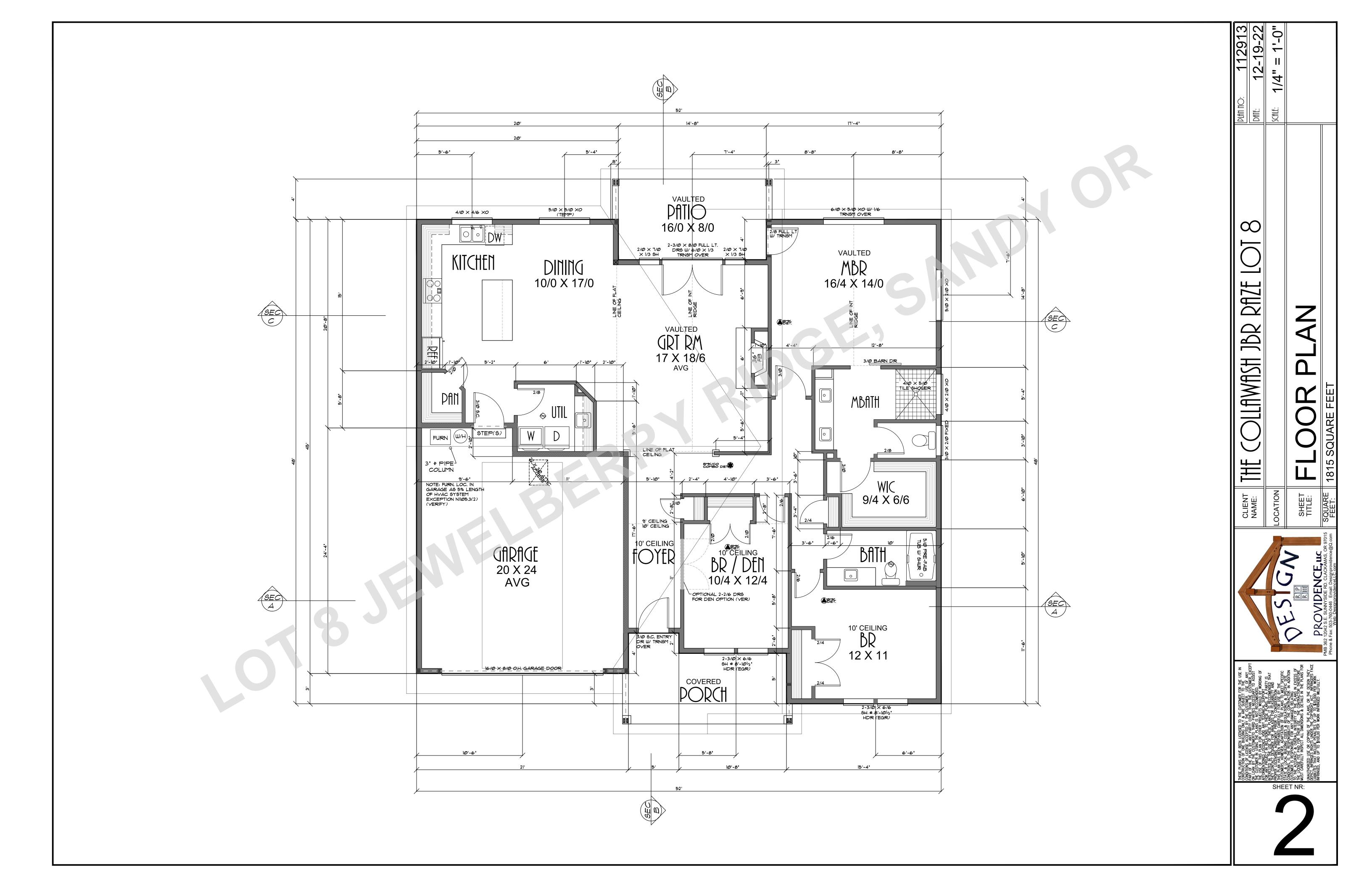
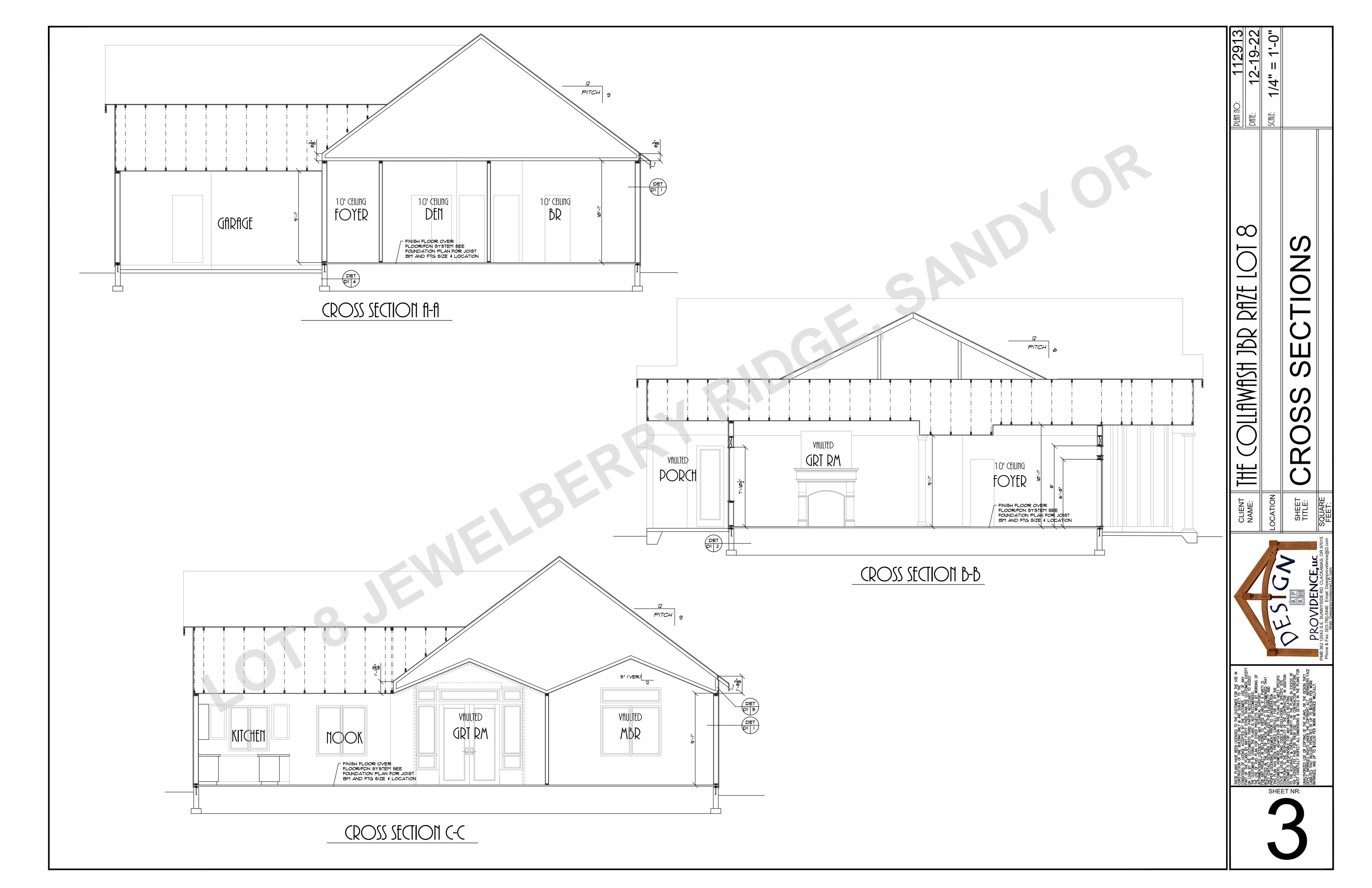
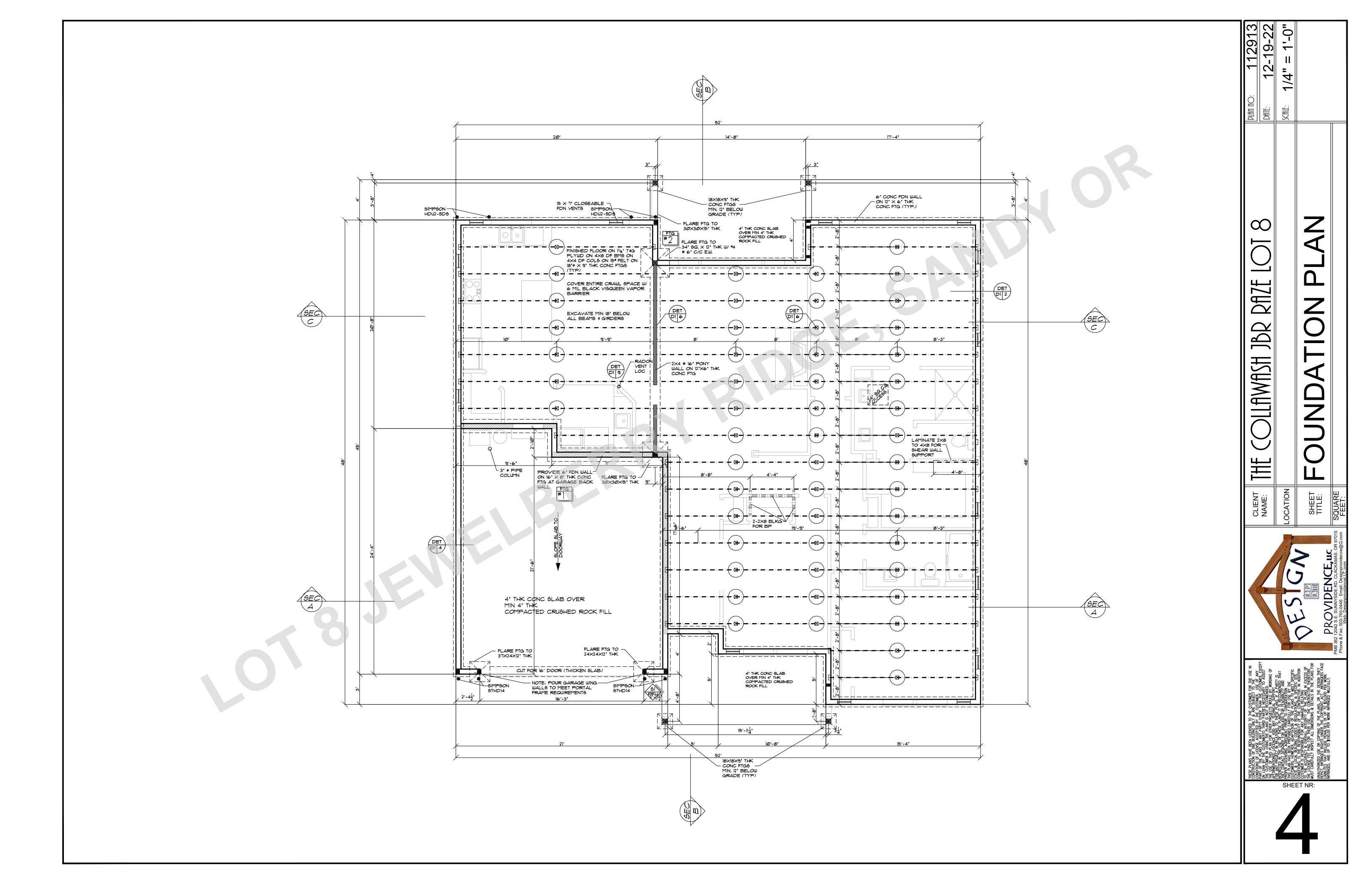
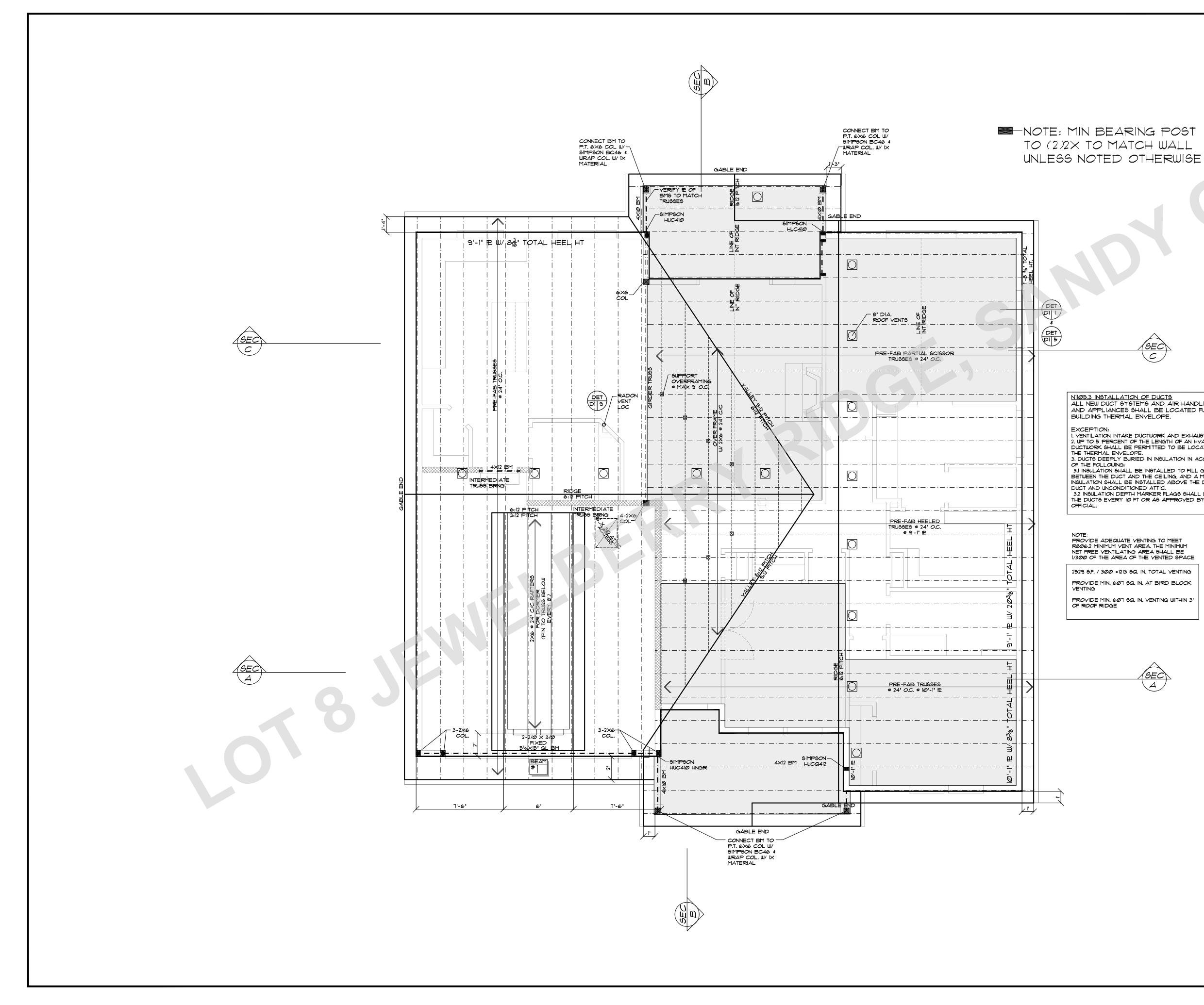


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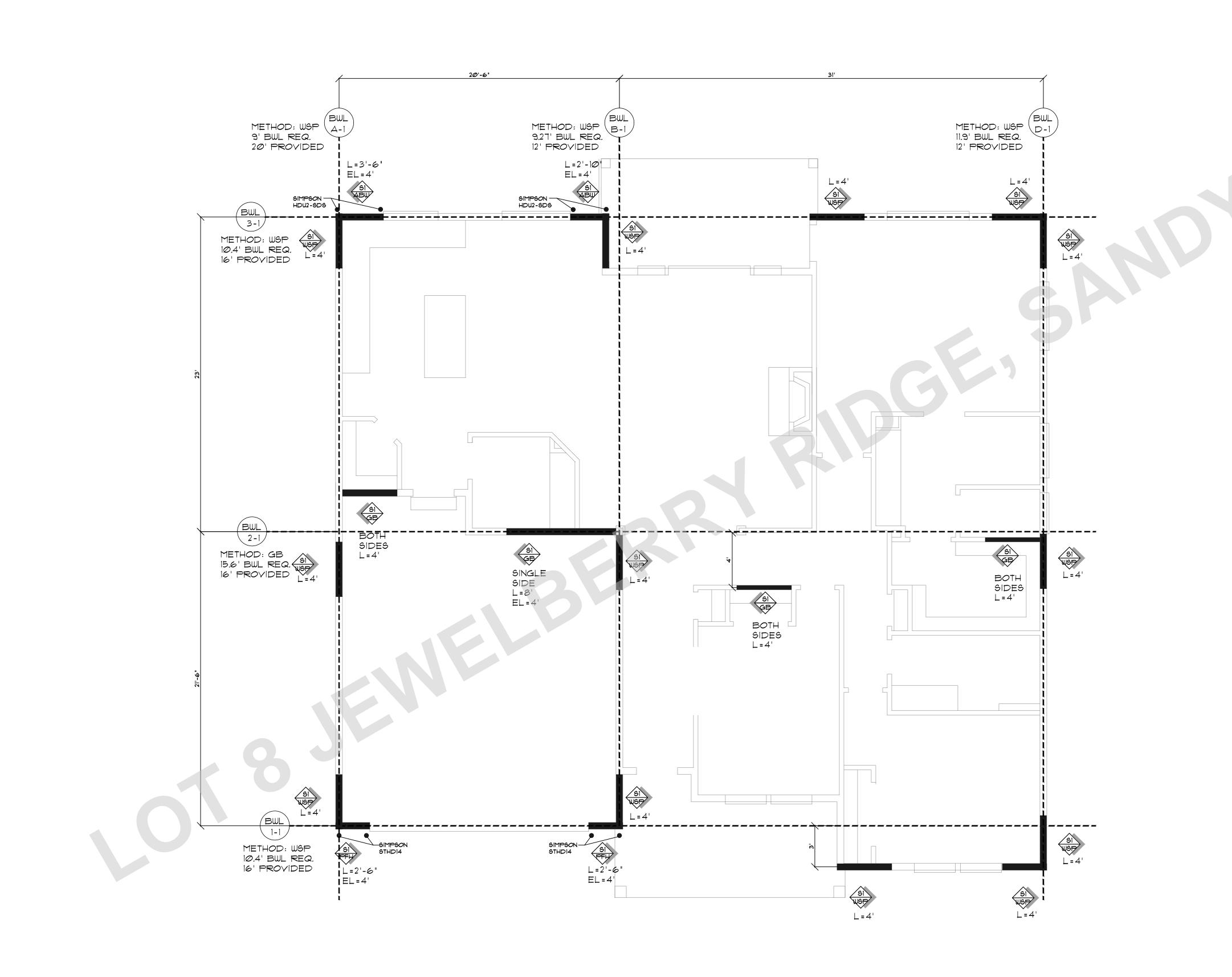












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WSP Wood	37 -	TIME T	Exterior sheathing per Table R602.3(3)
structural panel (See Section R604)	′ 8		Interior sheathing per Table R602.3(1) or R602.3(
GB			Nails or screws per Table R602 for exterior locations
Gypsum board	1/2*		Nails or screws per Table R702 for interior locations

REQUIRE	EMENTS FOR WO	DOD STRUCTURA	L PANEL WAL	L SHEATHING USE	ED TO RESIS	T WIN
MINIMUM	I NAIL	MINIMUM WOOD STRUCTURAL	MINIMUM NOMINAL PANEL	MAXIMUM WALL STUD SPACING	PANEL NAI	L SPAC
Size	Penetration	PANEL SPAN RATING	THICKNESS	(inches)	Edges	- F

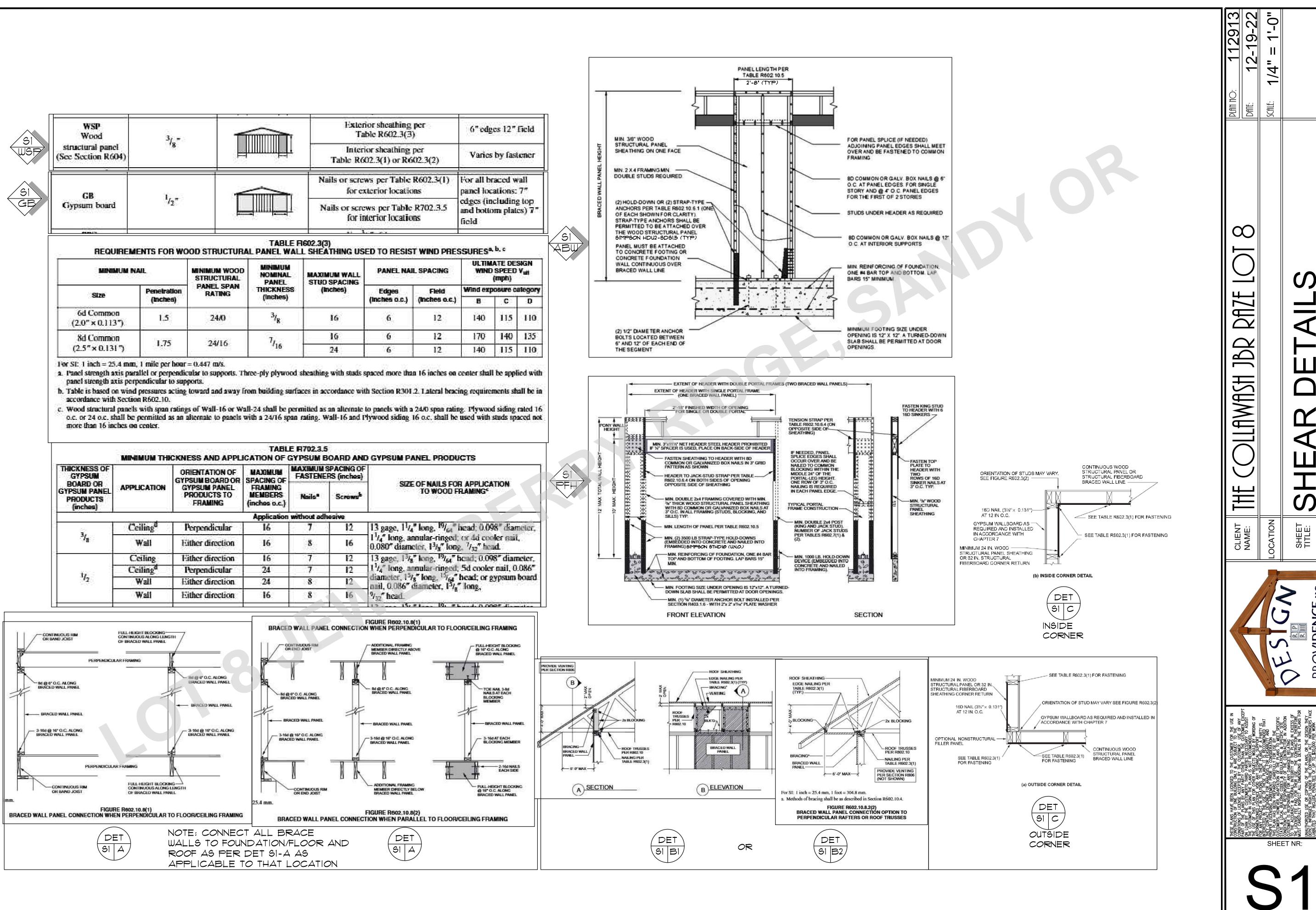
	S GRAD.	(Inches)	10.0000	(incnes)	2007 28	(Inches o.c.)	(Inch
	6d Common (2.0" × 0.113")	1.5	24/0	3/ ₈	16	6	
I	8d Common	1.75	24/16	Tr I	16	6	
	(2.5"×0.131")		24/10	16	24	6	

panel strength axis perpendicular to supports.

accordance with Section R602.10.

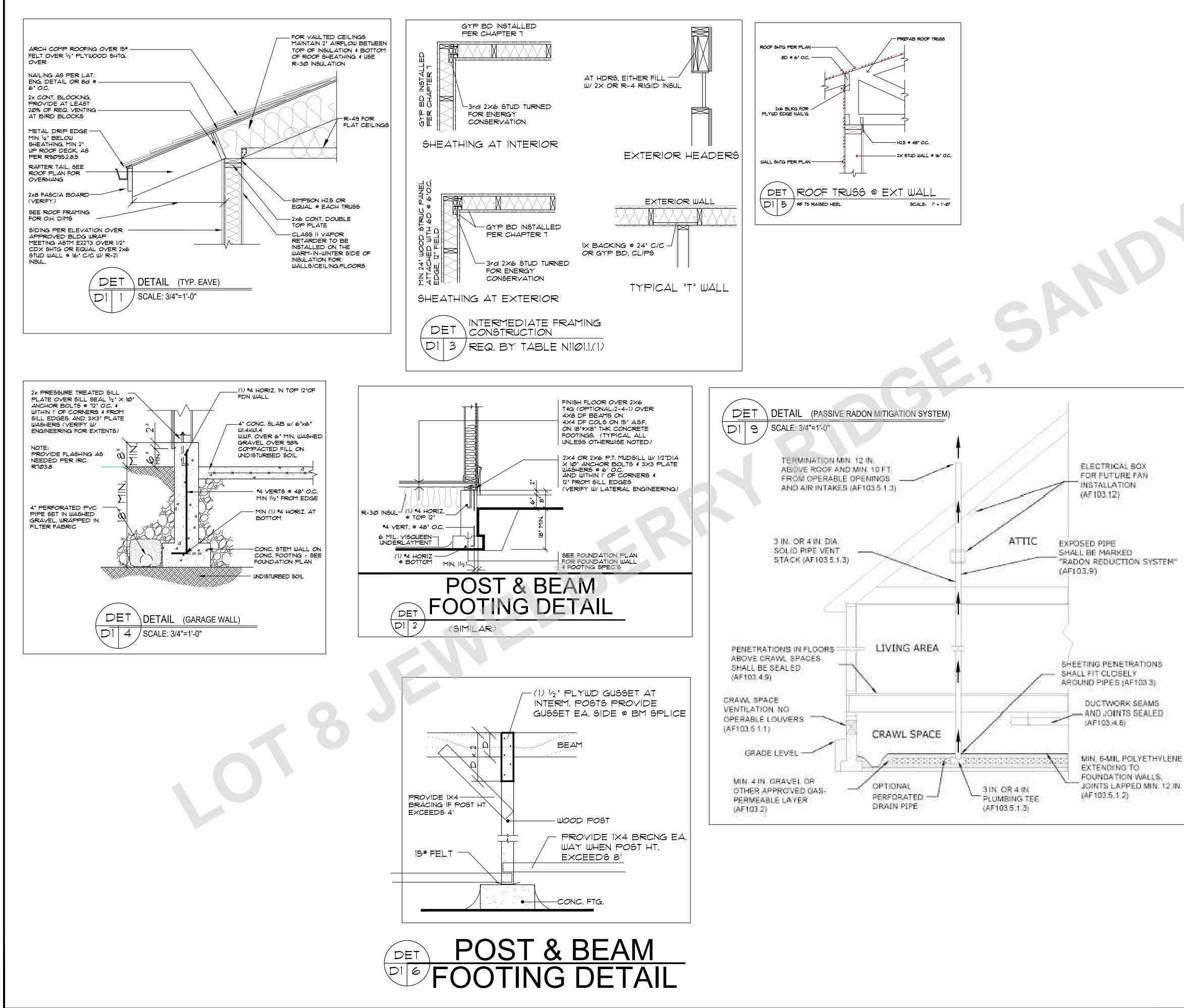
more than 16 inches on center.

	PACING OF RS (inches)	HAXIMUM S	MAXIMUM SPACING OF	ORIENTATION OF GYPSUM BOARD OR		THICKNESS OF GYPSUM
SIZE OF N TO	Scrows ^b	Nails*	FRAMING MEMBERS (inches o.c.)	GYPSUM PANEL PRODUCTS TO FRAMING	APPLICATION	BOARD OR GYPSUM PANEL PRODUCTS (inches)
	osivo	without adh	Application			
13 gage, 11/4" long	12	7	16	Perpendicular	Ceiling ^d	* 1
1 ¹ /4" long, annular 0.080" diameter, 1	16	8	16	Either direction	Wall	³ / ₈
13 gage, 13/3" kong	12	7	16	Fither direction	Ceiling	
114" long, annular	12	7	24	Perpendicular	Ceilingd	
diameter, 15/8" lon nail, 0.086" diame		8	24	Either direction	Wall	η2
2/12" head.	and the second se	8	16	Either direction	Wall	-
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FRAMING NOTES GENERAL NOTES NOTE: SEE TABLE 602.3(1) IN ORSC FOR FASTENER SCHEDULE ALL WORK IS TO COMPLY WITH THE LATEST ADOPTED VERSION OF THE ORSC CODE (2021) AND ANY APPLICABLE ttps://codes.iccsafe.org/content/ORRSC2021P1/chapter-6-wall-construction STATE, COUNTY OR LOCAL REGULATIONS. THE CONTRACTOR IS RESPONSIBLE TO CHECK THE PLANS ALL EXTERIOR WALL AND BEARING WALL OPENINGS TO AND IS TO NOTIFY THE DESIGNER OF ANY ERRORS OR HAVE 4×12 DF HEADERS UNLESS OTHERWISE INDICATED OMISSIONS PRIOR TO THE START OF CONSTRUCTION. JOISTS THAT ARE ATTACHED TO FLUSH BEAMS ARE TO BE HUNG WITH "SIMPSON" LU TYPE OR EQUIV. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED D. DOUBLE JOISTS THAT ARE ATTACHED TO FLUSH BMS DIMENSIONS. ARE TO BE HUNG WITH "SIMPSON" LUS TYPE OR EQUIV. 4. DESIGN LOADS: ROOF 25 PSF (LIVE LOAD) PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL 40 PSF (LIVE LOAD) FLOOR STAIRS 100 PSF PARTITIONS OVER. PROVIDE FIREBLOCKING, DRAFTSTOPS & FIRESTOPS GARAGE FLOOR 125 PSF (2000* PT) AS PER THE ORSC SEC R602.8 DECKS 75 PSF (IF YOUR LOCAL AREA REQUIRES DIFFERENT DESIGN . LUMBER SPECIES: LOADS, CONSULT WITH A LOCAL STRUCTURAL ENGINEER A. POSTS, BEAMS, HEADERS NO.2 DOUG FIR TO DETERMINE THE APPROPRIATE REVISIONS.) JOISTS AND RAFTERS PROVIDE INSULATION BAFFLES AT EAVE VENTS B. SILLS, PLATES, BLOCKING NO.3 DOUG FIR BETWEEN RAFTERS. BRIDGING, ETC. ALL SMOKE DETECTORS SHALL BE POWERED BY 110V C. STUDS STUD GRADE D.F. URRENT, CONNECTED TO HOUSE ELECTRICAL D. POST AND BEAM DECKING UTILITY GRADE D.F. SYSTEM. INTERCONNECT WITH EACH ONE SO THAT E. PLYWOOD SHEATHING 1/2" CDX PLY, 32/16 IF ANY ONE TRIPS THEY WILL ALL SOUND. THEY SHALL F. GLU-LAM BEAMS fb-2400, DRY ADH. ALGO HAVE A BATTERY BACKUP AND BE LOCATED IN EACH BEDROOM AND ON EACH FLOOR L NAILING SCHEDULE GUARDRAILS SHALL HAVE INTERMEDIATE RAILS SPACED SEE TABLE 602.3(1) SUCH THAT A SPHERE 4" IN DIA. CANNOT PASS THROUGH NOTCHES IN SOLID LUMBER JOISTS, RAFTERS, AND BEAMS PROVIDE GROUNDING ELECTRODE AT ELECTRICAL SHALL NOT EXCEED ONE-SIXTH OF THE DEPTH OF THE SERVICE CONSISTING OF A MINIMUM 20' LENGTH OF 1/2" STEEL REINFORCEMENT OF FOOTINGS. ELECTRODE SHALL MEMBER, SHALL NOT BE LONGER THAN ONE-THIRD OF THE EXTEND 12" MIN. ABOVE THE PLATE LINE. DEPTH OF THE MEMBER AND SHALL NOT BE LOCATED THE MAXIMUM AMOUNT OF WATER USED BY NEW IN THE MIDDLE ONE-THIRD OF THE SPAN. NOTCHES AT PLUMBING FIXTURES: THE ENDS OF THE MEMBER SHALL NOT EXCEED 1.6 GALLONS/FLUSH TOILETS ONE-FOURTH THE DEPTH OF THE MEMBER. THE TENSION 2.5 GALLONS/MINUTE SHOWER HEADS SIDE OF MEMBERS 4" (102mm) OR GREATER IN NOMINAL INTERIOR FAUCETS 2.5 GALLONS/MINUTE THICKNESS SHALL NOT BE NOTCHED EXCEPT AT ENDS OF D. IN THE EVENT OF CONFLICT BETWEEN PERTINENT CODES THE MEMBERS. THE DIAMETER OF HOLES BORED OR CUT AND REGULATIONS AND REFERENCED STANDARDS OF INTO MEMBERS SHALL NOT EXCEED ONE-THIRD THE THESE SPECIFICATIONS, THE MORE STRINGENT DEPTH OF THE MEMBER. HOLES SHALL NOT BE CLOSER PROVISIONS SHALL GOVERN. THAN 2" TO THE TOP OR BOTTOM OF THE MEMBER, OR TO STRUCTURAL SPECIFICATONS AND DRAWINGS FOR THIS ANY OTHER HOLE LOCATED IN THE MEMBER. WHERE THE WORK HAVE BEEN PREPARED IN ACCORDANCE WITH MEMBER IS ALSO NOTCHED, THE HOLE SHALL NOT BE GENERALLY ACCEPTED ENGINEERING PRACTICE TO MEET CLOSER THAN 2" (51mm) TO THE NOTCH. MINIMUM REQUIREMENTS OF THE LATEST EDITION OF THE STUDS IN AN EXTERIOR WALL OR LOAD-BEARING PAR-ABAC TITIONS SHALL BE PERMITTED TO BE CUT OR NOTCHED SPECIFICATIONS AND DRAWINGS INDICATE FINISHED TO A DEPTH NOT EXCEEDING 25% OF ITS WIDTH. STRUCTURE. BUILDER SHALL BE RESPONSIBLE FOR STUDS IN NON-LOAD-BEARING PARTITIONS SHALL BE CONSTRUCTION METHODS, PROCEDURES, AND CONDITIONS PERMITTED TO BE NOTCHED TO A DEPTH NOT TO EXCEED (INCLUDING SAFETY), EXCEPT AS SPECIFICALLY 40% OF A SINGLE STUD WIDTH. STUDS SHALL BE INDICATED OTHERWISE IN THE CONTRACT DOCUMENTS CONSTRUCTION LOADS SHALL NOT OVERLOAD PERMITTED TO BE BORED OR DRILLED, PROVIDED THAT STRUCTURE NOR SHALL THEY BE IN EXCESS OF DESIGN THE DIAMETER OF THE RESULTING HOLE IS NO GREATER LOADINGS INDICATED ON DRAWINGS THAN 40% OF THE STUD WIDTH. THE EDGE OF THE HOLE . BUILDER SHALL VERIFY ALL MATERIALS, DIMENSIONS, IS NO CLOSER THAN 5/8" (15.9mm) TO THE EDGE OF THE AND CONDITIONS SHOWN ON STRUCTURAL DRAWINGS OR STUD, AND THE HOLE IS NOT LOCATED IN THE SAME NOTED IN STRUCTURAL SPECIFICATIONS. ANY VARIANCES SECTION AS A CUT OR NOTCH. WITHIN STRUCTURAL DRAWINGS AND SPECIFICATIONS, INSTALL ALL HORIZONTAL MEMBERS WITH CROWN UP. OR WITHIN CONDITIONS ENCOUNTERED AT JOB SITE, ALL MEMBERS IN BEARING SHALL BE ACCURATELY SHALL BE REPORTED TO OWNER IN WRITING BEFORE CUT AND ALIGNED SO THAT FULL BEARING IS PROVIDED COMMENCEMENT OF ANY WORK EFFECTED BY SUCH WITHOUT USE OF SHIMS. BEARING POSTS SHALL HAVE VARIANCE FULL BLOCKING OR SUPPORT UNDER. BUILDER SHALL RIGIDLY ADHERE TO ALL LAWS, CODES, ALL JOISTS SHALL HAVE A MINIMUM OF 2" BEARING AT AND ORDINANCES WHICH APPLY TO THIS WORK. HE SHALL SUPPORTS. LAPPING JOISTS SHALL HAVE 6" LAPS NOTIFY AND RECEIVE CLARIFICATION FROM OWNER IN CENTERED OVER INTERIOR SUPPORTS. WRITING OF ANY VARIATIONS BETWEEN CONTRACT DOCUMENTS AND GOVERNING REGULATIONS. LEDGERS AND STUD WALL FOUNDATION SILL PLATES ALL MANUFACTURED MATERIALS, COMPONENTS, SHALL BE BOLTED TO CONCRETE W/ ANCHOR BOLTS OF SIZE AND MINIMUM SPACING AS SHOWN ON DRAWINGS. FASTENERS, ASSEMBLIES, ETC., SHALL BE HANDLED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S AT LEAST TWO BOLTS SHALL BE PROVIDED FOR EACH INSTRUCTIONS AND PROVISIONS OF APPLICABLE ICBO PIECE W/ ONE BOLT WITHIN 12" OF EACH END. RESEARCH RECOMMENDATIONS. WHERE SPECIFIC ALL PLYWOOD WALL SHEATHING SHALL BE APPLIED MANUFACTURED PRODUCTS ARE CALLED FOR GENERIC AS FOLLOWS: CENTER VERTICAL JOINTS OVER STUDS EQUALS WHICH MEET APPLICABLE STANDARDS AND AND CENTER HORIZONTAL JOINT OVER 2' BLOCKING OR SPECIFICATONS MAY BE USED. PLATE, NAIL TOP OF PANELS TO DOUBLE TOP PLATE, NO VARIANCE BY A BUILDING OFFICIAL SHALL BE AND NAIL BOTTOM OF PANELS TO ANCHORED SILL PLATE BINDING ON DESIGNERS. APPLY GYPSUM BOARD SO THAT END JOINTS OF BUILDER SHALL INVESTIGATE SITE DURING CLEARING AND ADJACENT COURSE DO NOT OCCUR AT THE SAME STUD. EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESS POOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH ITEMS ARE FOUND. FOUNDATION NOTES OWNER SHALL BE NOTIFIED IMMEDIATELY. COTINGS ARE TO BEAR ON UNDISTURBED LEVEL SOIL DEVOID OF ANY ORGANIC MATERIAL AND STEPPED AS **FLOOR PLAN NOTES** REQUIRED TO MAINTAIN THE REQUIRED DEPTH BELOW THE FINAL GRADE. EACH BEDROOM TO HAVE A MINIMUM WINDOW OPENING SOIL BEARING PRESSURE ASSUMED TO BE 1500 PSF. OF 5.1 SQ FT WITH A MIN. WIDTH OF 20' AND A MIN. HEIGHT . ANY FILL UNDER GRADE SUPPORTED SLABS TO BE A OF 22" AND A SILL LESS THAN 44" OFF THE FLOOR. MINIMUM OF 4' GRANULAR MATERIAL COMPACTED TO 95% ALL WINDOWS WITHIN 18" OF THE FLOOR AND WITHIN . CONCRETE TO DEVELOP A MIN. OF 3000 PSI AT 28 DAYS 24' OF ANY DOOR ARE TO HAVE TEMPERED GLAZING. WITH A MIN. OF 6 SACKS OF CEMENT PER YARD AND SEE SECTION R308.4 IN ORSC FOR ADDITIONAL INFO. A MAXIMUM SLUMP OF 4" SKYLITES ARE TO BE GLAZED WITH TEMPERED GLASS ON CONCRETE SLABS TO HAVE CONTROL JOINTS AT 25' OUTSIDE AND LAMINATED GLASS ON INSIDE (UNLESS (MAXIMUM) INTERVALS EA. WAY. PLEXIGLAS), GLASS TO HAVE MAXIMUM CLEAR SPAN CONCRETE SIDEWALKS TO HAVE 3/4' TOOLED JOINTS OF 25". SKYLITE FRAME IS TO BE ATTACHED TO A AT 5' O.C. (MINIMUM) 2 X CURB WITH MINIMUM OF 4" ABOVE ROOF PLANE. REINFORCING STEEL TO MEET MIN. ASTM A106 GRADE 60 ALL TUB OR SHOWER ENCLOSURES ARE TO BE GLAZED WELDED WIRE MESH TO BE A-185. WITH SAFETY GLAZING . EXCAVATE THE SITE TO PROVIDE A MINIMUM OF 18" ALL EXTERIOR WINDOWS ARE TO BE DOUBLE GLAZED AND CLEARANCE UNDER ALL GIRDERS. ALL EXTERIOR DOORS ARE TO BE SOLID CORE WITH . COVER ENTIRE CRAWLSPACE WITH 6 MIL BLACK WEATHERSTRIPPING. PROVIDE 1/2" DEADBOLT LOCKS ON "VISQUEEN" AND EXTEND UP FDTN. WALLS TO P.T. MUDSILL ALL EXTERIOR DOORS AND LOCKING DEVICES ON ALL 10. PROVIDE A MINIMUM OF I SQ FT OF VENTILATION AREA DOORS OR WINDOWS WITHIN 10' (VERTICAL) OF GRADE. FOR EACH 150 SQ FT OF CRAWLSPACE AREA. VENTS PROVIDE PEEP-HOLE @ 54" - 66" ABOVE FLOOR ON ARE TO BE CLOSABLE WITH 1/4" OPENINGS IN CORROSIVE EXTERIOR DOORS RESISTANT SCREEN. PROVIDE COMBUSTION AIR VENTS (W/ SCREEN AND ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE BACK DAMPER) FOR FIREPLACES, WOOD STOVES AND TREATED OR PROTECTED WITH 30* ROLL ROOFING. ANY APPLIANCES WITH AN OPEN FLAME. 2. BEAM POCKETS IN CONCRETE TO HAVE 1/2" AIRSPACE BATHROOMS AND UTILITY ROOMS ARE TO BE VENTED AT SIDES AND ENDS WITH A MINIMUM BEARING OF 3". TO THE OUTSIDE WITH A MINIMUM OF A 90 CFM FAN. 5. PROVIDE CRAWLSPACE DRAIN AS PER SEC. R405.1 OF RANGE HOODS ARE ALSO TO BE VENTED TO OUTSIDE. I. THE GRADE AWAY FROM FND WALLS SHALL FALL 6" MIN. WITHIN FIRST 10'. 5. SLOPE FOR PERMANENT FILLS AND CUT SLOPES SHALL INSULATION SPECIFICATIONS NOT EXCEED 2 UNITS HORIZ, TO I UNIT VERT. BACKFILL SHALL NOT BE PLACED UNTIL WALL HAS SUFFICIENT STRENGTH AND HAS BEEN ANCHORED TO ALL EXPOSED INSULATION IS TO HAVE A FLAME FLOOR ABOVE ON WALLS W/ MORE THAN 4' UNBALANCED SPREAD RATING OF LESS THAN 25 & A SMOKE DENSIT BACKFILL. RATING OF LESS THAN 450. I. BUILDER SHALL BE RESPONSIBLE FOR SUPPORT OF ALL PERIMETER CONC. WALLS TO BE PROTECTED W/ RIGID TEMPORARY EMBANKMENTS AND EXCAVATIONS. FIBERBOARD INSULATION FROM TOP OF CONC WALL 3. FOOTINGS SHALL BE FOUNDED ON FIRM, UNDISTURBED, TO NOT LESS THAN 24" BELOW GRADE. NATIVE, FREE DRAINING SOILS. CONDITIONS FOUND TO BE SLAB EDGE INSULATION IS TO BE R-15. OTHERWISE SHALL BE REPORTED TO OWNER. HEATING DUCTS TO BE INSULATED W/ R-8

WINDOWS SHALL MEET REQUIRED U FACTORS FOR THE

CONTRACTORS CHOSEN PATH OF COMPLIANCE

ONE EXTERIOR DOOR MAY BE INSULATED TO A

U-FACTOR OF Ø.20. ALL OTHER EXTERIOR DOORS

SEE TABLE NIIØ4.I(1)

MAY NOT EXCEED 0.54.

- ALL GROUND OVER WHICH FOOTINGS AND SLABS-ON-GRADE ARE TO BE PLACED SHALL BE FREE OF EXPANSIVE OR COMPRESSIBLE DEBRIS AND ORGANIC MATERIAL
- 20. FOOTINGS AND SLABS-ON-GRADE CONCRETE SHALL NOT BE PLACED ON MUDDY OR FROZEN GROUND. SUB-GRADE FOR SLABS-ON-GRADE WHERE VAPOR BARRIER IS NOT REQUIRED SHALL BE DAMP AT TIME OF CONCRETE PLACEMENT.

LIGHTING REQUIREMENTS: STAIRWAY LIGHTING CONTROL

ALL INTERIOR AND EXTERIOR STAIRWAYS SHALL BE PROVIDED WITH A MEANS OF ILLUMINATION TO THE STAIR, INCLUDING THE LANDINGS AND TREADS, TO BE CONTROLLED BY A WALL SWITCH AT EACH FLOOR LEVEL. INTERIOR STAIRS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF EACH LANDING AT THE TOP AND BOTTOM OF THE STAIR. EXTERIOR STAIRS SHALL BE PROVIDED WITH AN ARTIFICIAL LIGHT SOURCE LOCATED IN THE IMMEDIATE VICINITY OF THE TOP LANDING OF THE STAIR. EXCEPTION:

WHERE THE DIFFERENCE BETWEEN FLOOR LEVELS REQUIRES LESS THAN 6 STAIR RISERS. FIXTURES IN CLOTHES CLOSETS: SURFACE MOUNTED FLUORESCENT FIXTURES SHALL BE INSTALLED ON THE WALL ABOVE THE DOOR OR ON THE CEILING, PROVIDED THERE IS A MINIMUM CLEARANCE OF 6' BETWEEN THE FIXTURE AND THE NEAREST

POINT OF A STORAGE SPACE. WET OR DAMP LOCATIONS: FIXTURES INSTALLED IN WET OR DAMP LOCATIONS SHALL BE INSTALLED SO THAT WATER CANNOT ENTER OR ACCUMULATE IN WIRING COMPARTMENTS, LAMPHOLDERS OR OTHER ELECTRICAL PARTS. ALL FIXTURES INSTALLED IN WET LOCATIONS SHALL BE MARKED "SUITABLE FOR WET LOCATIONS". ALL FIXTURES INSTALLED IN DAMP LOCATIONS

LIGHT SWITCH ACCESS: ACCESSIBLE LOCATION.

RECEPTACLE OUTLET REQUIREMENTS: IN EVERY KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, DEN, BEDROOM, OR SIMILAR ROOM OR AREA OF DWELLING UNITS, RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FEET, MEASURED HORIZONTALLY FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE THAT IS 2 FEET OR MORE IN WIDTH.

KITCHENS: BATHROOMS

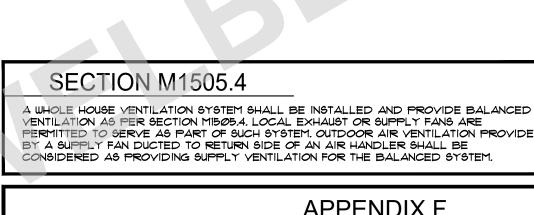
BE INSTALLED IN BATHROOMS ADJACENT TO EACH BASIN LOCATION. OUTDOORS: AT LEAST ONE RECEPTACLE OUTLET, WITH GFI PROTECTION, SHALL BE INSTALLED OUTDOORS AT THE FRONT AND BACK OF EACH DWELLING UNIT HAVING DIRECT ACCESS TO GRADE.

HALLWAYS: RECEPTACLE OUTLET. HYAC OUTLET:

A CONVENIENCE RECEPTACLE OUTLET SHALL BE INSTALLED FOR THE SERVICING OF HEATING, AIR-CONDITIONING AND REFRIGERATION EQUIPMENT LOCATED IN ATTICS AND CRAWL SPACES. WET LOCATIONS: A RECEPTACLE INSTALLED IN A WET LOCATION SHALL BE IN A WEATHER

RESIDENTIAL SPECIALTY CODE BOOK IN SECTIONS:

E37-404 SWITCHES E37-406 RECEPTACLE OUTLETS E37-410 LIGHTING OUTLETS



living spaces of the building

AFIØ3.3 Soil-aas-retarder, A minimum 6-mil ³40r 3-mil (see code for additional info)

AFIØ3.4 Entry routes. Potential radon entry routes shall be closed in accordance with Sections AFI03.4.1 through AFI03.4.10. (See code section for further details) AF103.5 Crawl space mitigation system. In buildings with crawl space foundations, a system complying with AF103.5.1 or AF103.5.2 shall be installed during construction.

Exception: Buildings in which an approved mechanical crawl space ventilation system or other equivalent system is installed. AF103.5.1.1 (PASSIVE METHOD) Ventilation. Crawl spaces shall be provided with vents to the exterior of the building The minimum net area of ventilation openings shall comply with Section R408.

be covered with a continuous layer of minimum 6-mil (0.15 mm) polyethylene soil-gas-retarder as per code section (min 12' lap) AFIØ3.5.1.2 Soil-gas-retarder. The soil in crawl spaces shall

AF103.5.1.3 Vent pipe. A plumbing tee or other approved connection shall be inserted horizontally beneath the sheeting and connected to a 3- or 4-inch-diameter (76 mm or 102 mm) fitting with a vertical vent pipe installed through the sheeting as per code section to min 12"

above roof suface

ELECTRICAL REQUIREMENTS

AT LEAST ONE WALL SWITCH-CONTROLLED LIGHTING OUTLET SHALL BE INSTALLED IN EVERY HABITABLE ROOM AND IN BATHROOMS, HALLWAYS, STAIRWAYS, ATTACHED GARAGES, DETACHED GARAGES PROVIDED WITH ELECTRICAL POWER AND AT THE EXTERIOR SIDE OF EGRESS DOORS.

SHALL BE MARKED 'SUITABLE FOR WET LOCATIONS' OR 'SUITABLE FOR DAMP LOCATIONS"

ALL SWITCHES SHALL BE LOCATED TO ALLOW OPERATION FROM A READILY

RECEPTACLE OUTLETS, WITH GFI PROTECTION, SHALL BE INSTALLED EVERY 24" ON ALL COUNTER SPACES THAT MEASURE 12" OR WIDER

AT LEAST ONE WALL RECEPTACLE OUTLET, WITH GFI PROTECTION, SHALL

HALLWAYS OF 10 FEET OR MORE IN LENGTH SHALL HAVE AT LEAST ONE

PROOF ENCLOSURE, THE INTEGRITY OF WHICH IS NOT AFFECTED WHEN THE ATTACHMENT PLUG CAP IS INSERTED.

*ADDITIONAL INFORMATION CAN BE FOUND IN THE OREGON

NII05.3 INSTALLATION OF DUCTS

ALL NEW DUCT SYSTEMS AND AIR HANDLING EQUIPMENT AND APPLIANCES SHALL BE LOCATED FULLY WITHIN THE BUILDING THERMAL ENVELOPE.

EXCEPTION

OFFICIAL.

I. VENTILATION INTAKE DUCTWORK AND EXHAUST DUCTWORK 2. UP TO 5 PERCENT OF THE LENGTH OF AN HVAC SYSTEM DUCTWORK SHALL BE PERMITTED TO BE LOCATED OUTSIDE OF HE THERMAL ENVELOPE. 3. DUCTS DEEPLY BURIED IN INSULATION IN ACCORDANCE ALL OF THE FOLLOWING:

3.1 INSULATION SHALL BE INSTALLED TO FILL GAPS AND VOIDS BETWEEN THE DUCT AND THE CEILING, AND A MINIMUM OF R-19 INSULATION SHALL BE INSTALLED ABOVE THE DUCT BETWEEN THE DUCT AND UNCONDITIONED ATTIC. 3.2 INSULATION DEPTH MARKER FLAGS SHALL BE INSTALLED ON THE DUCTS EVERY 10 FT OR AS APPROVED BY THE BUILDING

NIIOG.1 MECHANICAL SYSTEM PIPING INGULATION MECHANICAL SYSTEM PIPING CAPABLE OF CARRYING FLUIDS ABOVE 105°F OR BELOW 55°F SHALL BE INSULATED TO A MINIMUM OF R-3.

NIIØ6.2 DOMESTIC AND SERVICE HOT WATER SYSTEMS. DOMESTIC HOT WATER PIPING SHALL BE INSULATED TO A MINIMUM OF R-3 AT THE FOLLOWING LOCATIONS: I. PIPE LOCATED OUTSIDE THE BUILDING THERMAL ENVELOPE

2. THE FIRST & FEET OF PIPE INTO AND OUT OF A WATER HEATER.

3. RECIRCULATING WATER PIPING.

LIGHTING

SECTION N1107 ALL PERMANENTLY INSTALLED INTERIOR AND EXTERIOR LIGHTING FIXTURES SHALL BE COMPANCT FLUORESCENT LAMPS, T-8 OR SMALLER DIAMETER LINEAR FLUORESCENT LAMPS, LED LAMPS FIXTURE-INTEGRATED ILLUMINATION DEVICES, OR LAMPS WITH AN EFFICACY NOT LESS THAN 65 LUMENS PER WATT FOR EACH LAMP OR LUMINAIRES WITH EFFICACY NOT LESS THAN 45 LUMENS PER WATT PER EACH LUMINAIRE EXCEPT 2 INTERIOR AND 2 EXTERIOR PERMANENT FIXTURES ARE NOT

REQUIRED TO HAVE HIGH EFFICIENCY LAMPS. THE BUILDING OFFICIAL SHALL BE NOTIFIED IN WRITING AT THE FINAL

INSPECTION THAT THE PERMANENTLY INSTALLED FIXTURES HAVE MET THIS REQUIREMENT.

NOTE: AS PER ORSC NII07.4 PROVIDE 4"X4" METAL JUNCTION BOX W/ COVER WITHIN 24' OF MAIN ELECTRICAL PANEL, PROVIDE A 34' RIGID METAL RACEWAY EXTENDING FROM JCT. BOX TO CAPPED ROOF TERMINATION W/ CLEARANCE MIN. 36

VENTILATION AS PER SECTION MI505.4. LOCAL EXHAUST OR SUPPLY FANS ARE PERMITTED TO SERVE AS PART OF SUCH SYSTEM. OUTDOOR AIR VENTILATION PROVIDED BY A SUPPLY FAN DUCTED TO RETURN SIDE OF AN AIR HANDLER SHALL BE CONSIDERED AS PROVIDING SUPPLY VENTILATION FOR THE BALANCED SYSTEM.

APPENDIX F

RADON CONTROL METHODS (ABRIDGED - SEE CODE SECTION FOR FULL DETAILS)

AFIØ3.2 Subfloor preparation. A layer of gas-permeable material shall be placed under all concrete slabs and other floor systems that directly contact the ground and are within the walls of the

1. A uniform layer of clean aggregate, a min. of 4 inches thick (see code section for additional info)

cross-laminated polyethylene or equivalent flexible sheeting material shall be placed on top of the gas-permeable layer

AFIØ3.5.2 (ACTIVE METHOD) Crawl space ventilation and building tightness. As an alternate method to Passive method. Requires non closable fdn vents, and whole house centilation sustem (air exchanger

(see code section AFIØ3.5.2 for specifications)

AF103.6 Passive subslab depressurization system. AF103.6.1 Vent pipe. A minimum 3-inch-diameter (76 mm) ABS, PVC or equivalent gas-tight pipe shall be embedded vertically into the sub-slab aggregate (see code section for suther details)

AF103.6.2 - AF103.10 see code section for these requirements

AFIØ3.11 Building depressurization. Joints in air ducts and plenums in unconditioned spaces shall meet the requirements of Section MI601. Thermal envelope air infiltration requirements shall comply with the energy conservation provisions in Chapter II. Firestopping shall meet the requirements contained in Section R602.8.

AF103.12 Power source. To provide for future installation of an active sub-membrane or sub-slab depressurization system, an electrical circuit terminated in an approved box shall be installed during construction in the attic or other anticipated location of vent pipe fans. An electrical supply shall also be accessible in anticipated located of sustem failure

TABLE N1101.1(1) PRESCRIPTIVE ENVELOPE REQUIREMENTS^a

	STAND	ARD BASE CASE	LOG HOMES	S ONLY
	Required Performance	Equiv. Value ^b	Required Performance	Equiv. Value ^b
Wall insulation—above grade	U-0.059°	R-21 Intermediate ^c	Note d	Note d
Wall insulation—below grade ^e	C-0.063	R-15 c.i. / R-21	C-0.063	R-15/R-21
Flat ceilings ^f	U-0.021	R-49	U-0.020	R-49 A ^h
Vaulted ceilings ^g	U-0.033	R-30 Rafter or R-30A ^{g, h} Scissor Truss	U-0.027	R-38A ^h
Underfloors	U-0.033	R-30	U-0.033	R-30
Slab-edge perimeter ^m	F-0.520	R-15	F-0.520	R-15
Heated slab interior ⁱ	n/a	R-10	n/a	R-10
Windows ^j	U-0.27	U-0.27	U-0.27	U-0.27
Skylights	U-0.50	U-0.50	U-0.50	U-0.50
Exterior doorsk	U-0.20	U-0.20	U-0.54	U-0.54
Exterior doors with > 2.5 ft ² glazing ¹	U-0.40	U-0.40	U-0.40	U-0.40

a. As allowed in Section N1104.1, thermal performance of a component may be adjusted provided that overall heat loss does not exceed the total resulting from conformance to the required U-factor standards. Calculations to document equivalent heat loss shall be performed using the procedure and approved U-factors contained in Table N1104.1(1).

b. R-values used in this table are nominal for the insulation only in standard wood-framed construction and not for the entire assembly.

. Wall insulation requirements apply to all exterior wood-framed, concrete or masonry walls that are above grade. This includes cripple walls and rim joist areas. Nominal compliance with R-21 insulation and Intermediate Framing (N1104.5.2) with insulated headers.

d. The wall component shall be a minimum solid log or timber wall thickness of 3.5 inches. e. Below-grade wood, concrete or masonry walls include all walls that are below grade and do not include those portions of such wall that extend more than 24 inches above grade. R-21 for insulation in framed cavity; R-15 continuous insulation.

Insulation levels for ceilings that have limited attic/rafter depth such as dormers, bay windows or similar architectural features totaling not more than 150 square feet in area may be reduced to not less than R-21. When reduced, the cavity shall be filled (except for required ventilation spaces). R-49 insulation installed to minimum 6-inches depth at top plate at exterior of structure to achieve U-factor.

g. Vaulted ceiling surface area exceeding 50 percent of the total heated space floor area shall have a U-factor no greater than U-0.026 (equivalent to R-38 rafter or scissor truss with R-38 advanced framing).

h. A = Advanced frame construction. See Section N1104.6.

i. Heated slab interior applies to concrete slab floors (both on and below grade) that incorporate a radiant heating system within the slab. Insulation shall be installed underneath the entire slab.

 Sliding glass doors shall comply with window performance requirements. Windows exempt from testing in accordance with Section NF1111.2, Item 3 shall comply with window performance requirements if constructed with thermal break aluminum or wood, or vinyl, or fiberglass frames and double-pane glazing with low-emissivity coatings of 0.10 or less. Buildings designed to incorporate passive solar elements may include glazing with a U-factor greater than 0.35 by using Table N1104.1(1) to demonstrate equivalence to building envelope requirements.

k. A maximum of 28 square feet of exterior door area per dwelling unit can have a U-factor of 0.54 or less.

Glazing that is either double pane with low-e coating on one surface, or triple pane shall be deemed to comply with this requirement.

m. Minimum 24-inch horizontal or vertical below grade.

Т	HIGH EFFICIENCY HVAC SYSTEM ^a
	a. Gas-fired furnace or boiler AFUE 94%, or
1	b. Air source heat pump HSPF 10.0/14.0 SEER cooling, or
_	c. Ground source heat pump COP 3.5 or Energy Star rated
Τ	HIGH EFFICIENCY WATER HEATING SYSTEM
	a. Natural gas/propane water heater with minimum UEF 0.90, o
2	b. Electric heat pump water heater with minimum 2.0 COP, or
	c. Natural gas/propane tankless/instantaneous heater with m
	installed on minimum of one shower/tub-shower
3	WALL INSULATION UPGRADE
3	Exterior walls—U-0.045/R-21 conventional framing with R-5.0 contin
	ADVANCED ENVELOPE
4	Windows-U-0.21 (Area weighted average), and
3	Flat ceiling ^b —U-0.017/R-60, and
	Framed floors—U-0.026/R-38 or slab edge insulation to F-0.48 or le
	DUCTLESS HEAT PUMP
5	For dwelling units with all-electric heat provide:
ž	Ductless heat pump of minimum HSPF 10 in primary zone repla
	Programmable thermostat for all heaters in bedrooms
6	HIGH EFFICIENCY THERMAL ENVELOPE UAC
0	Proposed UA is 8 percent lower than the code UA
7	GLAZING AREA
"	Glazing area, measured as the total of framed openings is less than
	3 ACH AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION
8	Achieve a maximum of 3.0 ACH50 whole-house air leakage when th
	system including heat recovery with a minimum sensible heat recover

total heated space floor area unless vaulted area has a U-factor no greater than U-0.026. c. In accordance with Table N1104.1(1), the Proposed UA total of the Proposed Alternative Design shall be a minimum of 8 percent less than the Code UA total of the

Standard Base Case.

TABLE N1101.1(2) ADDITIONAL MEASURES

ninimum UEF 0.90, or

eous heater with minimum 0.80 UEF and Drain Water Heat Recovery Unit shower

ing with R-5.0 continuous insulation

lation to F-0.48 or less (R-10 for 48"; R-15 for 36" or R-5 fully insulated slab)

primary zone replaces zonal electric heat sources, and edrooms

penings is less than 12 percent of conditioned floor area

NT VENTILATION

air leakage when third-party tested and provide a whole-house ventilation sensible heat recovery efficiency of not less than 66 percent

air installed. Combustion air shall be ducted directly from the outdoors.

THESE PLANS HAVE BEEN LICENSED TO THE CUSTOMER FOR THE USE IN CONSTRUCTION OF ONE BUILDING ONLY & ARE SUBJECT TO THE CONSTRUCTION OF ONE DULLING ONLY & ARE SUBJECT TO THE CONDITION OF ONE DULLING ONLY & ARE SUBJECT OF ANY				plan no:	112913
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