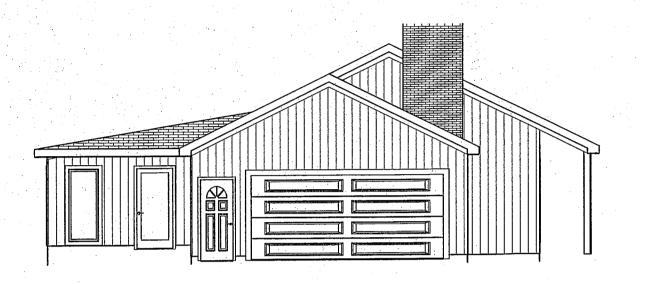
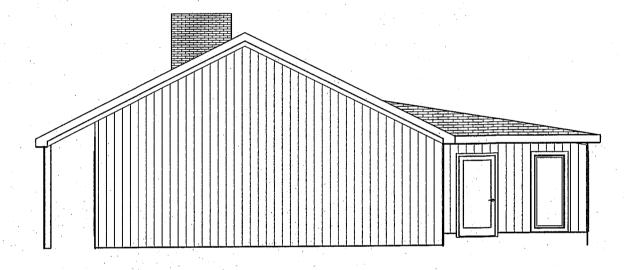


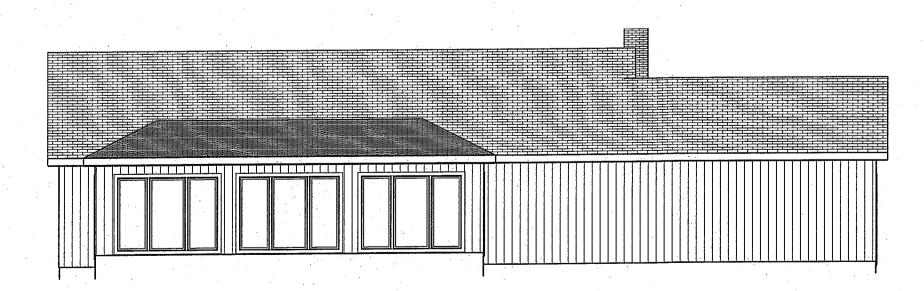
EXISTING FRONT EL. 1/8" = 1-0



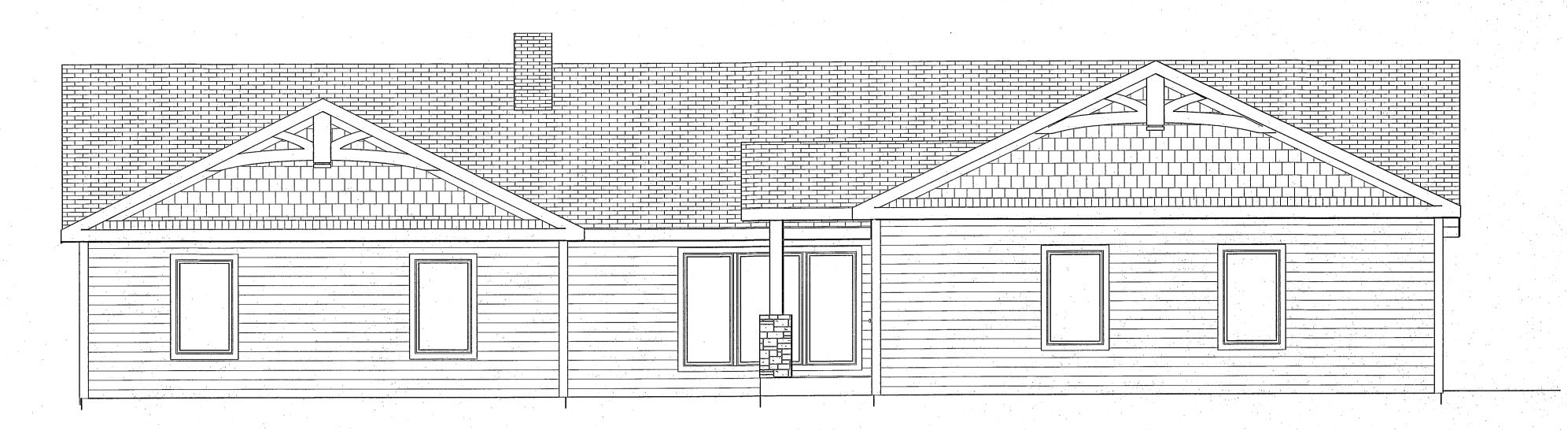
EXISTING LEFT EL. 1/8 = 1-0



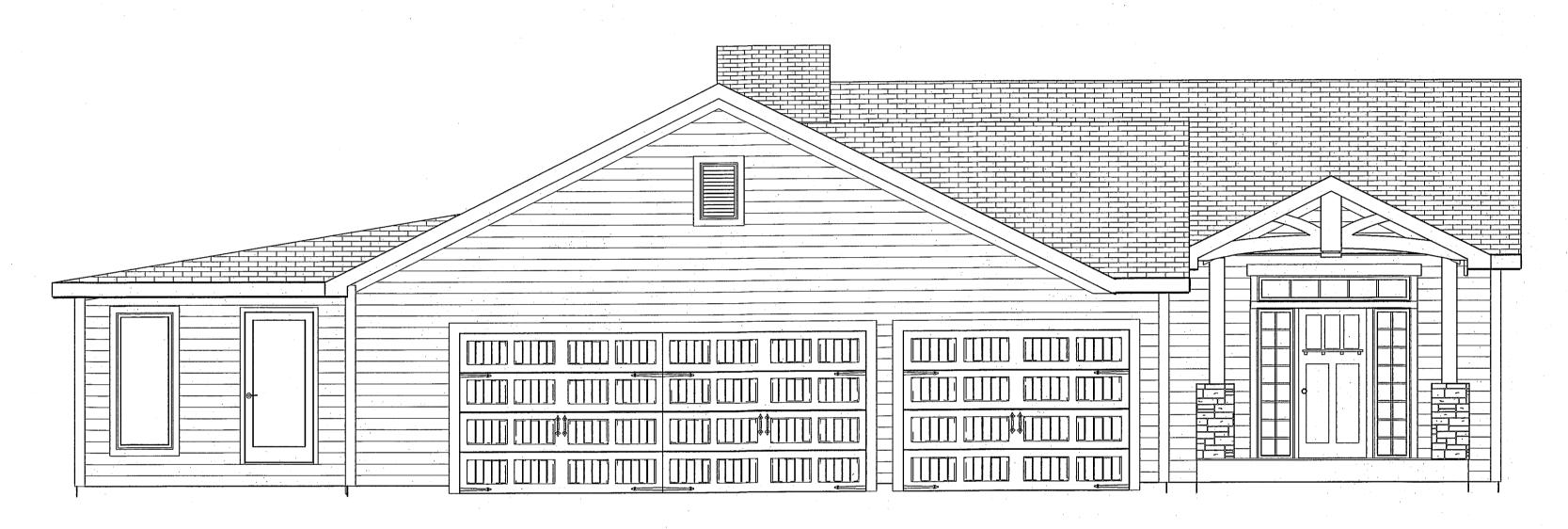
EXISTING RIGHT EL. 1/8 = 1-0



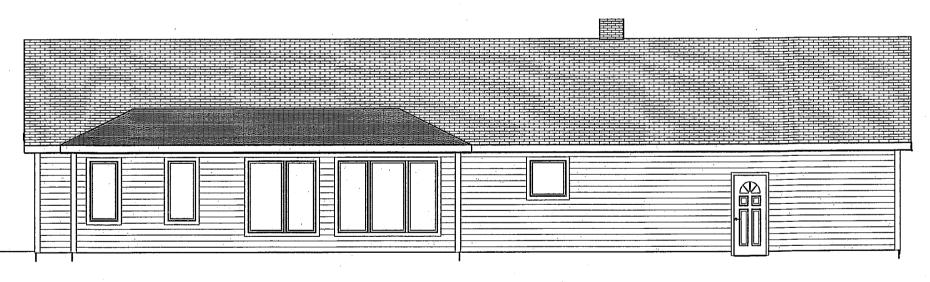
EXISTING REAR EL. 1/8 = 1-0



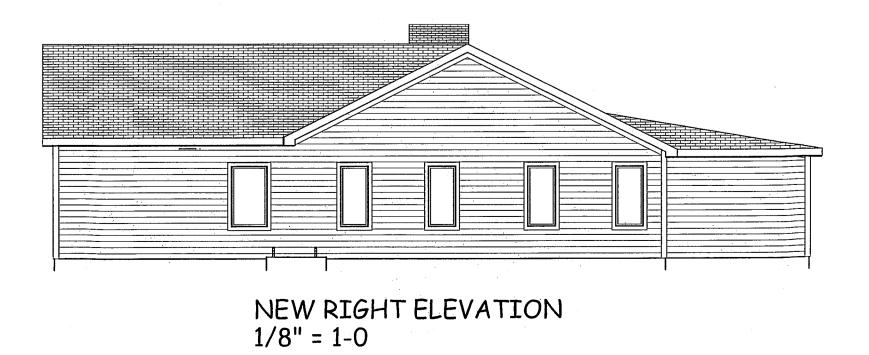
NEW FRONT ELEVATION



NEW LEFT ELEVATION



NEW REAR ELEVATION 1/8" = 1-0





RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
CODES ADMINISTRATION
LEE'S SUMMIT, MISSOURI

JOSEPH A. TOWNS P.E. MO. LIC E 22017 PROFESSIONAL SEAL APPLIES TO STRUCTURAL ELEMENTS ONLY

SCALE 1/4" = 1-0

DATE

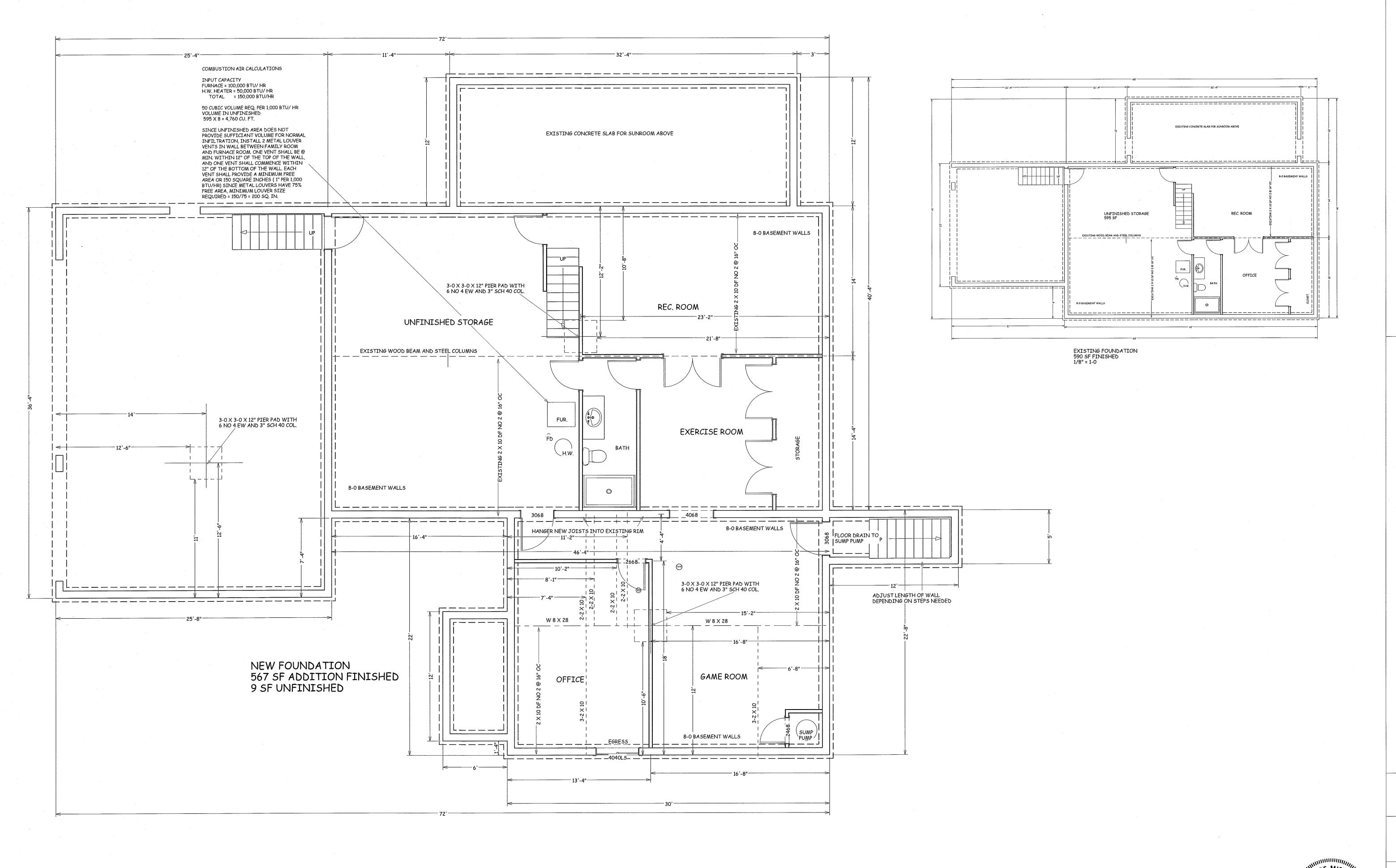
7-27-20

PLAN NO.

3149

SHEET NO.

1 OF 6



SCALE 1/4" = 1-0

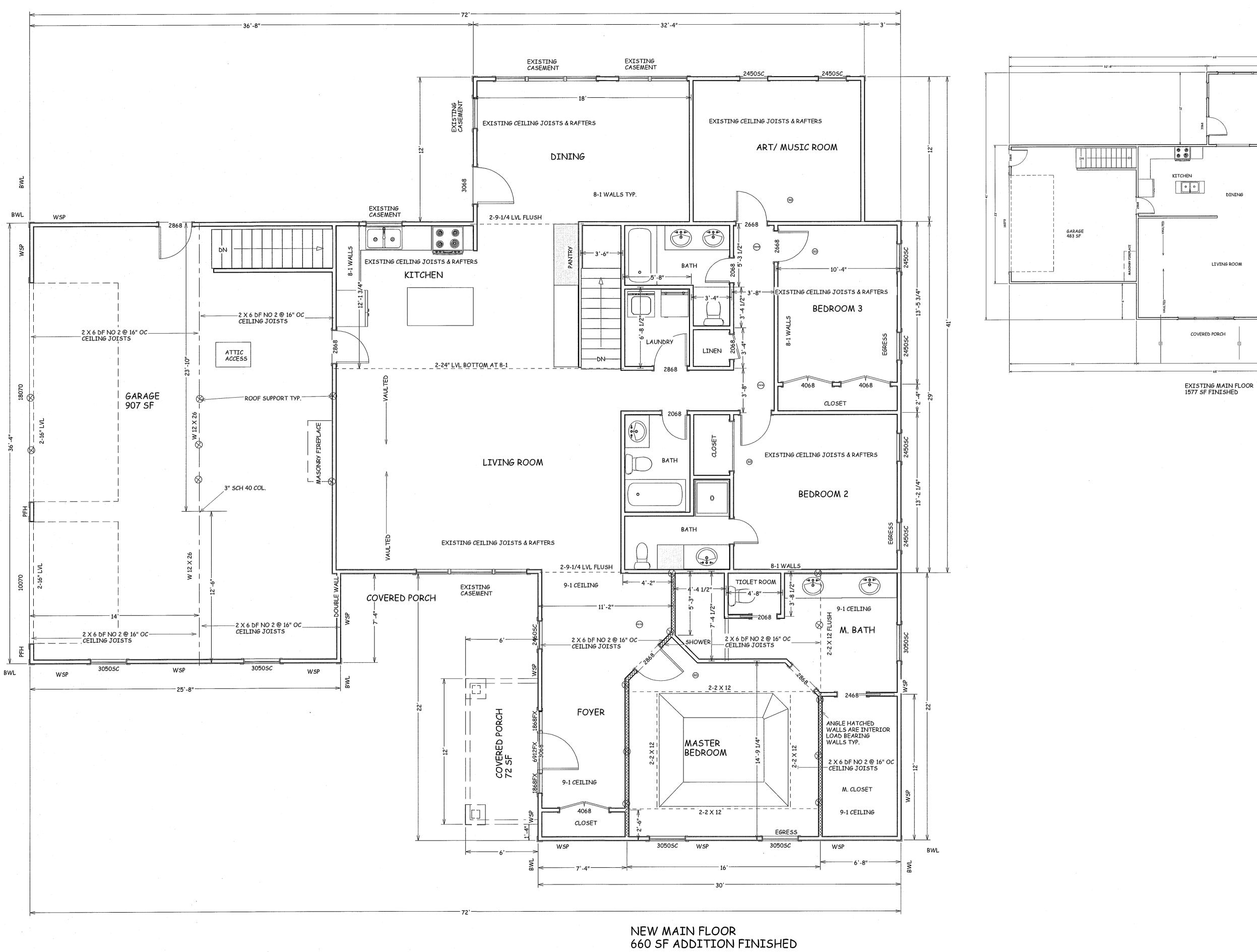
DATE

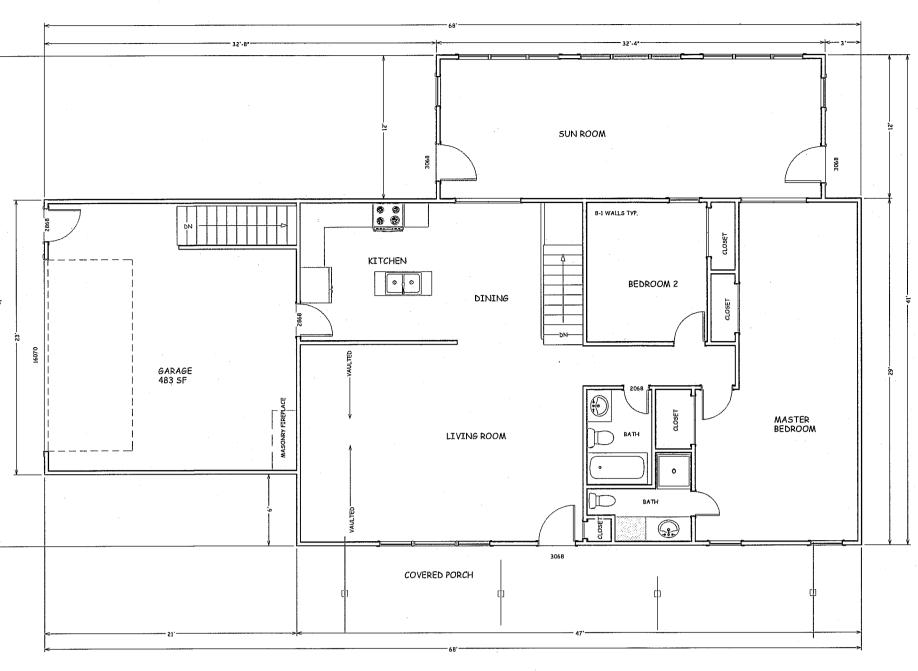
7-27-20

PLAN NO.

SHEET NO. RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
CODES ADMINISTRATION
LEE'S SUMMIT, MISSOURI
2 OF 68/11/2020

JOSEPH A. TOWNS P.E. MO. LIC E 22017 PROFESSIONAL SEAL APPLIES TO STRUCTURAL ELEMENTS ONLY





RHOADS RES. REMODEL AND ADDITION 1400 NE WOODS CHAPEL LEE SUMMIT MO

IN ACCORDANCE WITH INTERNATIONAL SENTIAL CODE AND CODES.

SCALE 1/4" = 1-0

DATE

7-27-20

3149

SHEET NO.

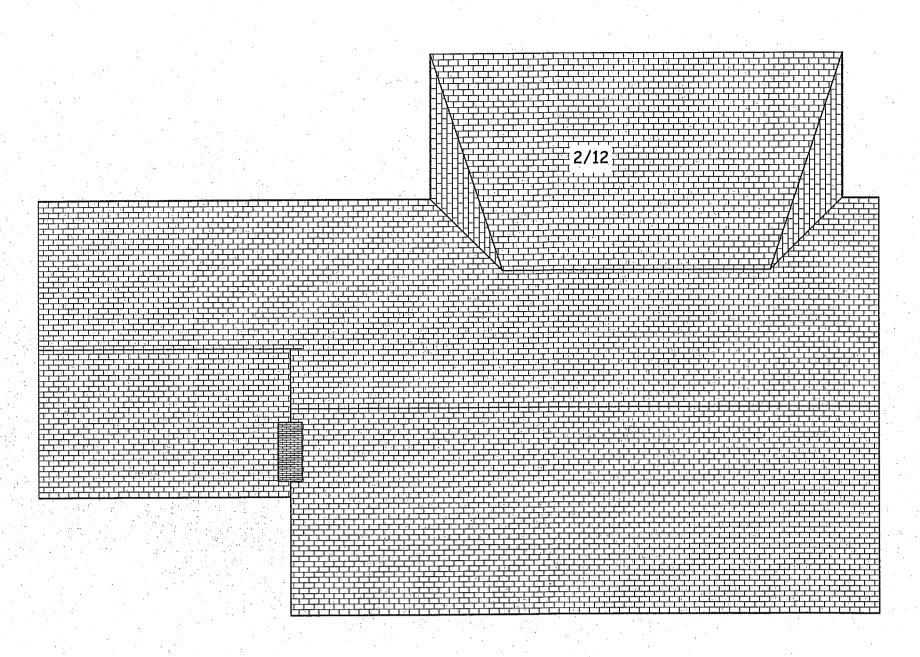
JOSEPH A. TOWNS P.E. MO. LIC E 22017
PROFESSIONAL SEAL
APPLIES TO STRUCTURAL
ELEMENTS ONLY

RELEASE FOR CONSTRUCTION

AS NOTED ON PLANS REVIEW

CODE SADMINISTRATION

LEE'S SUMMIT, MISSOURI



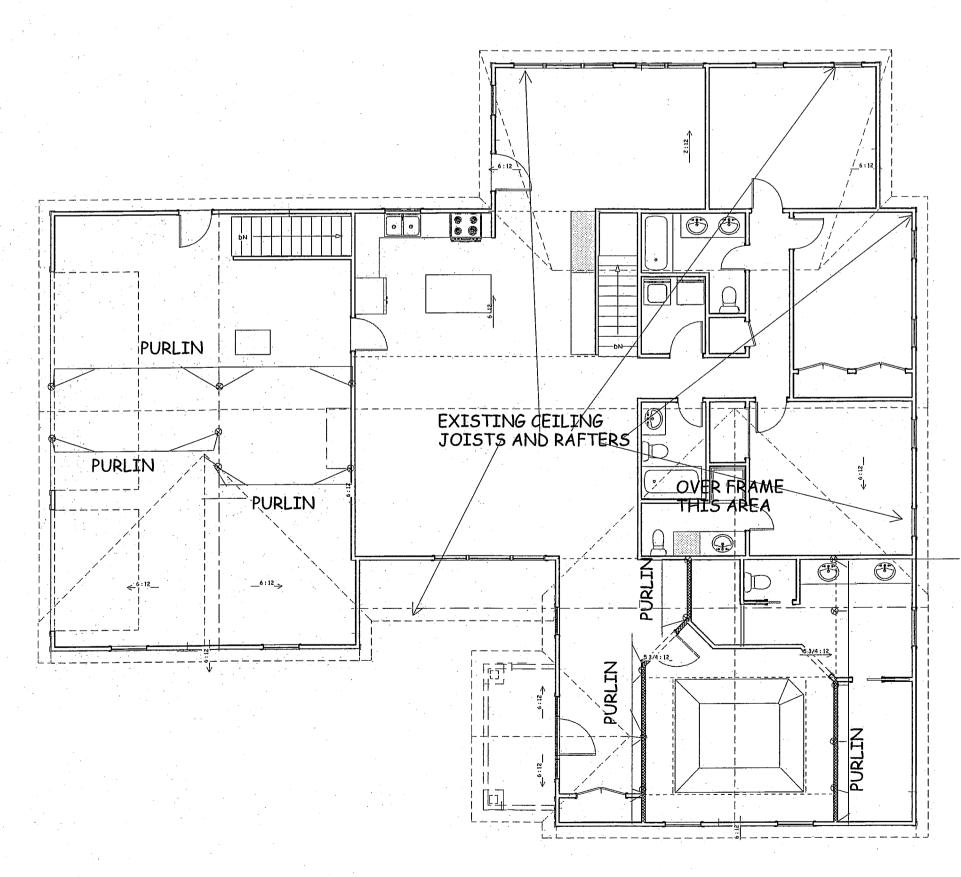
EXISTING ROOF PLAN

1/8 = 1-0

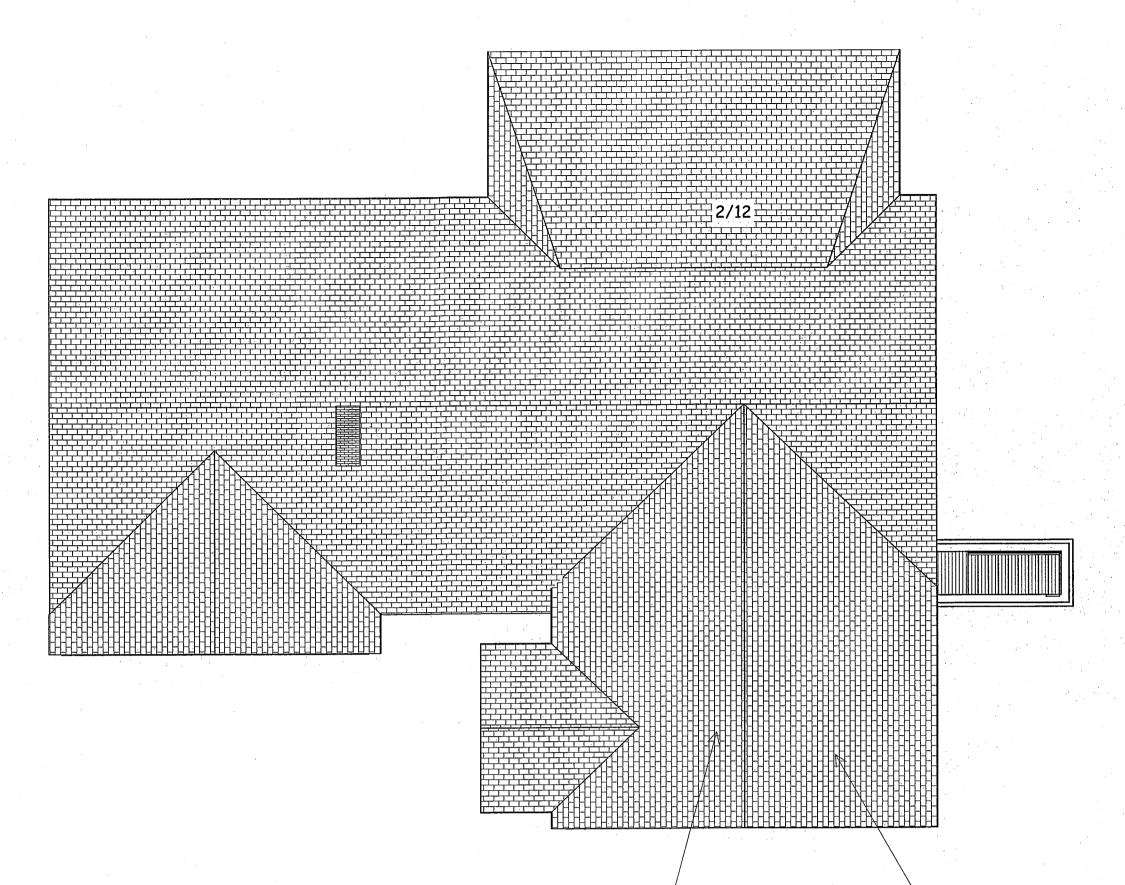
ROOF PITCHES 6/12 U.N.O.

RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP.

HIPS AND RIDGES 2 X 8 DF NO 2 TYP.



PURLIN PLAN 1/8 = 1-0



ADJUST ROOF PITCH TO MATCH MAIN RIDGE 5-3/4 / 12

NEW ROOF PLAN

1/8 = 1-0

ROOF PITCHES 6/12 U.N.O.

RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP.

HIPS AND RIDGES 2 X 8 DF NO 2 TYP.

RHOADS RES.
REMODEL AND ADDITIO
1400 NE WOODS CHAPEL
LEE SUMMIT MO

SCALE 1/4" = 1-0

DATE

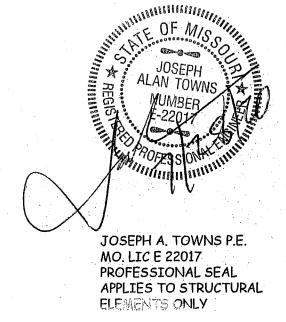
7-27-20

PLAN NO.

3149

SHEET NO.

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
CODES ADMINISTRATION
TELES SUMMIT, MISSOURI



WINDOWS ARE TO HAVE FALL

PROTECTION PER IRC 312.2

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

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

RHOADS RES.
REMODEL AND ADDITION
1400 NE WOODS CHAPEL
LEE SUMMIT MO

SCALE 1/4" = 1-0

DATE

7-27-20

PLAN NO.

JOSEPH ALAN TOWNS

JOSEPH A. TOWNS P.E.

MO. LIC E 22017 PROFESSIONAL SEAL APPLIES TO STRUCTURAL

ELEMENTS ONLY

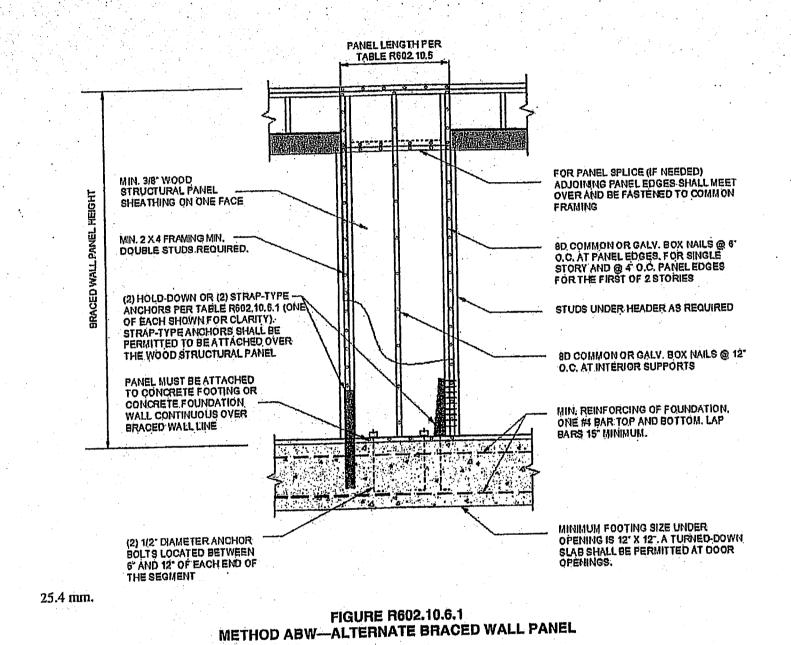
3149

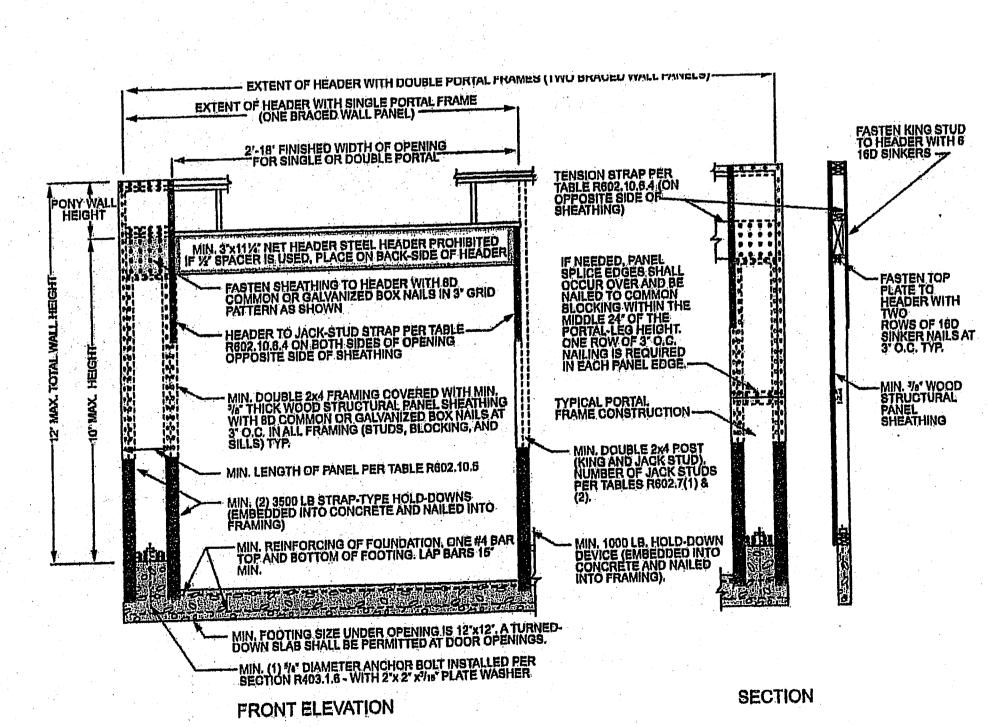
SHEET NO.

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DES ADMINISTRATION

OR (11/2020)

EXPOSURE CATEGORY B 3D-FOOT MEAN ROOF HEIGHT 10-FOOT WALL HEIGHT 2 BRACED WALL LINES			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE:					
Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing* (feet)) Method LIB [®] Method GB		Methods DWB, WBP, SFB, PBS, PCP, HPS, BV-WSP, ABW, PFH, PFC, CS-SFB	Maihods CB-WBP, CS-G, CB-PF		
		10	3.5	3.5	2.0	2.0		
	٨	20	6.5	6.5	3.5	3.5		
		30	9,5	9.5	5.5	4.5		
		40	12.5	12.5	7.0	6.0		
		50	15.0	15.0	9.0	7.5		
		60	18.0	18.0	10.5	9.0		
		10	7.0	7.0	4.0	3.5		
		20	12.5	12.5	7.5	6.5		
		30	18.0	18.0	10.5	9.0		
≤ 115		40	23.5	23.5	13.5	11.5		
		50	29.0	29.0	16.5	14.0		
		60	34.5	34.5	20.0	17.0		
		10	NP	10.0	6.0	5.0		
		20	NP	18.5	11.0	9.0		
		30	NP	27.0	15.5	13.0		
			NP	35.0	20.0	17.0		
		40	NP	43.0	24.5	21.0		
		50 60	NP	51.0	29.0	25.0		





4 mm, 1 foot = 304.8 mm.

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

				TABLE R602.10 BRACING METHO		
		·			CONNECTION CRITERI	A* 1
	METHODS, MATERIAL		MINIMUM THICKNESS	FIGURE	Fastenera	Spacing
		LIB	1 × 4 wood or approved metal straps at 45° to 60° angles for		Wood: 2-8d common nails or $3-8d (2^1/2^n \log x \ 0.113^n \ dia.)$ nails	Wood: per stud and top and bottom plates
		Let-in-bracing	maximum 16" stud spacing		Metal strap: per manufacturer	Metal: per manufacturer
		DWB Diagonal wood boards	74" (1" nominal) for maximum 24" stud spacing		2-8d (2 ¹ / ₂ " long × 0.113" dia.) nails or 2 - 1 ³ / ₄ " long staples	Per stud
	f	WSP			Exterior sheathing per Table R602.3(3)	6" edges 12" field
		Wood structural panel (See Section R604)	³ / ₈ "		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener
	thods	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 ($2^{1}/_{2}$ " × 0.131) nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts
	Intermittent Bracing Methods	SFB Structural fiberboard sheathing	¹ / ₂ " or ²⁵ / ₃₂ " for maximum 16" stud spacing		$1^{1}/_{2}$ " long × 0.12" dia. (for $^{1}/_{2}$ " thick sheathing) $1^{3}/_{4}$ " long × 0.12" dia. (for $^{25}/_{32}$ " thick sheathing) galvanized roofing nalls	3" edges 6" field
1	mittent				Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7" edges (including top
	Inter	GB Gypsum board	1/2"		Nails or screws per Table R702.3.5 for interior locations	and bottom plates) 7 field
	•	PBS Particleboard sheathing (See Section R605)	³ / ₈ " or '/ ₂ " for maximum 16" stud spacing		For ³ / ₈ ", 6d common (2" long × 0.113" dia.) nails For ¹ / ₂ ", 8d common (2'/ 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	members
		HPS Hardboard panel siding	7/16" for maximum 16' stud spacing		0.092" dia., 0.225" dia. head nails with length to accommodate 11/2" penetration into studs	4" edges 8" field
		ABW Alternate braced wall	3/8"		See Section R602.10.6.1	See Section R602.10.6.

METHOD (See Table R602.10.4) DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP GB		(inchea) Wali Halght				CONTRIBUTING LENGTH	
					12 feet		
		8 feet 48	9 feet 48	48	53	58	Actual
		48	48	48	53	58	Double sided = Actual Single sided = 0.5 × Actual
		55	62	69	NP	NP	Actual ⁶
	JB	- 55	- 02	- 05			
;	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	
	28-G	24	27	30	33	36	Actual ^b
	Adjacent clear opening height (inches)		:				
	≤ 64	24	27	30	33	36	
	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	- Actual ^b
	104		49	43	40	39	Acidai
	108		54	46	43	41	<u>. </u>
	112			50	45	45	
	116			55	48	48	
	120			60	52 56	51	
	124				61	54	
	128	·			66	58	
•	132					62	-
	136					66	-
	140 144					72	
			Po	rtal header	r helght		
METHOD (See Table R602,10.4)		8 feet	9 feet	10 feet	11 feet	12 feet	
(500 2.0	Supporting roof only	16	16	16	Note c	Note o	48
PFH	Supporting one story and roof	24	24	24	Note c	Note o	
	PFG	24	27	30	Note d	Note	
	SDC A, B and C	16	18	20	Note e	Note	
CS-PF	SDC D ₀ , D ₁ and D ₂	16	18	20	Note e	Note	Actual ⁶
NP = Not Permitted. Linear interpolation shall	foot = 304.8 mm, 1 mile per hour = 0	1_!1					

BRACE WALL DETAILS WIND SPEED 115 MPH WIND EXPOSURE A SEISMIC DESIGN CAEGORY A

				CONNECTION CRITERIA		
METHODS, MATERIAL		MINIMUM THICKNESS	FIGURE	Fasteners	Spacing	
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	
Sheathing Methods	CS-WSP Continuously sheathed wood structural panel	3/8"		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	
	CS-G ^{b, c} Continuously sheathed wood structural panel adjacent to garage openings	3/8"		See Method CS-WSP	See Method CS-WSP	
	CS-PF Continuously sheathed portal frame	7/ ₁₆ "		See Section R602.10.6.4	See Section R602,10.6.	
Contir	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) $1\frac{3}{4}$ " long × 0.12" dia. (for $\frac{25}{32}$ " thick sheathing) galvanized roofing nails	3" edges 6" field	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, I degree = 0.0175 rad, I pound per square foot = 47.8 N/m², I 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.

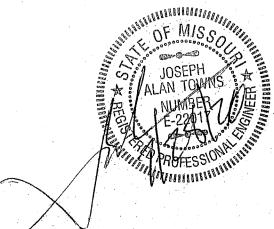
d. Method CS-SFB does not apply in Seismic Design Categories D₀, D₁ and D₂.

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

OVER CONCRETE OR MASONRY BLOCK FOUNDATION OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION (WHERE PORTAL SHEATHING DOES NOT LAP OVER BAND OR RIM JOIST) OVER RAISED WOOD FLOOR - OVERLAP OPTION (WHERE FORTAL SHEATHING LAPS OVER BAND OR RIM BOARD) 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



APPLIES TO STRUCTURAL

ELEMENTS ONLY

JOSEPH A. TOWNS P.E. MO. LIC E 22017 PROFESSIONAL SEAL

SHEET NO. RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
CODES ADMINISTRATION 6 OF 6

SCALE 1/4" = 1-0

DATE

7-27-20

PLAN NO.

3149