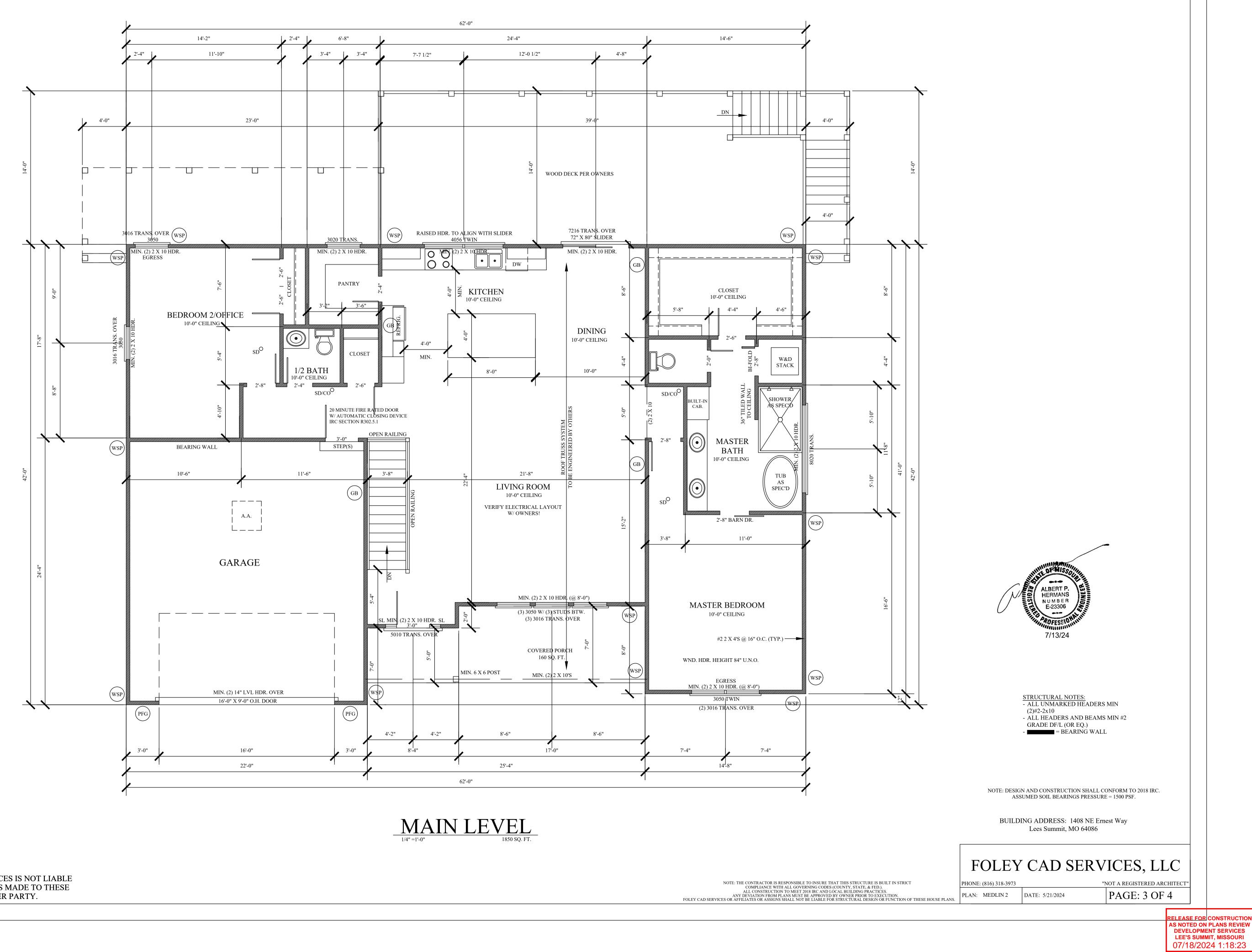


DIMENSIONS AND JOB SITE CONDITIONS PRIOR TO CONSTRUCTION.

07/18/2024 1:18:23



CONTRACTOR TO CHECK AND VERIFY ALL FOLEY CAD SERVICES IS NOT LIABLE DIMENSIONS AND JOB SITE CONDITIONS PRIOR TO CONSTRUCTION.

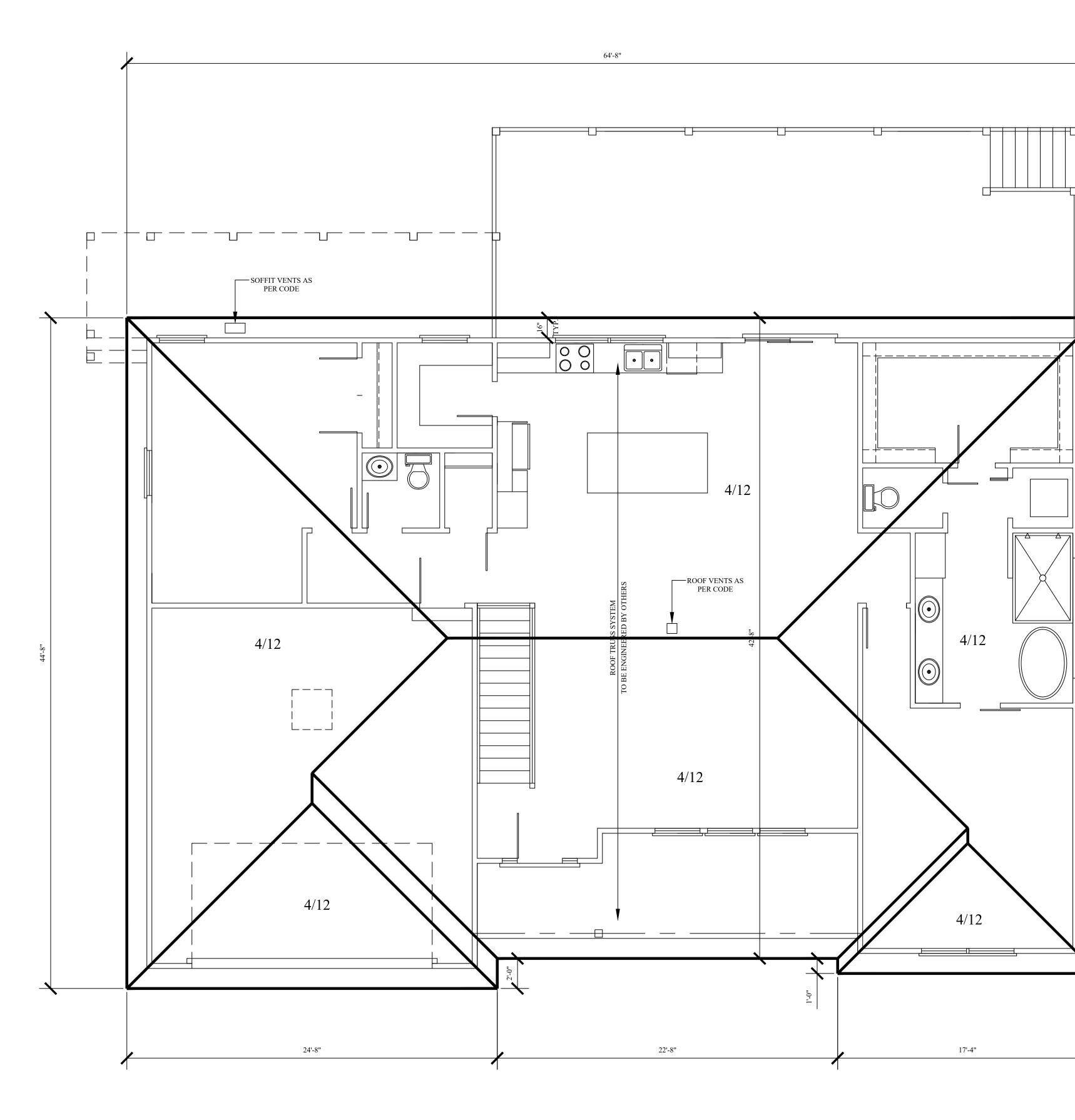
FOR ANY CHANGES MADE TO THESE PLANS BY ANOTHER PARTY.

(GB) = GYPSUM BOARD

(PFG) = PORTAL FRAME GARAGE

(WSP) = WOOD STRUCTURAL PANEL

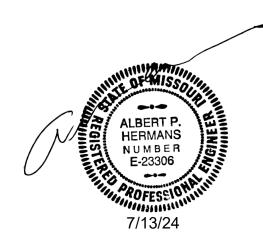




CONTRACTOR TO CHECK AND VERIFY ALL<br/>DIMENSIONS AND JOB SITE CONDITIONSFOLEY CAD SERVICES IS NOT LIABLE<br/>FOR ANY CHANGES MADE TO THESE PRIOR TO CONSTRUCTION.

FOR ANY CHANGES MADE TO THESE PLANS BY ANOTHER PARTY.

ROOF PLAN



NOTE: DESIGN AND CONSTRUCTION SHALL CONFORM TO 2018 IRC. ASSUMED SOIL BEARINGS PRESSURE = 1500 PSF.

FOLEY CAD SERVICES, LLC

BUILDING ADDRESS: 1408 NE Ernest Way Lees Summit, MO 64086

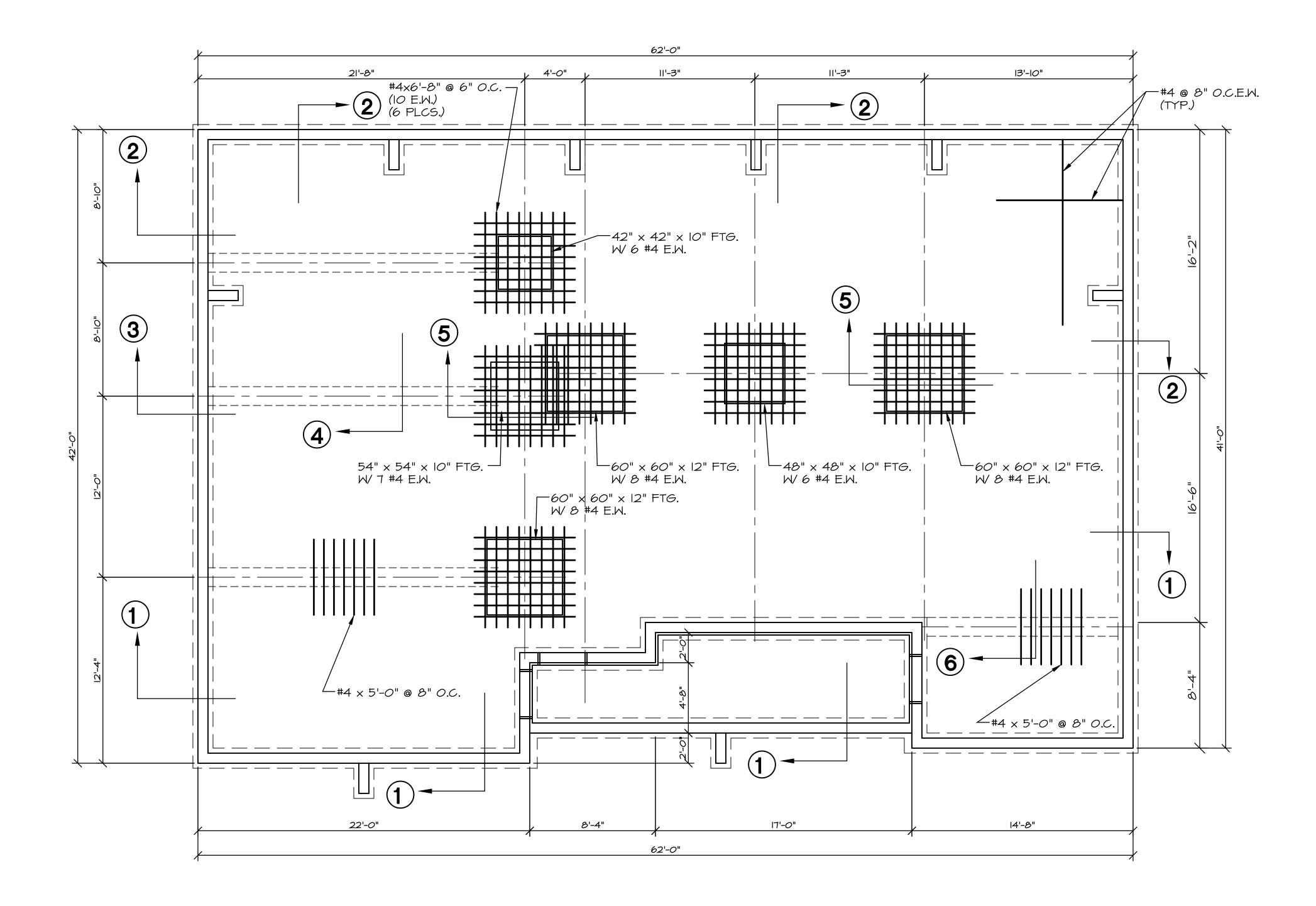
# NOTE: THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT THIS STRUCTURE IS BUILT IN STRICT COMPLIANCE WITH ALL GOVERNING CODES (COUNTY, STATE, & FED.). ALL CONSTRUCTION TO MEET 2018 IRC AND LOCAL BUILDING PRACTICES. ANY DEVIATION FROM PLANS MUST BE APPROVED BY OWNER PRIOR TO EXECUTION. FOLEY CAD SERVICES OR AFFILIATES OR ASSIGNS SHALL NOT BE LIABLE FOR STRUCTURAL DESIGN OR FUNCTION OF THESE HOUSE PLANS.

PHONE: (816) 318-3973 PLAN: MEDLIN 2

DATE: 5/21/2024

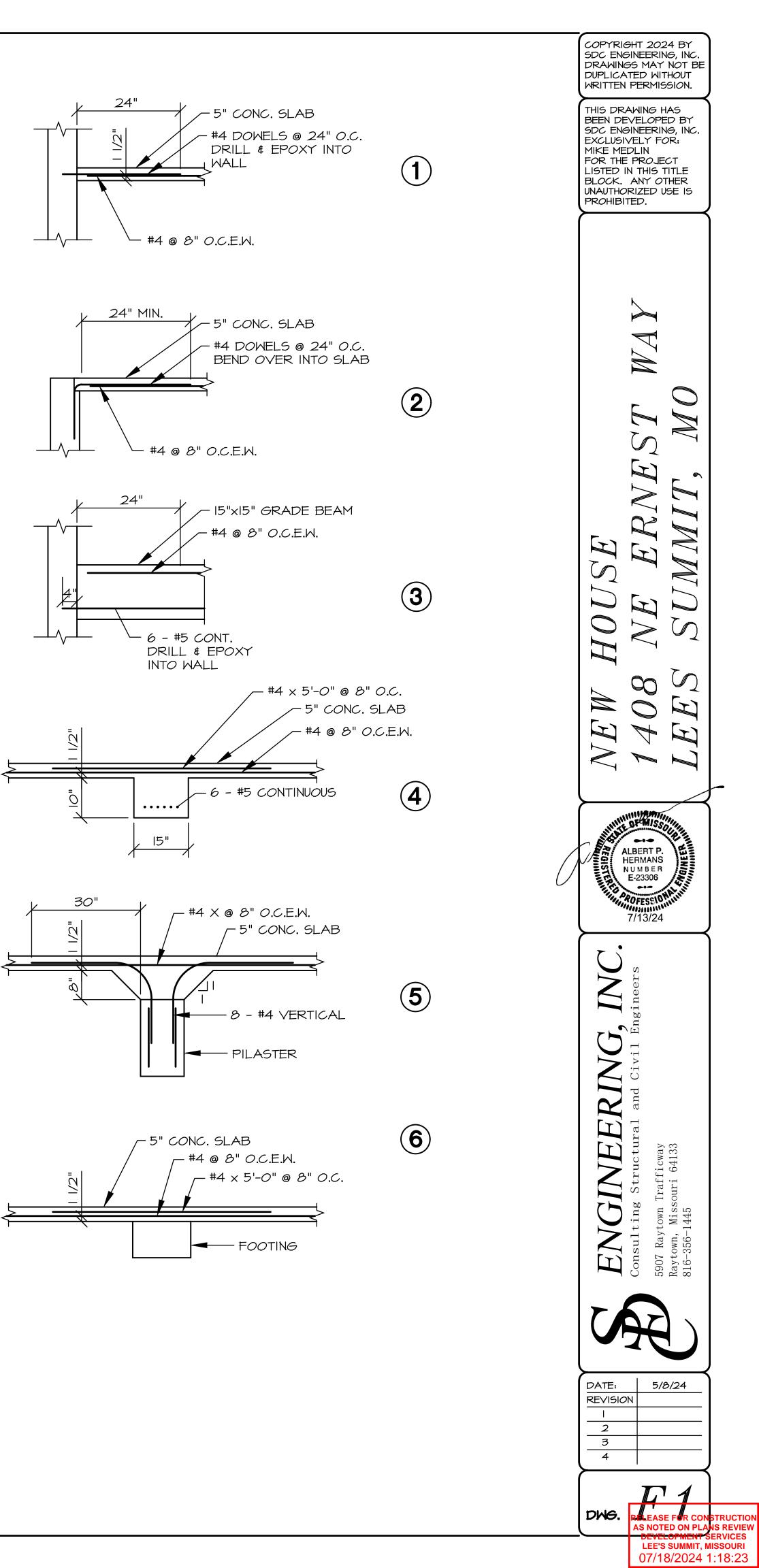
"NOT A REGISTERED ARCHITECT" PAGE: 4 OF 4

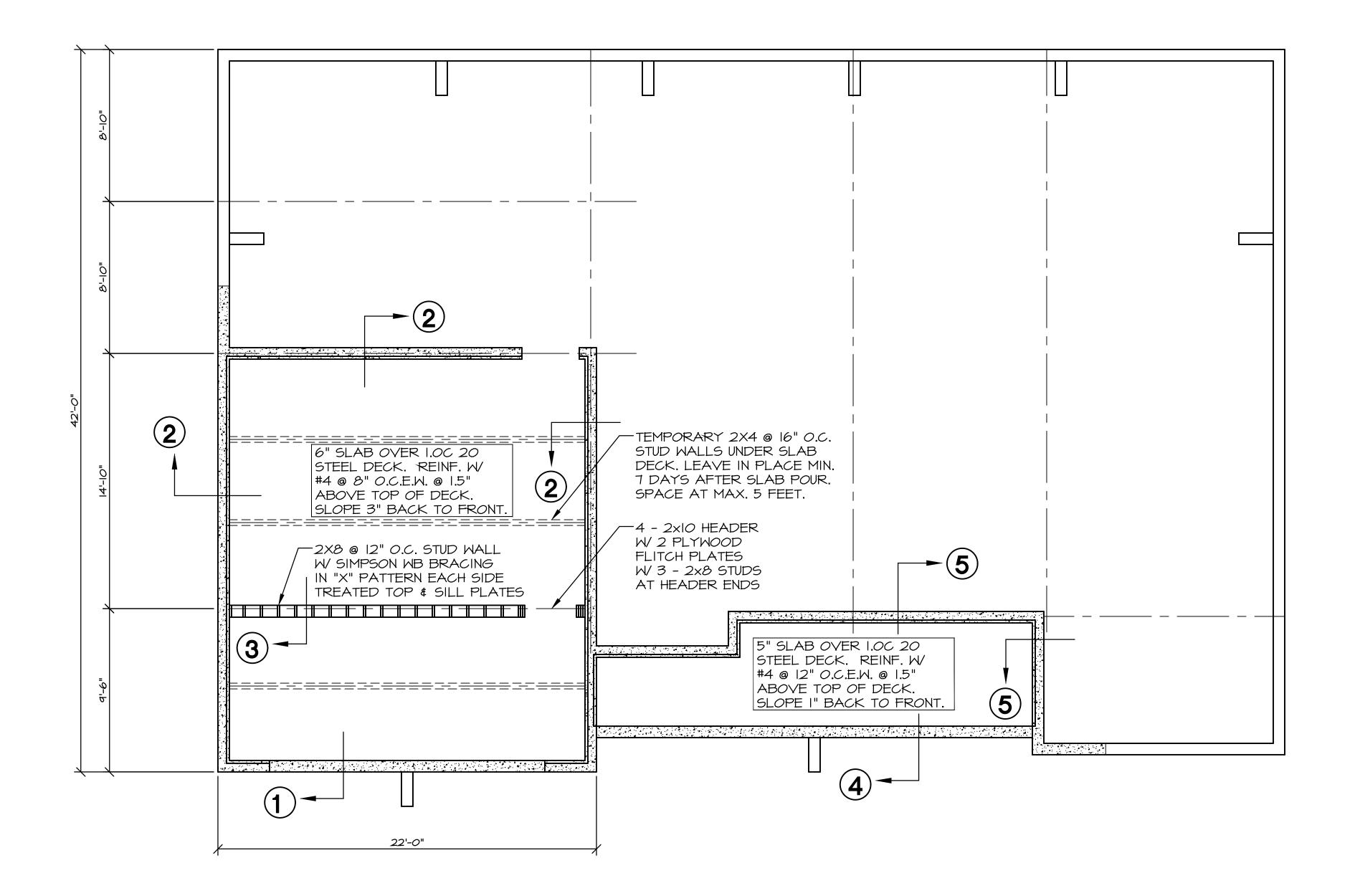
RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 07/18/2024 1:18:23



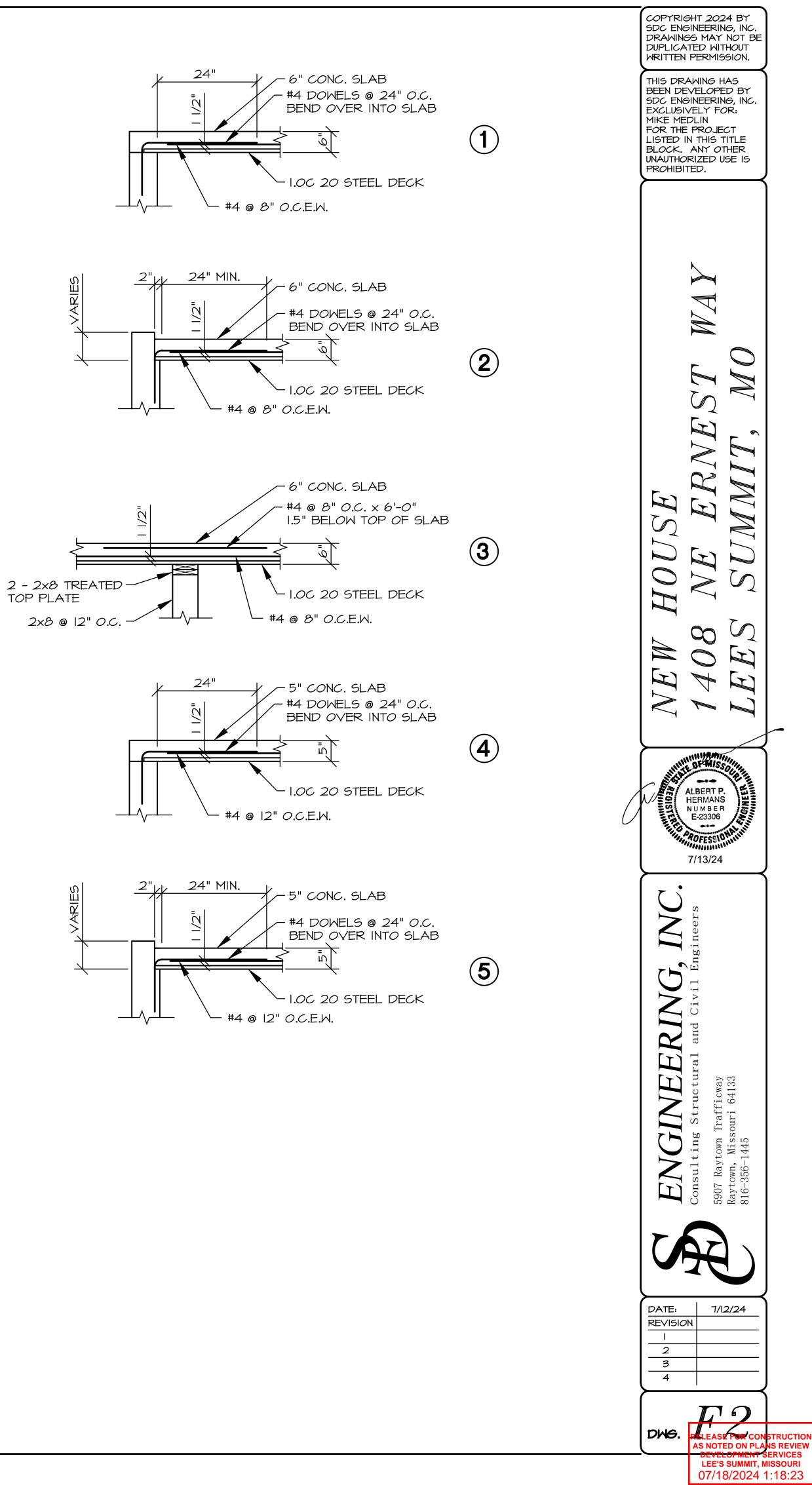
FOUNDATION PLAN SCALE: 1/4" = 1'-0"







GARAGE SLAB PLAN SCALE: 1/4" = 1'-0"





CHA	PTER 11 MANDATORY PROVISIONS			
RC CODE REFERENCE	DESCRIPTION			
N1101.14	REQUIRES POSTING A PERMANENT CERTIFICATE THAT LISTS THE ENERGY EFFICIENT COMPONENTS INSTALLED AND CONSTRUCTED IN THE HOUSE.	NAILING SCHEDULE		
N1102.4	REQUIRES THAT AN AIR LEAKAGE TEST (BLOWER DOOR) BE CONDUCTED, VERIFYING THE HOUSE ACHIEVES 3 AIR CHANGES PER HOUR OR LESS LEAKAGE.	DESCRIPTIOM OF BLDG. ELEMENTS	# AND NAIL TYPE	SPACING
		SOLE PLATE TO JOIST	16d	16" O. C
N1103.1.1	REQUIRES THAT EACH HVAC SYSTEM BE PROVIDED WITH A PROGRAMMABLE THERMOSTST.	SOLE PLATE TO STUD, END NAIL	2-16d	- 1
		DOUBLE STUDS, FACE NAIL	10d	24" 0. (
N1103.1.2 N1103.3.2	REQUIRES THAT HEAT PUMPS MEET SUPPLEMENTARY ELECTRIC HEAT ENERGY EFFICIENCY REQUIREMENTS REQUIRES THAT DUCTS, AIR HANDLERS AND FILTER BOXES JOINTS AND SEAMS BE SEALED.	DOUBLE TOP PLATES, FACE NAIL	10d	24" 0. (
		RIM JOIST- TOP PLATES, TOE NAIL	8d	6" O. C.
		CLG. JOIST TO PLATE, TOE NAIL	3-8d	_
N1103.6	REQUIRES MECHANICAL VENTILATION SYSTEMS TO MEET MINIMUM EFFICIENCY REQUIREMENTS.	RAFTER TO PLATE, TOE NAIL	2–16d	_
		RAFTER TO RIDGE, VALLEY OR HIP		
N1103.10	REQUIRES POOLS AND SPAS TO MEET MINIMUM ENERGY EFFICIENCY LEVELS.	TOE NAIL	4–16d	-
		FACE NAIL	3–16d	_

# FOUNDATION NOTES:

-BASEMENT FLOOR TO BE MIN. 4" THICK CONC. SLAB OVER 4" CRUSHED ROCK W/ A 6-MIL-THICK POLYETHYLENE MOISTURE BARRIER BETWEEN SLAB AND ROCK.

-ASSUMED SOIL BEARING CAPACITY-2000 PSF MINIMUM, CONTRACTOR TO VERIFY.

-CONCRETE SHALL BE AIR ENTRANED WITH A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 4000 PSI FOR BASEMENT AND INTERIOR FLOOR SLABS, 3000 PSI FOR BASEMENT AND FOUNDATION WALLS AND 4000 PSI FOR PORCHES AND GARAGE FLOOR SLABS.

-LAP FOUNDATION WALL CORNER AND END BARS 24" MINIMUM. LAP FOOTING BARS 24" MINIMUM.

-FOOTINGS TO BE POURED CONTINUOUS AT FOOTING STEPS. (SOLID JUMPS)

-FLOOR SLABS TO HAVE INSTALLED CONTROL JOINTS TO MINIMIZE THE AMOUNT OF RANDOM CRACKING. JOINTS TO BE SAW CUT WITHIN 18 HOURS OF POURING OR MAY BE TOOLED INTO SLAB.

-FOOTINGS SHALL EXTEND BELOW FROST LINE - MINIMUM DEPTH OF 36" BELOW GRADE IS REQUIRED IN THE KANSAS CITY AREA.

-FOUNDATION DRAIN SHALL BE MIN. 4" PERFORATED DRAIN AROUND USABLE SPACE BELOW GRADE OR OTHER EQUIVALENT MATERIALS (2018 IRC SECTION R405.1). DRAIN TO BE COVERED WITH NOT LESS THAN 6" OF WASHED GRAVEL OR CRUSHED ROCK AND SHALL DRAIN TO DAYLIGHT TO THE EXTERIOR BELOW FLOOR LEVEL OR TERMINATE IN A MIN. 20 GALLON SUMP PUMP.

-STEEL REBAR TO BE MIN. OF GRADE 40.

-ANCHOR BOLT SPACING SHALL NOT EXCEED 72" O. C. W/ 7" MINIMUM EMBEDMENT INTO CONCRETE.

-FOUNDATION WALLS TO BE DAMP-PROOFED (2018 IRC SECTION R406)

DESIGN NOTES:

A. STEEL:

WOOD:

A-36 # 2 D.F.L. OR BETTER DEFLECTION: L/360 MIN. SOIL BEARING: 2000 PSF

B. ALL L.V.L.S TO BE 2.0E MICROLAMS UNLESS OTHERWISE SPECIFIED.

C. ALL HEADERS TO BE (2) 2"x10" #2 D.F.L. UNLESS OTHERWISE SPECIFIED

D. ALL BEAM AND HEADER SUPPORTS TO BE (3) 2"x4" #2 D.F.L. UNLESS OTHERWISE SPECIFIED.

E. ALL STEEL BEAM POSTS TO BE STANDARD WEIGHT STEEL PIPE COLUMNS UNLESS OTHERWISE SPECIFIED.

F. ALL WINDOW SIZES SPECIFIED ARE IN INCHES ACCORDING TO THE GLASS UNIT SIZE. THE CONTRACTOR CONSTRUCTED WITH 5/8" FIRE ROCK. SHALL BE RESPONSIBLE FOR SIZING WINDOWS TO MATCH AS CLOSELY AS POSSIBLE TO THE MANUFACTURER OF THE THEIR CHOICE.

G. ALL RECEPTACLES ON 15 OR 20 AMP BRANCH CIRCUITS IN FOLLOWING LOCATIONS ARE TO HAVE G.F.C.I. PROTECTION: BATHROOMS, CRAWL SPACES, UNFINISHED PORTIONS OF BASEMENT. SERVING KITCHEN COUNTERTOPS, WITHIN 6' OF SINKS, OUTDOORS AND IN GARAGES WITHIN 6'-6" OF FINISHED FLOOR.

# STRUCTURAL NOTES:

## NOTES:

-EXTERIOR WALLS TO BE 2 x 6'S (STUD GRADE) @ 16" O. C.  $W/ \frac{7}{16}$ " CDX PLYWOOD OR OSB SHEATHING AS SUB-SIDING. (R-20 BATT INSULATION)

-PROVIDE SOLID BLOCKING BELOW BEAMS AND LOAD BEARING HEADERS.

-STAIRS TO HAVE 3 STRINGERS NOT TO EXCEED 18" O. C.

-ALL SILLS, SLEEPERS AND FURRING ATTATCHED TO CONCRETE SHALL BE OF DECAY-RESISTANT MATERIALS.

-FRAMING OF OPENINGS: HEADERS & TRIMMERS SHALL BE OF SUFFICIENT CROSS SECTION TO SUPPORT THE FLOOR FRAMING. TRIMMER JOISTS SHALL BE DOUBLED WHEN THE HEADER IS SUPPORTED MORE THAN 3' FROM THE TRIMMER JOIST BEARING. WHEN THE HEADER SPAN EXCEEDS 4', THE HEADER AND TRIMMER SHALL BE DOUBLED.

#### NOTE:

EXTERIOR WALLS TO BE CONSTRUCTED IN ACCORDANCE WITH IRC 2018 SECTION R602.10.4 METHOD WSP FOR BRACED WALL CONSTRUCTION WITH CONTINUOUS EXTERIOR WOOD STRUCTURAL PANEL SHEATHING.

#### **ROOF NOTES:**

A. PROVIDE ROOF VENTS TOTALING MIN. 1 SQ. FT. NET FREE VENTILATING AREA FOR EA. 300 SQ. FT. OF ATTIC SPACE WITH AN EQUAL AMOUNT OF SOFFIT VENTS.

B. ALL ROOF RAFTERS TO BE #2 D.F.L. 2"x6" @ 16" O.C. UNLESS OTHERWISE SPECIFIED.

#### PLAN NOTES:

A. ALL DIMENSIONS, JOIST, MICROLAMS LVL'S, BEAMS AND POINT LOADS SHALL BE REVIEWED BY CONTRACTORS AND THEIR SUB CONTRACTORS AND VERIFIED. SDC ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY INFORMATION WHICH IS NOT VERIFIED.

B. CONTRACTOR SHALL NOTIFY SDC ENGINEERING IMMEDIATELY OF ANY DISCREPANCY FOUND WITHIN THESE PLANS.

C. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE AND FEDERAL CODES REGARDING CONSTRUCTION OF THIS PLAN.

D. PLANS ARE DESIGNED AND HOME SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS AND ANY AMENDMENTS THAT MAY APPLY.

E. DESIGN CRITERIA WITHIN THIS PLAN ARE SPECIFIED TO PROVIDE WHAT SDC ENGINEERING FEELS IS BEST FOR THE STRUCTURAL INTEGRITY OF THE PLAN. ANY CHANGES TO THOSE SPECIFICATIONS ARE AT THE BUILDERS DISCRETION. HOWEVER SDC ENGINEERING WILL ASSUME NO LIABILITY FOR THE STRUCTURE OF THE PLAN IF CHANGES ARE MADE TO THESE SPECIFICATIONS.

DOOR BETWEEN THE GARAGE AND THE DWELLING SHALL BE 1 3/8" THICK SOLID WOOD, 1 3/8" THICK MINIMUM SOLID CORE OR HONEY COMBED STEEL DOOR OR 20-MINUTE FIRE RATED.

G. ALL WALLS BETWEEN THE GARAGE AND HOUSE ARE TO BE

H. ALL WINDOWS IN SLEEPING ROOMS OVER 6' ABOVE GRADE MUST BE A MINIMUM OF 24" ABOVE FINISHED FLOOR.

> PLANS WERE DESIGNED AND REVIEWED IN ACCORDANCE WITH THE 2018 IRC AS ADOPTED BY THE CITY OF LEES SUMMIT, MO.

-GLASS IN HAZARDOUS LOCATIONS 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 24" ARCH OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS WITHIN 60" OF THE FLOOR; WALLS ENCLOSING STAIR-WAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTOM OF THE STAIR: ENCLOS-URES FOR SPAS, TUBS, SHOWERS AND WHIRLPOOLS; AND GLAZING IN FIXED OR OPENABLE PANELS EXC-EEDING 9 SQ. FT. AND WHOSE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR WALKING SURFACE WITHIN 36".

-ALL EXTERIOR WINDOWS AND GLASS DOORS TO BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE 2018 IRC..

-EMERGENCY EGRESS WINDOWS ARE NOTED AT REQUIRED LOCATIONS IN EACH BEDROOM. THE "EGRESS" WINDOW SHALL HAVE A MINIMUM OPENABLE AREA OF 5.7 SQUARE FEET WITH A MINIMUM OPENABLE HEIGHT OF 24 INCHES AND WIDTH OF 21 INCHES. THE SILL HEIGHT OF THE WINDOW SHALL NOT EXCEED 44 INCHES.

-THE BUILDING THERMAL ENVELOPE IS REQUIRED TO BE SEALED (IRC N1102.4.1).

-DUCTS, AIR HANDLERS, FILTER BOXES AND BUILDING CAVITIES USED AS DUCTS SHALL BE SEALED (2018 IRC SECTION N1103.3).

-THE MINIMUM SEER RATING FOR THE AIR CONDITIONER IS 13.

-THE MINIMUM EFFICIENCY RATING FOR THE FORCED AIR FURNACE IS 78%.

-PROVIDE A MECHANICAL VENTILATION SYSTEM FOR ALL BATHROOM & WATER CLOSET ROOMS WHICH DO NOT HAVE A MINIMUM 3 SQUARE FT. EXTERIOR WINDOW, 1/2 OF WHICH IS OPENABLE.

-STAIRWAYS TO HAVE A MAXIMUM 734" RISER AND A MINIMUM 10" TREAD. (IRC 2018 R311.7.5)

-GUARDRAILS AND HANDRAILS TO BE CONSTRUCTED SUCH THAT A 4" SPHERE CANNOT PASS THRU.

-PROVIDE SMOKE ALARMS OUTSIDE AND INSIDE OF EACH SLEEPING ROOM. AND ON EACH FLOOR INCLUDING BASEMENTS. ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE DWELLING.

-ALL ELECTRICAL OUTLETS SERVING BATHROOMS, KITCHEN COUNTERS, GARAGE AND WITHIN 6' OF ANY SINK SHALL HAVE GFCI PROTECTION.

-ALL OPERABLE WINDOWS W/SILLS MORE THAN 72" ABOVE FINISHED GRADE OR OUTSIDE SURFACE AND ARE LESS THAN 24" ABOVE FINISHED FLOOR ARE TO BE EQUIPPED WITH A WINDOW OPENING CONTROL DEVICE. THESE MECHANISMS ARE REQUIRED TO COMPLY WITH ASTM 2090.

-CARBON MONOXIDE ALARMS ARE REQUIRED OUTSIDE OF AND IN THE IMMEDIATE VICINITY OF ALL SLEEPING ROOMS. IRC R315.3.

-TAMPER RESISTANT RECEPTACLES ARE REQUIRED AS DESCRIBED BY IRC SECTION E4002.14.

-ARC-FAULT CIRCUIT INTERRUPTER PROTECTION IS ONLY REQUIRED FOR ALL BRANCH CIRCUITS SERVING 15 & 20 AMP RECEPTACLES IN BEDROOMS.

3 ACH – R303.

# DWELLING MUST MEET OR EXCEED THE MINIMUM REQUIREMENTS OF 2018 IRC TABLE N1102.1.2.

TABLE N1102.1.2 ALTERNATE INSULATION VALUES (WINDOW AREA NOT LIMITED)						
CEILING R-VALUE	R-49	EXTERIOR WALL	R-20			
CATHEDRAL CEILING R-VALUE	R-30	CRAWL SPACE WALL	R-13			
FLOOR OVER UNHEATED SPACE	R—19	GLAZING	U≤ 0.40			
FLOOR OVER OUTSIDE AIR	R-30	N/A				
DUCTS OUTSIDE OF THE	SUPPLY AND RETURN R-8					
CONDITIONED SPACE	IN FLOOF	R-6				
BASEMENT WALL	R-13 INSULATION CONCRETE WALLS ADJACENT TO FINISHED SPACE.					
ON GRADE TRENCH FOOTINGS	R10, R15 FOR HEATED SLABS					

a. DEFAULT U-FACTOR FOR DOUBLE PANE, ARGON FILLED LOW-E TREATMENT IS U= 0.40. FOR ALL SKYLITES USE U-FACTOR = 0.55.

-RECESSED LIGHTING SHALL BE SEALED TO PREVENT LEAKAGE BETWEEN CONDITIONED & UNCONDITIONED SPACE.

-WHOLE HOUSE VENTILATION REQUIRED WHERE UNDER

# NOTES:

-ALL NEW HOMES ARE REQUIRED TO HAVE AN AIR LEAKAGE TEST (BLOWER DOOR TEST) PERFORMED TO VERIFY THAT THE AIR LEAKAGE RATE DOES NOT EXCEED 3 AIR CHANGES PER HOUR AT A PRESSURE DIFFERENTIAL OF 50 PASCALS. THE DETAILS OF THE TEST ARE IN SECTION N1102.4.1.2 OF THE 2018 IRC.

-NEW HOMES THAT HAVE AN AIR LEAKAGE RATE OF LESS THAN 3 AIR CHANGES PER HOUR ARE REQUIRED TO PROVIDE "WHOLE HOUSE MECHANICAL VENTILATION" AS DESCRIBED IN SECTION M1505.4 OF THE 2018 IRC.

-AMENDMENTS TO CHAPTER 11 ENERGY EFFICIENCY OF THE 2018 IRC PROVIDE FOR 3 DIFFERENT COMPLIANCE PATHS: 1.) PRESCRIPTIVE ALTERNATIVE

2.) PERFORMANCE ALTERNATIVE

3.) HERS OPTION THE NEW HOME COMPLIANCE PATH OPTION MUST BE INDICATED AT THE TIME OF PERMIT APPLICATION.

CHAPTER 11 MANDATES SOME REQUIREMENTS, REGARDLESS OF THE COMPLIANCE PATH CHOSEN. THESE REQUIREMENTS ARE LISTED IN THE TABLE ABOVE.

# **TRUSS DESIGN NOTES:**

-FLOOR AND ROOF TRUSSES SHALL BE DESIGNED AND MANUFACTURED BY OTHERS. TRUSS VENDOR SHALL SUBMIT DESIGN AND LAYOUT DRAWINGS FOR REVIEW BY THE ENGINEER FOR COMPLIANCE WITH THE STRUCTURAL DRAWINGS.

-ROOF TRUSSES SHALL BE DESIGNED TO CARRY THE FOLLOWING LOADS: TOP CHORD DEAD LOAD = 10 PSFBOTTOM CHORD DEAD LOAD = 10 PSFTOP CHORD LIVE LOAD = 20 PSF

-FLOOR TRUSSES SHALL BE DESIGNED TO CARRY THE FOLLOWING LOADS: TOP CHORD DEAD LOAD = 10 PSFBOTTOM CHORD DEAD LOAD = 5 PSF TOP CHORD LIVE LOAD = 40 PSF

### DWELLING SHALL COMPLY WITH THE FOLLOWING LOAD CONDITIONS

AREA	MINIMUM DEAD LOAD	MINIMUM LIVE LOAD
EXTERIOR BALCONIES	10	60
DECKS	10	40
CEILING JOISTS/ATTICS W/O STORAGE SCUTTLE ACCESS ONLY	10	10
CEILING JOISTS/ATTICS W/ STORAGE-DOOR /PULL DOWN LADDER ACCESS	10	20
ROOMS - NON-SLEEPING	10	40
SLEEPING ROOMS	10	30
ROOF – LIGHT ROOF COVERING	10	20
ROOF – HEAVY ROOF COVERING – CONCRETE/TILE/SLATE	20	20

