

LEFT EL. 1/8 = 1-0 BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL RESIDENTIAL CODE AND LOCAL CODES.

TRUMARK HOMES KYLE III LOT 1437 WINTERSET 157 NW CARSON DR LEE SUMMIT MO

SCALE 1/4" = 1-0

DATE 10-28-20

PLAN NO.

3206

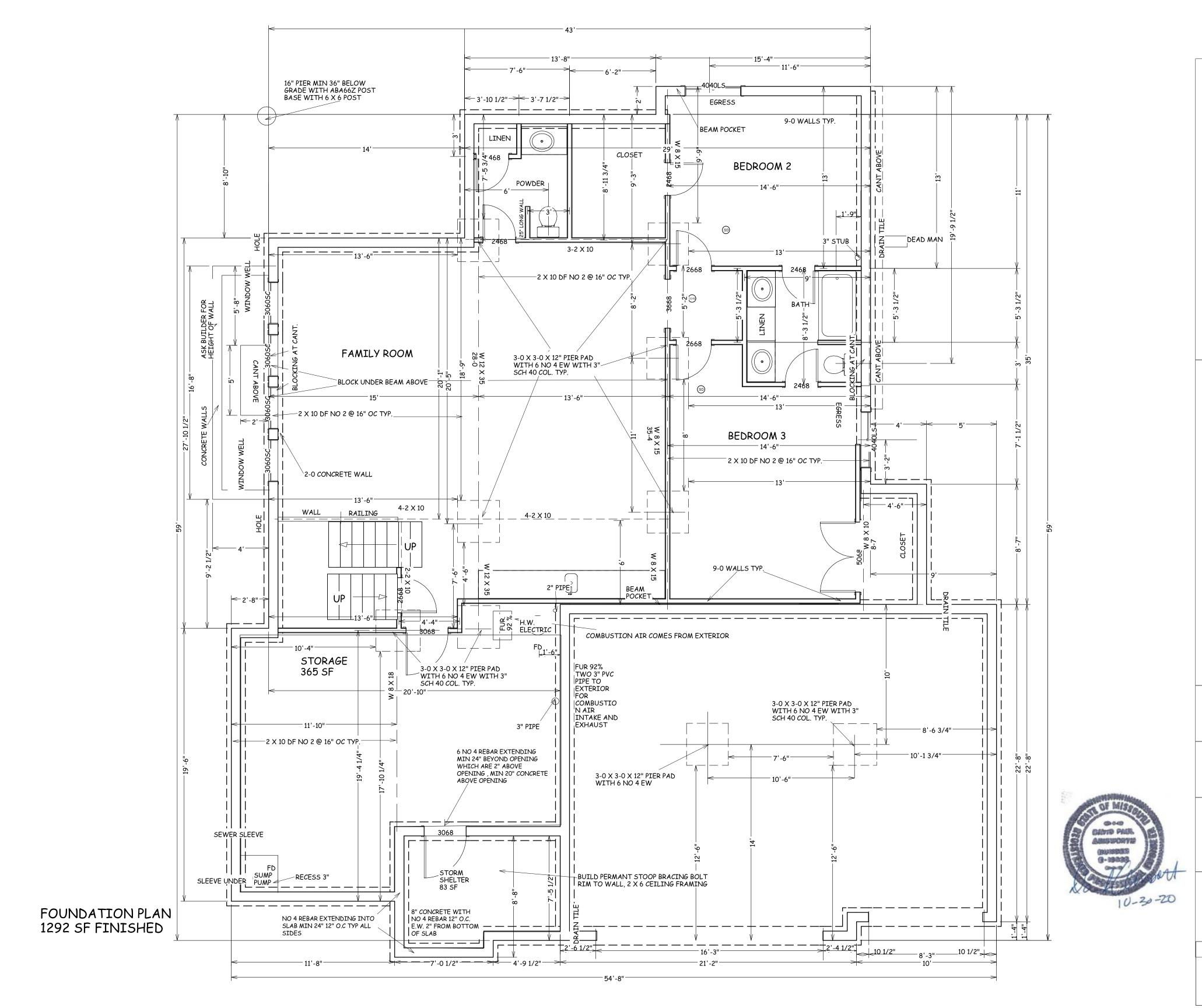
SHEET NO.

1 OF 6

RELEASE FOR
CONSTRUCTION

AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

11/12/2020



BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL RESIDENTIAL CODE AND LOCAL CODES.

TRUMARK HOMES KYLE III LOT 1437 WINTERSET 157 NW CARSON DR LEE SUMMIT MO

SCALE 1/4" = 1-0

> DATE 10-28-20

PLAN NO.

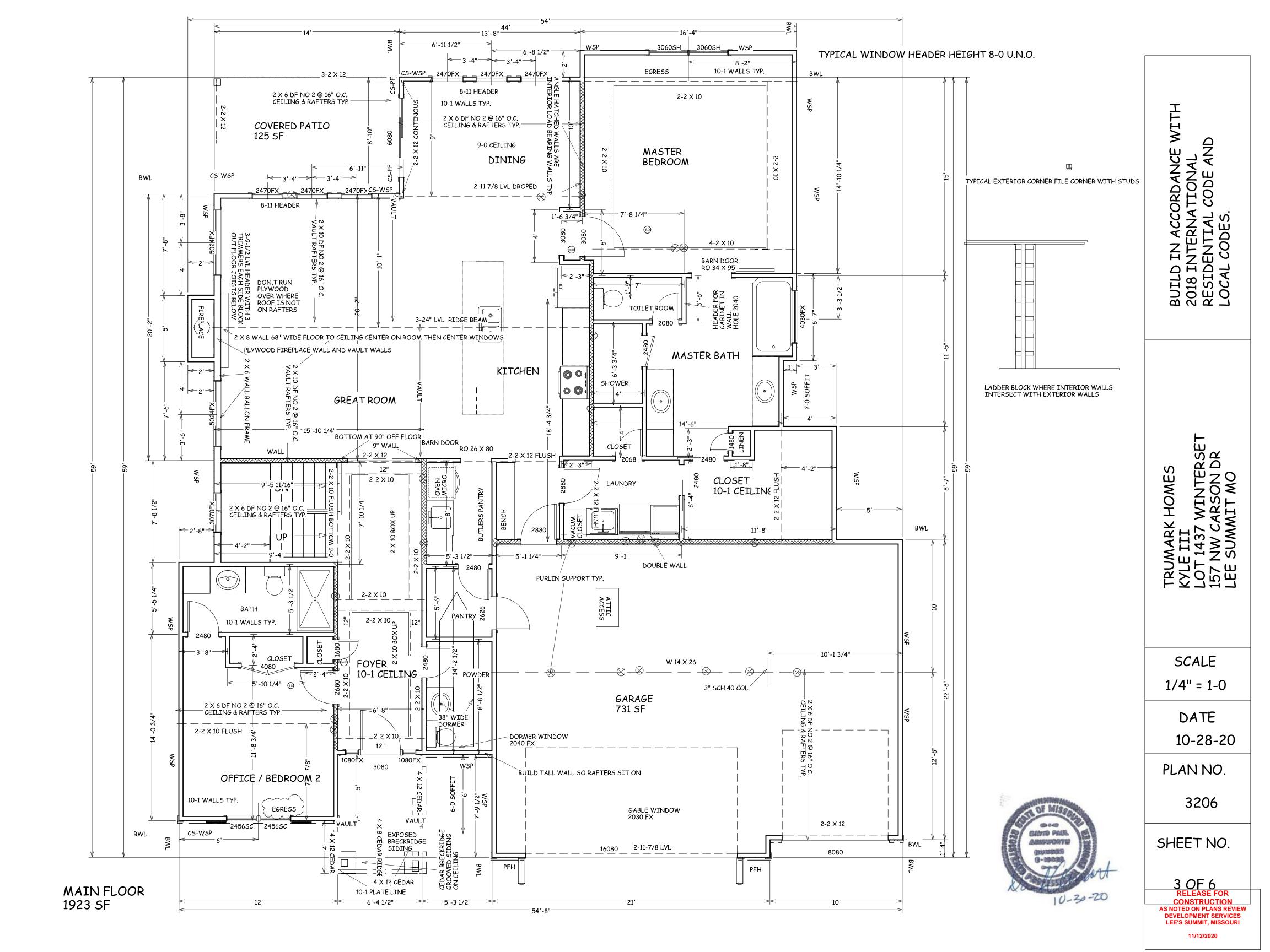
3206

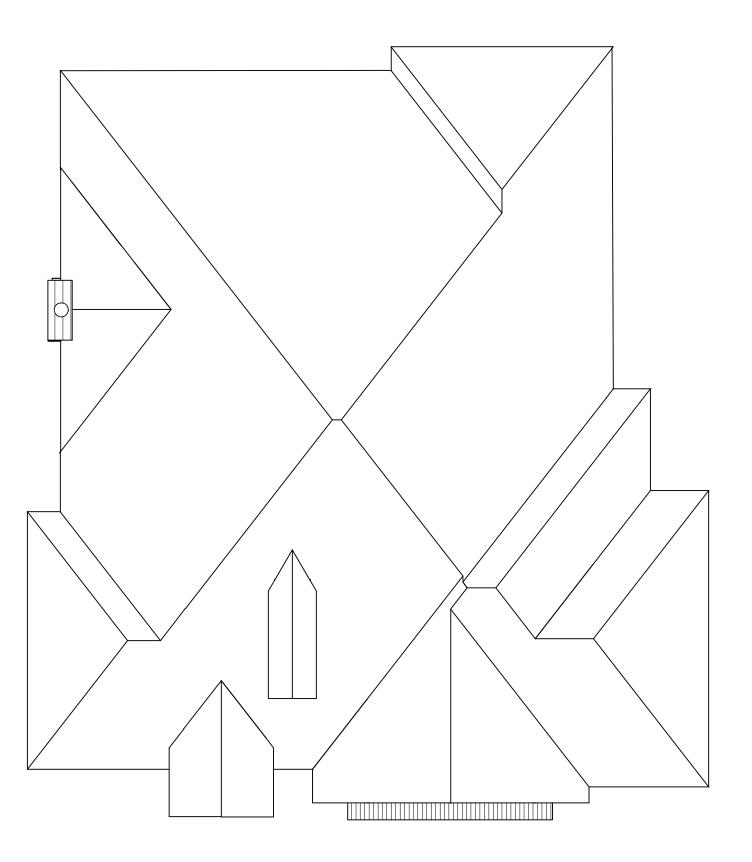
SHEET NO.

2 OF 6

RELEASE FOR
CONSTRUCTION

AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI





ROOF PLAN SIDE TO SIDE 9/12 FRONT TO BACK 7/12 RAFTERS 2 X 6 DF NO 2 @ 16" OC HIPS AND RIDGES 2 X 8 DF NO 2

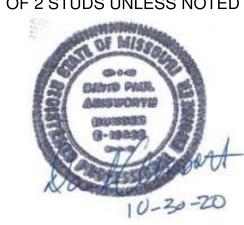
1. DWELLING / GARAGE OPENINGS BETWEEN GARAGE AND SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS SHALL BE 2 X 10 VAULT RAFTER 1" AIR SPACE WITH FOAM AIR EQUIPPED WITH SOLID WOOD OR STELL DOORS NOT LESS THAN 1-3/8" ENERGY CONSERVATION CODE CHUTES 2 X 2 NAILED TO BOTTOM OF THICK OR 20 MINUTE RATED DOORS, WITH SELF CLOSING DEVICES THE FOLLOWING VALUES ARE NEEDED. RAFTERS 12" O.C. WITH 12 D REQUIRED FOR GARAGE / DWELLING SEPERATION DOORS R302.5.1 2. WHOLE HOUSE MECHANICAL VENTILATION SYSTEM IS REQUIRED FOR R-15 IN WALLS ANY DWELLING IN COMPLIANCE WITH IRC M 1505 3. CARBON MONOXIDE DETECTORS REQUIRED IRC R 315 R-49 IN ATTICS R-38 HIGH DENSITY 4. STEEL COLUMNS SHALL BE MINIMUM SCHEDULE 40 R407.3 INSULATION R-38 IN VAULTS R-30 REDUCTION FOR VAULTS IS ONLY FOR 500 SF 5. DECK SHALL BE BUILT PER TABLES 507.2 , 507.2.1, 507.3, 507.6, INTERCONNECTED HARD WIRED SMOKE DETECTORS SHALL BE INSTALLED IN EACH 507.5.1(1)&(2), 507.5, AND 507.6 BEDROOM AND OUTSIDE OF EACH BEDROOM 6. STUDS SHALL BE CONTINUOUS BETWEEN FLOOR, CEILING AND OR R-19 IN FLOORS OVER UNCONDITIONED SPACES ROOF DIAPHRAGMS R602.3 ALL PLUMBING IF EXISITING SHALL BE CAPPED AND AIR TESTED PRIOR TO ROUGH-IN 7. ADDED REQUIREMENTS FOR WINDOW FALL PROTECTION R312.2 R-10 IN CRAWL SPACE WALLS INSPECTION FOR LEAK VERIFICATION 8. NEW PROVISIONS FOR ATTACHMENT OF RAFTERS, TRUSSES AND BASEMENT WALLS R-13 CAVITY OR R-10 CONTINOUS ROOF BEAMS R802.3.1. R802.11 9. INSULATION REQUIRED FOR ALL BASEMENT WALLS (INCLUDING SLABS SHALL BE R-10 FOR A DEPTH OF 2 FOOT UNFINISHED BASEMENTS) N1102.1 A WINDOW U FACTOR OF .35 OR BETTER 10. EXTERIOR WINDOWS/DOORS SHALL HAVE U-FACTOR 0.35 AND ICE & WATER SHEILD REQUIRED ON ALL GLAZING SHALL HAVE SOLAR HEIGHT GAIN FACTOR OF 0.40 N1102.1 DUCTWORK NEEDS TO HAVE AN R-8 VALUE 11. HOUSE LEAKAGE AND DUCT LEAKAGE PERFORMANCE STANDARDS EFFECTIVE JANUARY 1, 2014. A SAMPLE TESTING PROGRAM WILL BE ROOF IS DESIGNED FOR 25 IMPLEMENTED OCTOBER 1, 2012 KCBRC N1102.4.1.2 N1103.2.2 P.S.F. SNOW LOAD MIN. COMP. SHINGLES OVER 12. LIGHTING FIXTURES PENETRATING THE THERMAL ENVELOPE (E.G. RIDGE BOARDS AND HIPS ARE TO BE 2 CAN LIGHTS IN ATTIC) SHALL BE IC-RATED, LEAKAGE-RATED AND 15# FELT X MATERIAL, AND NOT LESS THAN SEALED TO THE GYPSUM WALLBOARD N1102.4.4 THE END CUT OF RAFTER RAFTERS AND CEILING 2 X 6 DF NO. 2 7/16" APA JOISTS CONNECTIONS IN 13.PROGRAMMABLE THERMOSTAT REQUIRED N1103.1.1 RATED ROOF ACCORDANCE IRC 802.3 SHEATHING 14. AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2 % AIR LEAKAGE RATE N1103.2.2.1 PROVIDE RAFTER TIES PER SECTION 802.3 DRIP EDGE AND GUTER AND 802.3.1 WHEN UNABLE TO CONNECT RAFTERS TO CEILING JOISTS 1 X 8 FASCIA OVER 2 X 6 15. BUILDING CAVITIES USED AS RETURN AIR PLENUMS SHALL BE 2 X 6 DF NO. 2 AT 16" OC SUBFASCIA SEALED TO PREVENT LEAKAGE ACROSS THE THERMAL ENVELOPE KCBRC 1/2 GYP. BOARD 16. CERTAIN HOT WATER PIPES SHALL BE INSULATED N1103.4 WITH GARAGE SHALL HAVE 5/8 TYPE X VENTS 17. ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR SHEET ROCK CEILING AND WALLS 7/16 APA RATED SIDING OVER 18. MAKEUP AIR SYSTEM REQUIRED FOR KITHCHEN EXHAUST HOODS 2 - 2 X 10 DF NO 2 WATER RESISTIVE HOUSE WRAP IN THAT EXCEED 400 CFM M1503.4 HEADERS TYP. U.N.O. COMPLIANCE WITH SECTION 703.2 WALLS OVER 10-2 TO 18-0 OF THE IRC 2 X 4 DF NO. 2 STUDS SHALL BE 2 X 6 DF 19. BUILDING CAVITIES IN A THERMAL ENVELOPE WALL (INCLUDING AT 16" OC NO 2 @ 16" O.C. TYP. THE WALL BETWEEN THE HOUSE AND GARAGE) SHALL NOT BE USED AS 3/4" T & G SUB FLOOR GLUED AND NAILED 1/2 " ANCHOR BOLTS AT 5-0 OC MIN. , AND BE ALL STUDS GO FROM FLOOR TO LOCATED WITHIN 12" FROM THE ENDS OF EACH 20. AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING CEILING OR RAFTER DIAFRAM TYP. PLATE SECTION. SHALL EXTEND A MINIMUM OF SPACE AND THE GARAGE M1601.6 2 X 10 DF NO 2 @ 7" INTO CONCRETE 16" OC TYP. 21. A CONCRETE- ENCASED GROUNDING ELECTRODE ('UFER' GROUND) 2 X4 TREATED PLATE OVER REINFORCEMNT AT MIN. CONCRETE STRENGTH CONNECTION SHALL BE PROVIDED TO THE ELECTRICAL SERVICE E3608.1 SILL SEALER CORNERS OF OPENINGS 2,500 PSI BASEMENT FLOOR SLABS UNDISTURBED GRADE AND STEP DOWNS 3,000 PSI FOR FOOTINGS, FOUNDATION WALLS, AND OTHER VERTICAL 22. COMPLIANCE WITH THE REQUIRMENT AND SHOW CONNECTION AS REQUIRE 1 # 4 BAR 48" NEEDED FOR ROOF BEAM, TRUS, RAFTER, AND GIRDER CONNECTION FOR LONG AT 45 DEGREE 3,500 PSI FOR CARPORT AND GARAGE FLOOR SLABS ON UNDISTURBED GRADE, DAMPPROOF WALLS BELOW GRADE UPLIFT PER IRC 802.11. ALL RAFTERS BE IN COMPLIANCE WITH IRC 502.11 ANGLE AT CORNERS AND STRUCTURAL FLOOR SLABS SPRAY ON TAR WITHIN CODE R-406.1 AMENDED RAYMORE CODE WITHIN 6" OF THE EDGE FILL ALL VIODS & HONEYCOMB AREAS OF INSIDE CORNERS BEFORE DAMPPROOFING 4" CONCRETE SLAB WITH NO SPREAD FOOTING 4 BARS AT 2-0 OC EACH WAY, 7.5" CONCRETE WALL WITH NO 4 BARS HORT. EVERY 18" OF WALL MIN 8" DEEP X 16" HEIGHT WITH # 4 BAR WITHIN 6" OF TOP AND BOTTOM OF WALL, WIDE WITH TWO NO OVER 6 ML VAPOR BARRIOR USE LSTA24 RIDGE STRAPS HORT. REBAR SHALL BE INSTALLED ON SOIL SIDE OF VERTICAL OVER CRUSHED ROCK 4 REBAR ON ALL VAULTS AT RIDGE REINFORCEMENT OR COLLAR TIES GRADE 40 TYP. VERTICAL REBAR SHALL BE WITHIN 8" OF THE TOP OF THE WALL, AND POSITIONED 2" FROM THE INSIDE FACE OF WALL VERTICAL REBAR SPACING WALL HEIGHT IN FEET INTERIOR DRAIN TILE MIN. 1-1/2" 6-0 OR LESS #4 @ 24" O.C. MIN. DRAIN TO DAYLIGHT, OR SUMP RADON VENTING OF SLAB 8-0 # 4 @ 16" O.C. PUMP IN ACCORDANCE TO R-405 ALL CONCRETE EXPOSED TO 9-0 # 4@ 12" O.C. WEATHER GARAGE SLABS 10-0 # 4 @ 8" O.C. FOOTINGS WALLS AND FLATWORK 10-0 WALL 9.5" #4 @ 12" O.C. MUST HAVE 6% AIR ENTRAINMENT 8 X 16 FOOTING WITH TWO NO 4 BARS HORIZONTAL 3" FROM THE BOTTOM, ALL FOOTINGS TO EXCEED MIN. FROST DEPTH OF 36" ASSUMED SOIL \ CRUSHED ROCK OVER PIPE, DRAIN TO PRESSURE DAYLIGHT, OR SUMP PUMP IN MIN. STAIR HEADROOM 6-8 PIER PADS 2000 P.S.F. ACCORDANCE TO R-405 ALL STAIRS TYP. U.N.O. 3-0 X 3-0 X 12" PEIR PADS MIN. STUDS OVER 10-0 SHALL HAVE MAX. RISE 7-3/4" TYPICAL WALL SECTION WITH # 4 REBAR, 6 EACH WAY BLOCKING ALONG WALL MAX MIN. RUN 10" OF 6-0 O.C. WINDOW EGRESS REQUIREMENTS WINDOW SAFETY GLAZING PER 308 OVERHEAD GARAGE DOORS MUST MEET DASMA 115 MPH SAFETY GLAZING REQUIRED ALONG WALKING SURFACES AND BEDROOM WINDOW EGRESS MINIMUM FOR A DOUBLE HUNG STAIRS LOCATED WITHIN 36 INCHES HORIZONTALLY OF THE STEPS. WINDOW IS 34 INCH CLEAR WIDTH MIN. AND 24 INCH CLEAR OR IRC 2018 REQUIRMENTS SAFETY GLAZING REQUIRED IF EXPOSED SINGLE PANEL IS IN HEIGHT MIN. WITH A CLEAR OPENABLE AREA OF 5.7 SQUARE FEET EXCESS OF 9 SQUARE FEET OR THE BOTTOM EDGE OF THE GLAZING $_{-}$ LADDER $^{\perp}$ IS LESS THAN 18 INCHES ABOVE THE FINISHED FLOOR. A CASEMENT OR SLIDER WINDOW MINIMUMS ARE 20 INCH CLEAR **≪** 3'-0" → WIDTH MINIMUM AND 41 INCH CLEAR HEIGHT MINIMUM. WITH A SAFETY GLAZING REQUIRD WHERE THE NEAREST EXPOSED EDGE OF MINIMUM 5.7 SQUARE FOOT OF OPENABLE AREA. EGRESS WINDOW WELL AS NEEDED THE GLAZING IS WITHIN 24 INCHES OF EITHER VERTICAL EDGE OF OPENING OF EGRESS WINDOW NOT MORE THAN 42" PER SECTION 308 MIN 3-0 X 3-0 THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM FROM THE FLOOR EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A

VAULT INSULATION DETAIL

WALKING SURFACE, SAFETY OR TEMPERED GLAZING IS REQUIRED.

WINDOWS ARE TO HAVE FALL PROTECTION PER IRC 312.2

ALL POINT LOADS SHALL HAVE A MINIMUM OF 2 STUDS UNLESS NOTED OTHERWISE



ACCORDANCE WITH TIONA CODE NTERNA 'ENTIAL UILD 1018 IN RESIDE

018 : ESII

BUB

SA TER! 0 2

SCALE

1/4" = 1-0

DATE 10-28-20

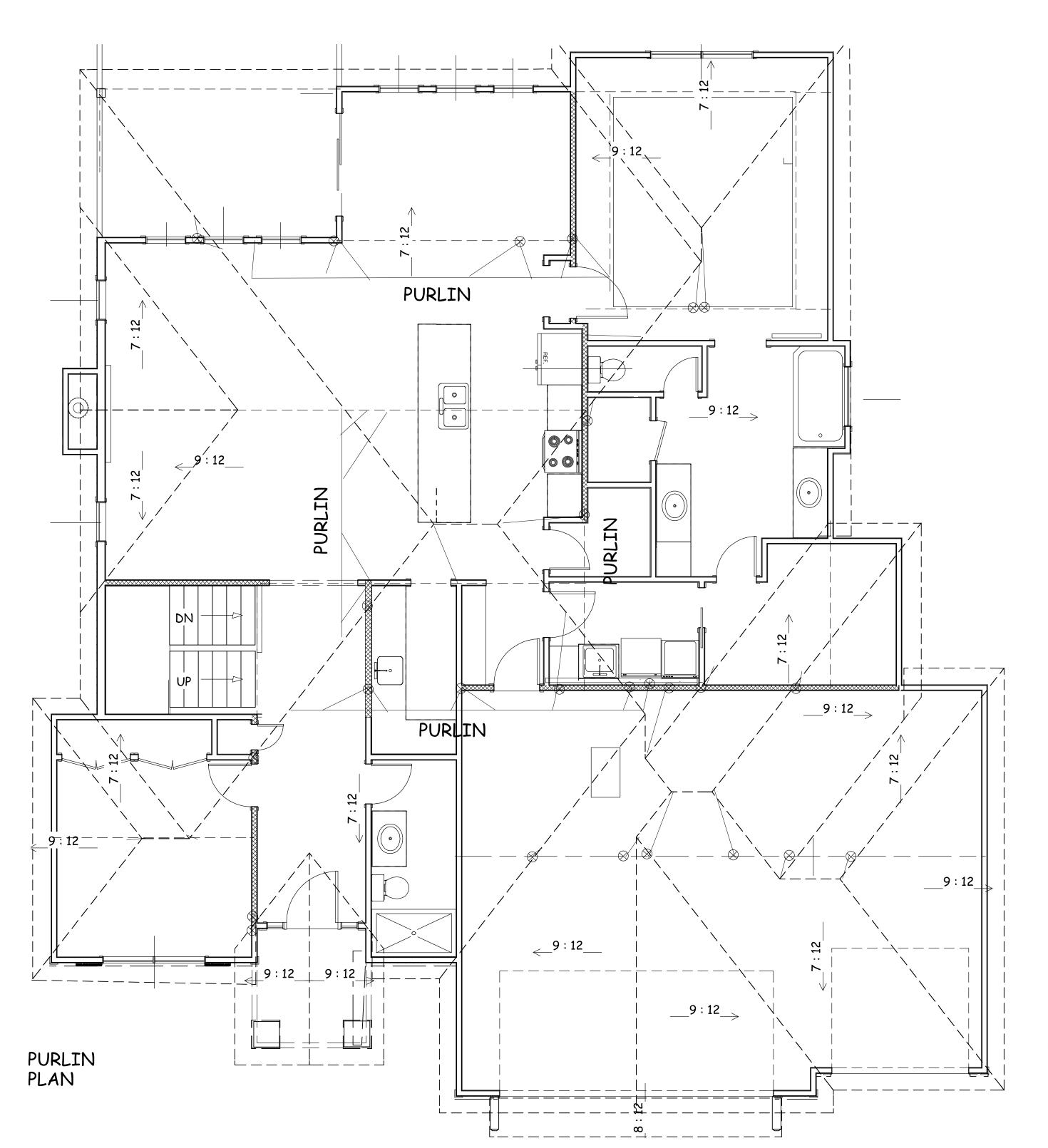
PLAN NO.

3206

SHEET NO.

4 OF 6

RELEASE FOR CONSTRUCTION **AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES** LEE'S SUMMIT, MISSOURI





BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL RESIDENTIAL CODE AND LOCAL CODES.

TRUMARK HOMES KYLE III LOT 1437 WINTERSET 157 NW CARSON DR LEE SUMMIT MO

SCALE 1/4" = 1-0

> DATE 10-28-20

PLAN NO.

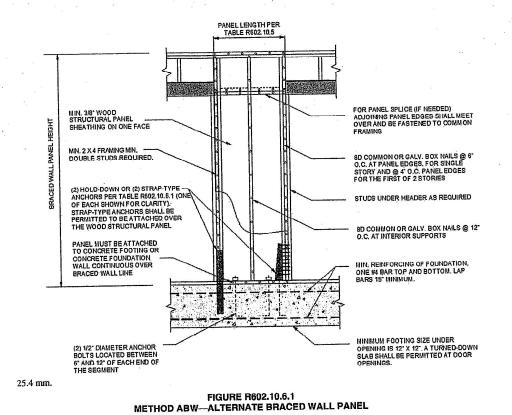
3206

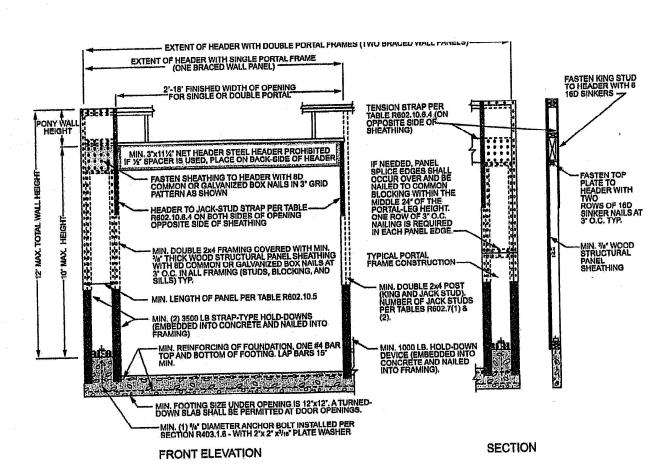
SHEET NO.

5 OF 6

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI

3.5 3,5 5.5 4.5 7.0 12.5 12.5 7.5 15.0 15.0 9.0 50 9.0 10.5 18.0 20 9.0 18.0 23.5 23.5 14.0 16.5 29.0 29.0 50 17.0 20.0 34,5 9.0 13.0 15.5 27.0 20.0 35.0 NP 24.5 21.0 43.0 25.0





4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.2 METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

	BRACING METHODS									
					CONNECTION CRITERIA*					
METHODS, MATERIAL		ODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Spacing				
			1 × 4 wood or approved metal straps at 45° to 60° angles for maximum 16" stud spacing			Wood: per stud and top and bottom plates				
					Metal strap: per manufacturer	Metal: per manufacturer				
		DWB Diagonal wood boards	3/4" (1" nominal) for maximum 24" stud spacing		2-8d $(2^{1}/_{2}" long \times 0.113" dia.)$ nails or $2 - 1^{3}/_{4}" long staples$	Per stud				
	T	WSP Wood structural panel (See Section R604)	³/g"		Exterior sheathing per Table R602.3(3)	6" edges 12" field				
					Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener				
	ethods	BV-WSP Wood structural panels with stone or masonry veneer (See Section R602.10.6.5)	7/ ₁₆ "	See Figure R602.10.6.5	8d common $(2^{1}/_{2}^{"} \times 0.131)$ pails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts				
	Bracing M	SFB Structural fiberboard sheathing	1/2" or 25/32" for maximum 16" stud spacing		$1^1 l_2'' \log \times 0.12''$ dia. (for $^1 l_2''$ thick sheathing) $1^3 l_4'' \log \times 0.12''$ dia. (for $^{23} l_{32}''$ thick sheathing) galvanized roofing nails	3" edges 6" field				
Intermittent Bracing Methods	mitten	GB Gypsum board	1/2"		Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7"				
	Intern				Natls or screws per Table R702.3.5 for interior locations	edges (including to and bottom plates) field				
		PBS Particleboard sheathing (See Section R605)	3/8" or 1/2" for maximum 16" stud spacing	For ³ / ₈ ", 6d common (2" long × 0.113" dia.) nails For ¹ / ₂ ", 8d common (2.1/ ₂ " long × 0.131" dia.) nails		3" edges 6" field				
		PCP Portland cement plaster	See Section R703.7 for maximum 16" stud spacing		1 ¹ / ₂ " long, 11 gage, ⁷ / ₁₆ " dia. head nails or ⁷ / ₈ " long, 16 gage staples	6" o.c. on all framing members				
		HPS Hardboard panel siding	7/16" for maximum 16" stud spacing		0.092" dia., 0.225" dia. head nails with length to accommodate 1 ½" penetration into studs	4" edges 8" field				
		ABW Alternate braced wall	3/8"		See Section R602.10.6.1	See Section R602.10.6.				
- 1		L		The second secon						

TABLE R602.10.4

METHOD (See Table R602.10.4)			MINIS	CONTRIBUTING LENGTH (Inches)				
			Wall Height					
,		8 feet	9 feet	10 feet	11 feet	12 feet		
DWR WSP SER P	BS, PCP, HPS, BV-WSP	48	48	48	53	58	Actual ^b	
GB LIB		48	48	48	53	58	Double sided = Actual Single sided = 0.5 × Actual	
		55	62	69	NP	NP	Actual ⁶	
ADIN	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42	48	
ABW	SDC D ₀ , D ₁ and D ₂ , ultimate design wind speed < 140 mph	32	32	34	NP	NP		
	CS-G	24	27	30	33	36	Actual ^b	
<u></u>	Adjacent clear opening height (inches)							
	≤ 64	24	27	30	33	36	Actual ^b	
	68	26	27	30	33	36		
	72	27	27	30	33	36		
	76	30	29	30	33	36		
	80	32	30	30	33	36		
	84	35	32	32	33	36		
	88	38	35	33	33	36		
	92	43	37	35	35	36		
	96	48	41	38	36	36		
CS-WSP, CS-SFB	100		44	40	38	38		
,	104	_	49	43	40	39		
	108	_	54	46	43	41		
	112		_	50	45	43		
	116			55	48	45		
	120	_		60	52	48		
	124		_	-	56	51		
	128	_	T		61	54		
	132		_		66	58		
	136	_		-		62		
	140	E .	T -			66		
	144	T -	_			72		
METHOD		Portal header height				-		
(See T	able R602,10.4)	8 feet	9 feet	10 feet	11 feet Note c	12 feet Note c		
PFH	Supporting roof only	16	16	16		Note o	48	
Lin	Supporting one story and roo		24	24	Note c			
PFG		24	27	30	Note d	Note of		
CS-PF	SDC A, B and C	16	18	20	Note e	Note e		
	SDC D_0 , D_1 and D_2 I foot = 304.8 mm, 1 mile per hour =	16	18	20	More e	14016.6	Actual	

BRACE WALL DETAILS WIND SPEED 115 MPH WIND EXPOSURE A

SEISMIC DESIGN CAEGORY A

a. Linear interpolation shall be permitted.
b. Use the actual length where it is greater than or equal to the minimum length.
c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height shall be permitted to be increased to 12 feet with pony wall.
d. Maximum header height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height shall be permitted to be increased to 12 feet with pony wall.
e. Maximum header height for CS-PF is 10 feet in accordance with Figure R602.10.6.4, but wall height shall be permitted to be increased to 12 feet with pony wall.

TABLE R602.10.4—continued BRACING METHODS							
Γ-				CONNECTION CRITERIA			
N	ETHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Specing		
g Methods	PFH Portal frame with hold-downs	3/g"		See Section R602.10.6.2	See Section R602.10.6.2		
Intermittent Bracing Methods	PFG Portal frame at garage	⁷ / ₁₆ "		See Section R602.10.6.3	See Section R602.10.6.3		
	CS-WSP Continuously sheathed wood structural panel	3/8"		Exterior sheathing per Table R602.3(3)	6" edges 12" field		
, s				Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener		
Continuous Sheathing Methods	CS-G ^{b,c} Continuously sheathed wood structural panel adjacent to garage openings	3/8"		See Method CS-WSP	See Method CS-WSP		
incous Sh	CS-PF Continuously sheathed portal frame	7/ ₁₆ "		See Section R602.10.6.4	See Section R602.10.6.4		
Conti	CS-SFB ^d Continuously sheathed structural fiberboard	1/2" or ²⁵ /32" for maximum 16" stud spacing		$1\frac{1}{2}$ " long × 0.12" dia. (for $\frac{1}{2}$ " thick sheathing) $\frac{1}{4}$ " long × 0.12" dia. (for $\frac{2}{3}$ " thick sheathing) galvanized roofing nails	3" edges 6" field		

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 md, 1 pound per square foot = 47.8 N/m², 1 mile per hour = 0.447 m/s.

a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D₀, D₁ and D₂.

b. Applies to panels next to garage door opening where supporting gable end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D₀, D₁ and D₂, roof covering dead load shall not exceed 3 psf.

c. Garage openings adjacent to a Method CS-G panel. Shall be provided with a header in accordance with Table R602.7(1). A full-height clear opening shall not be permitted adjacent to a Method CS-G panel.

d. Method CS-SFB does not apply in Seismic Design Categories D₀, D₁ and D₂.

e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D₀ through D₂ only.

EXTENT OF HEADER WITH SINGLE PORTAL FRAME (ONE BRACED WALL PANEL) WOOD STRUCTURAL PANEL, SHEATHING O'
OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION
OVER BAND OR RIM JOIST) WOOD STRUCTURAL PANEL SHEATHING OVER APPRI FLOOR - OVERLAP OPTION FRONT ELEVATION

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R802.10.6.4
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION



BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL RESIDENTIAL CODE AND LOCAL CODES.

TRUMARK HOMES KYLE III LOT 1437 WINTERSET 157 NW CARSON DR LEE SUMMIT MO

SCALE 1/4" = 1-0

DATE 10-28-20

PLAN NO.

3206

SHEET NO.

RELEASE FOR

CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI