG. SPECIFICALLY TO RESIST	/
UPLIFT, AS INFICATED IN MFG. LISTING,	/
2 ~ 2X10 HEADER MIN. OR AS NOTED IN PLAN -	
2X4 #2DF EXTERIOR WALLS @ 16" O.C., R-13 MIN.	_
TALL WALLS (>12'h): ½" GYP. BOARD 2X6 @ 16" O.C. ¾" T&G SUBFLOOR	
2X10 TYP. OR I-JOIST	
6 BRACING AT UPSET I	
S1.1 SCALE: 1/2" = 1'	
ROOF BRACING	
PLUMB TO TOP OF	_
UPSET LVL BEAM	
STD. JOIST HANGER	_
GTD. JOIDT THATGER	
7 BRACING AT UPSET I	
S1.1 SCALE: ½" = 1'	-
RAFTERS	
PLUMB BRACING TO RAFTERS, ANGLE BRACING TO BOT OF BEAM	/
	_
2X6 ACROSS TOP OF CJ	
FLAT CEILING ~8' NOMINAL	_

TYPICAL STAIRS

3



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