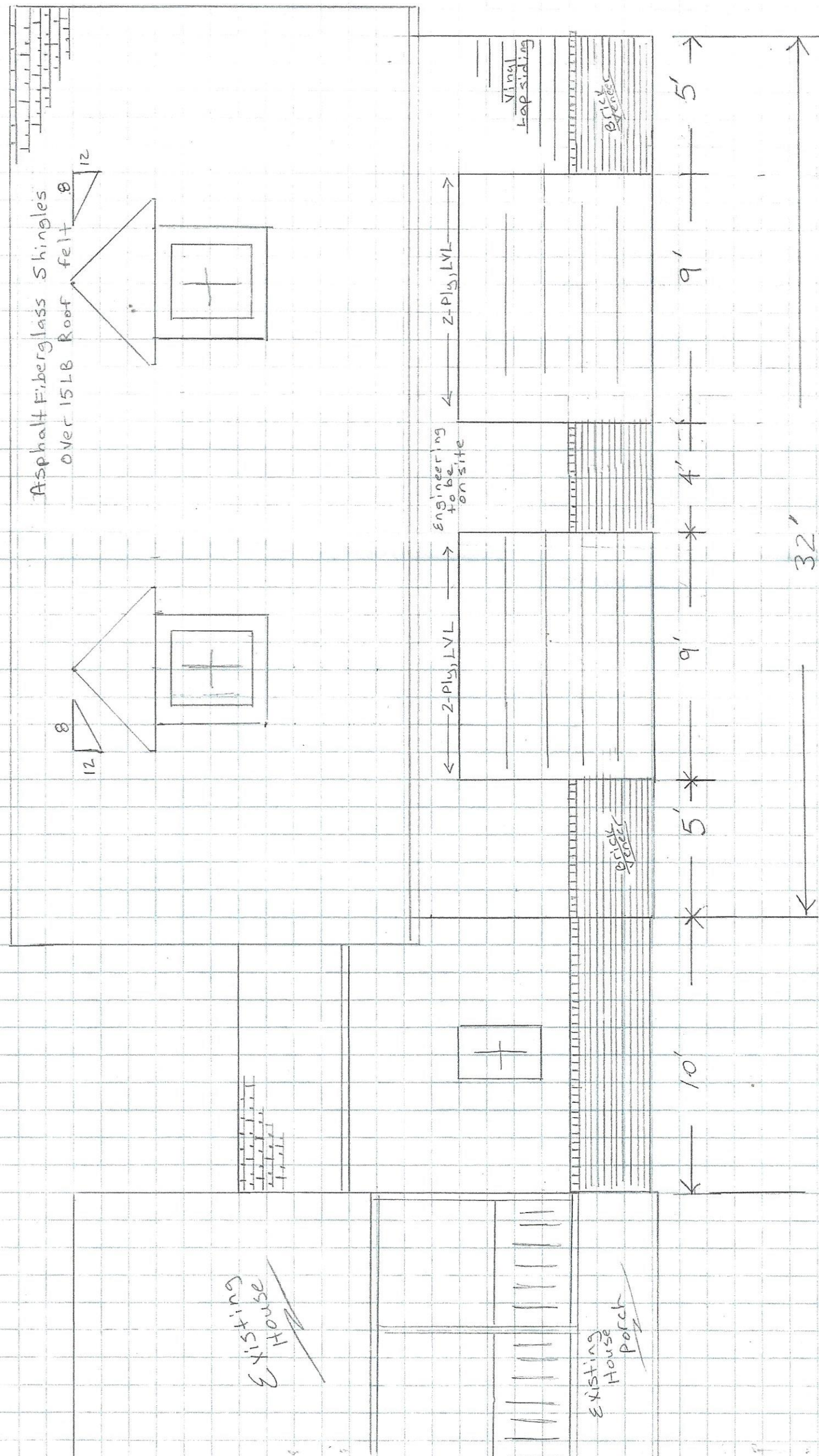
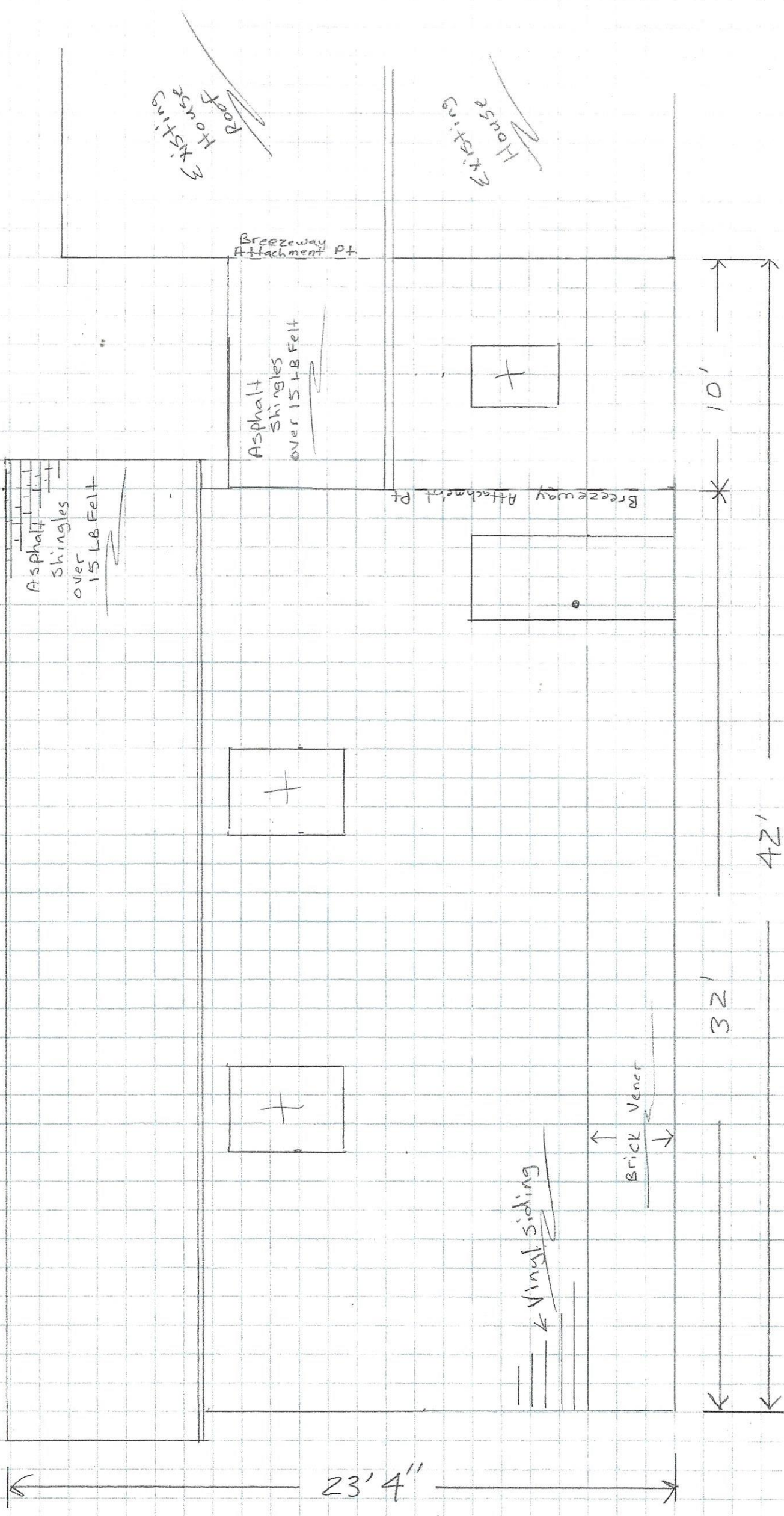




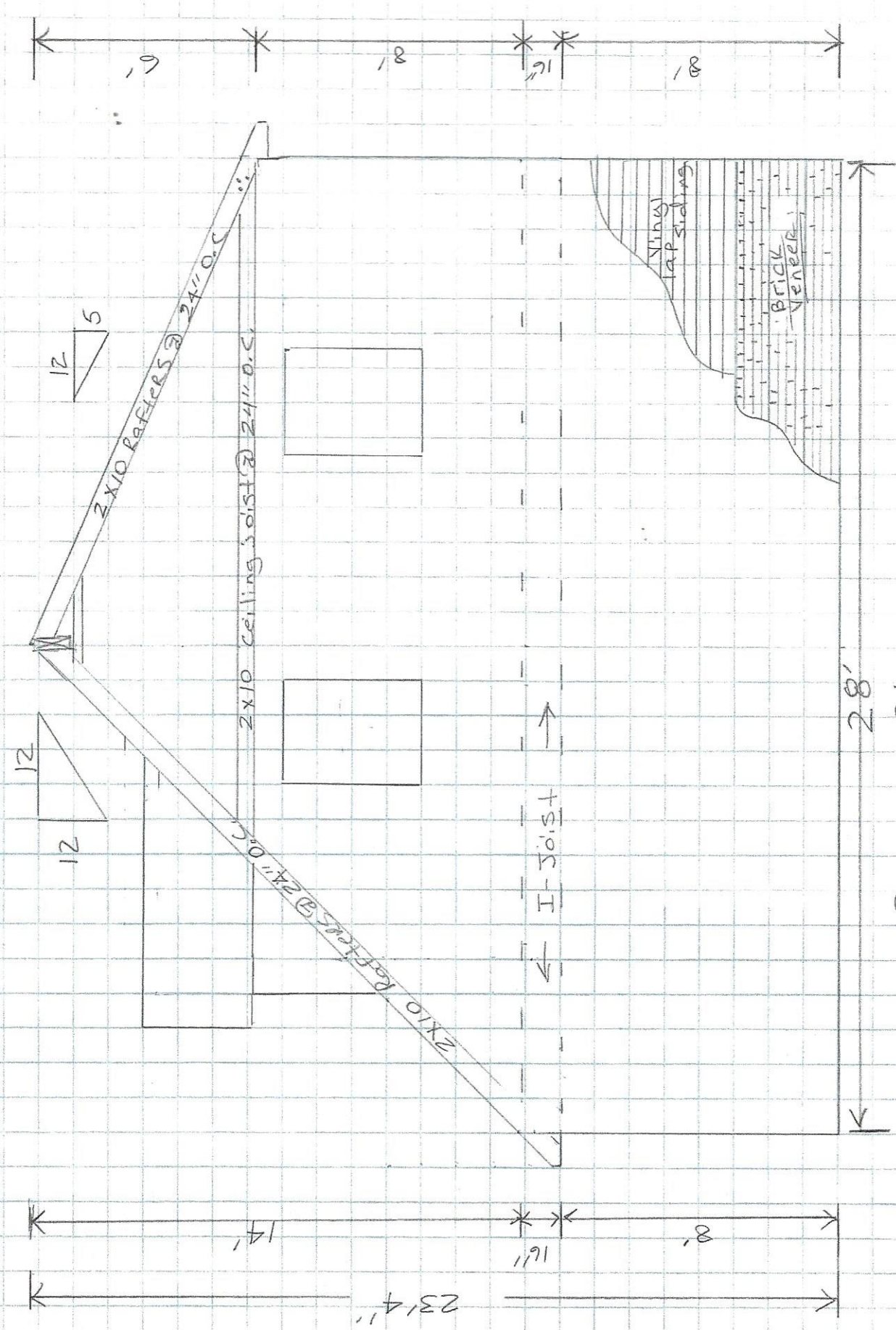
28' x 32' Garage  
 with 10' x 14' Breezeway  
 (Attached to Existing House)



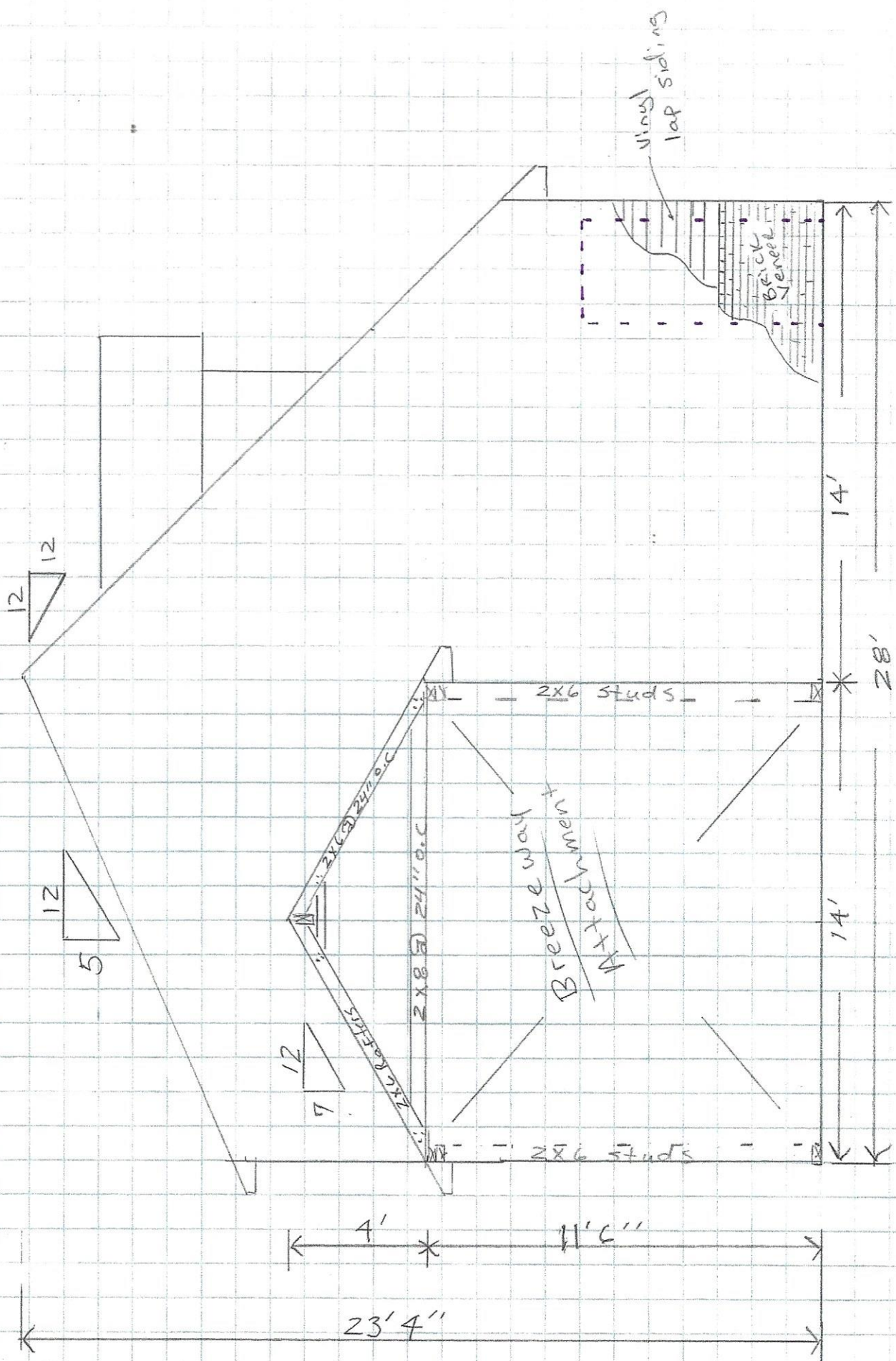
Name: Richard Bayer  
 Address: 4420 NC 210 N  
 Lillington, NC 27546  
 By: Don Cable  
 (336) 688-4774



Rear Elevation  
 Scale: 1/4" = 1'

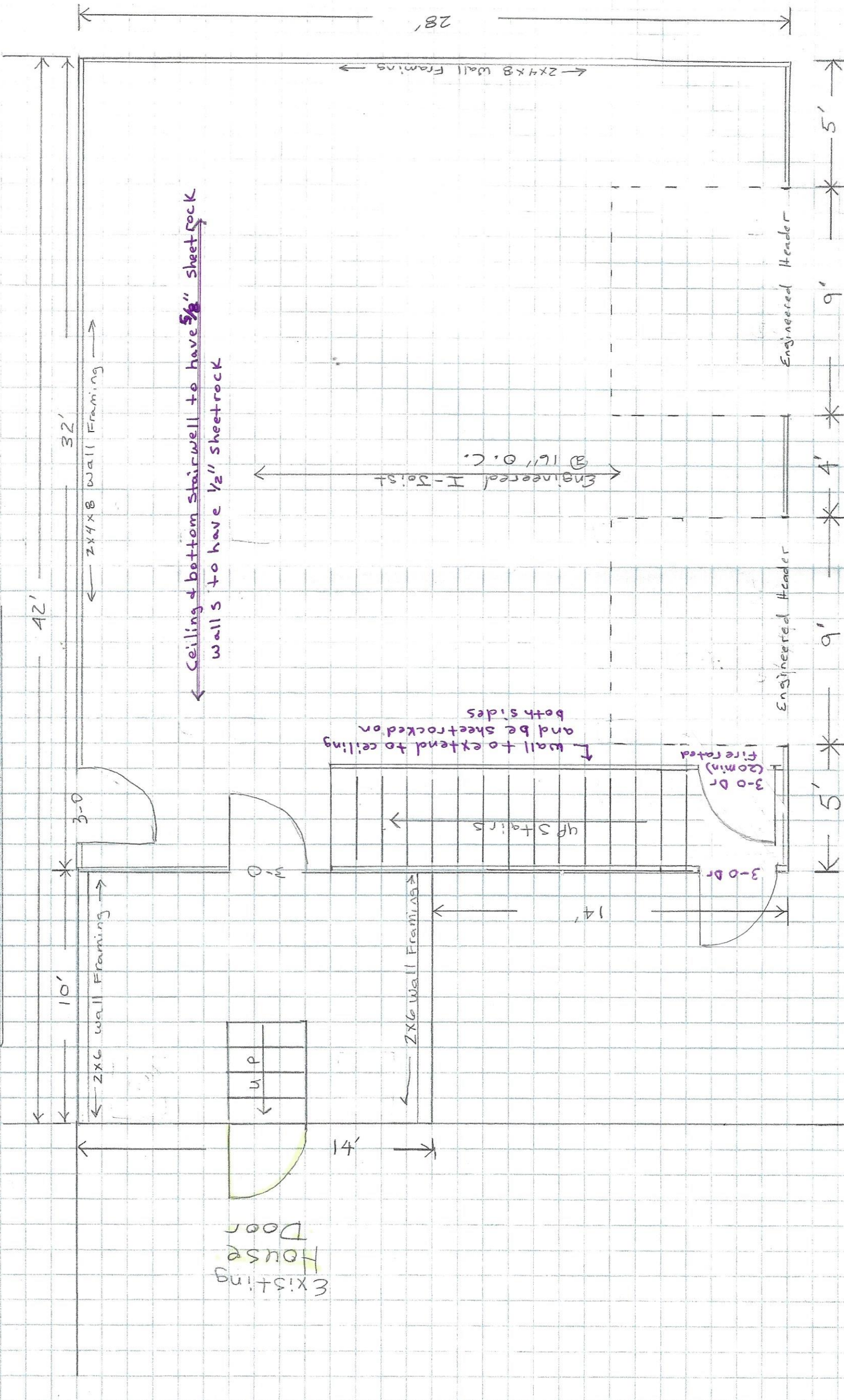


Right Elevation  
 scale:  $\frac{1}{4}'' = 1'$



Left Elevation  
 Scale: 1/4" = 1'

1st Floor



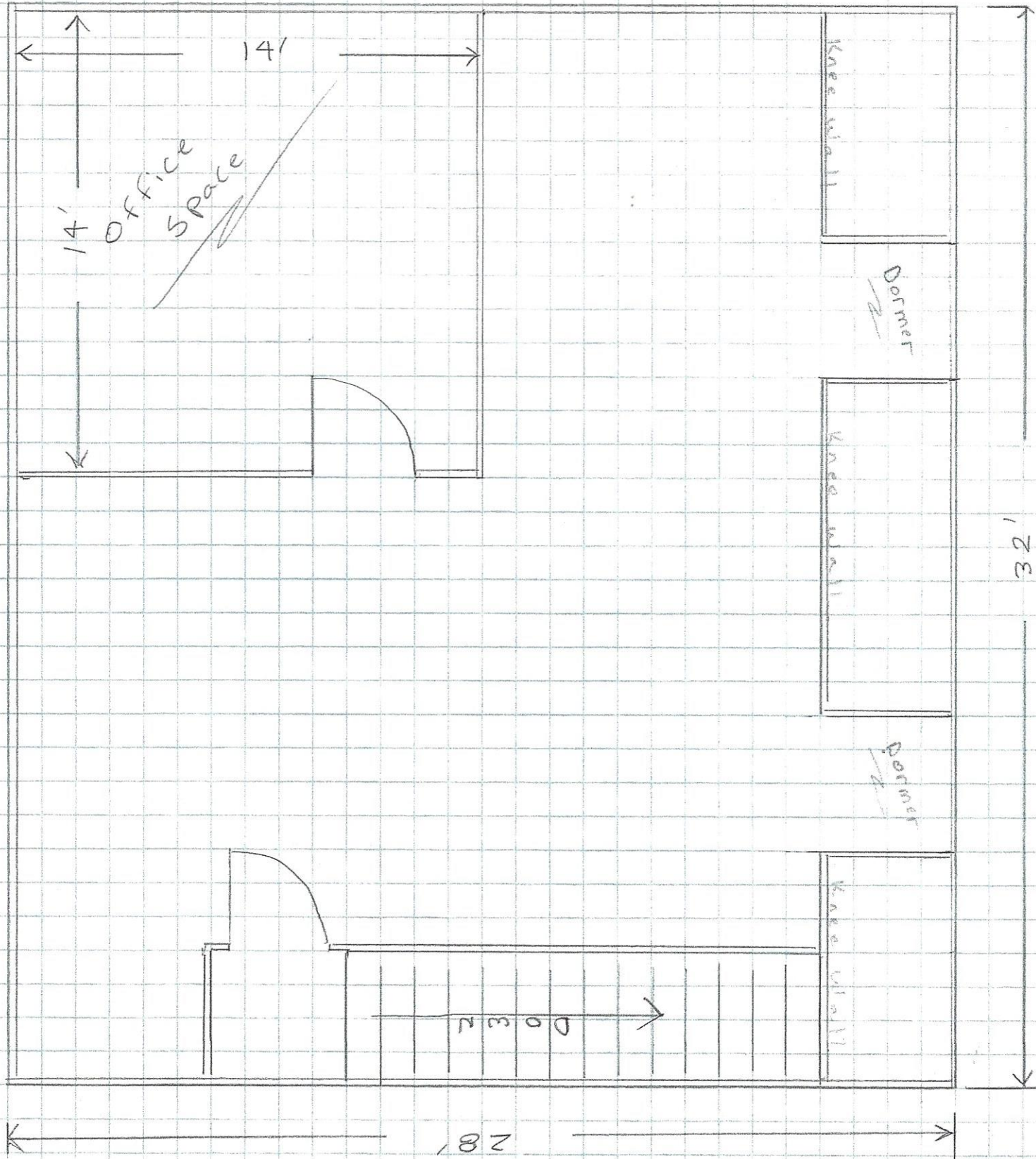
Ceiling & bottom stairwell to have 5/8" sheet rock walls to have 1/2" sheetrock

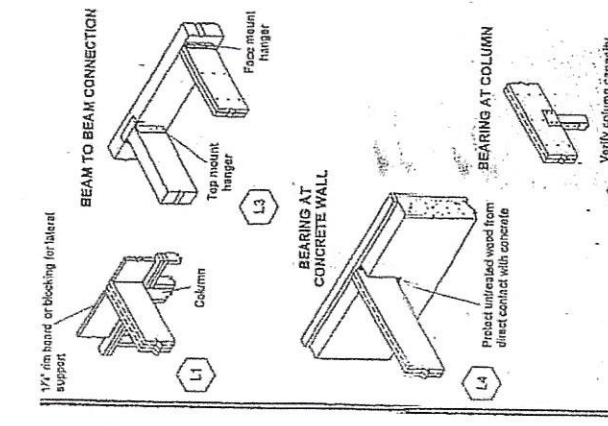
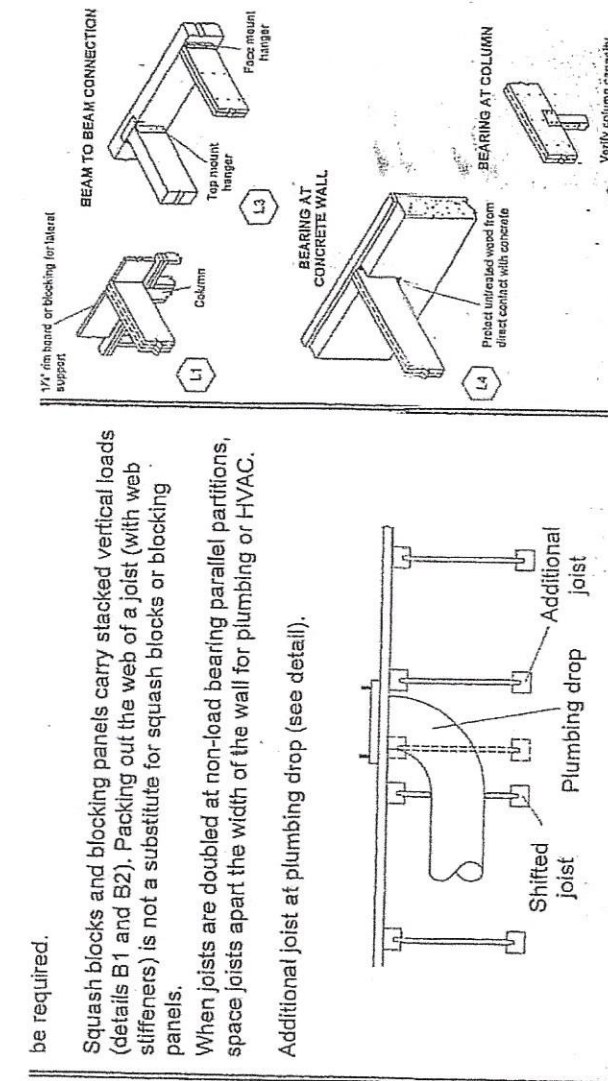
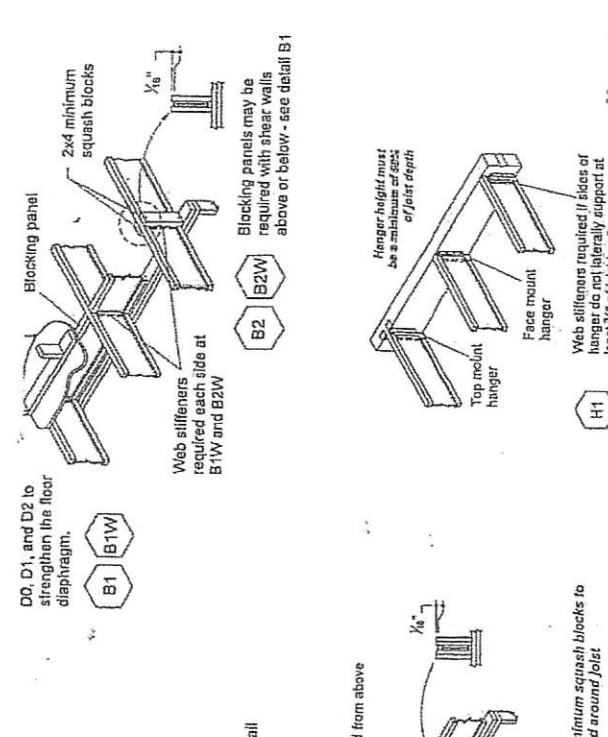
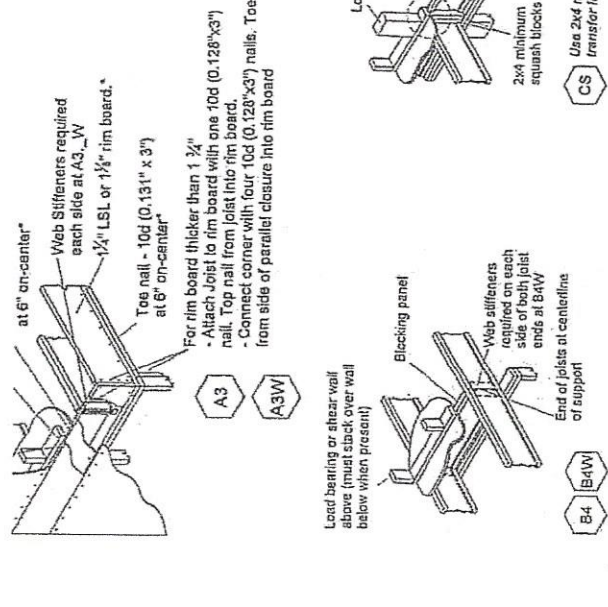
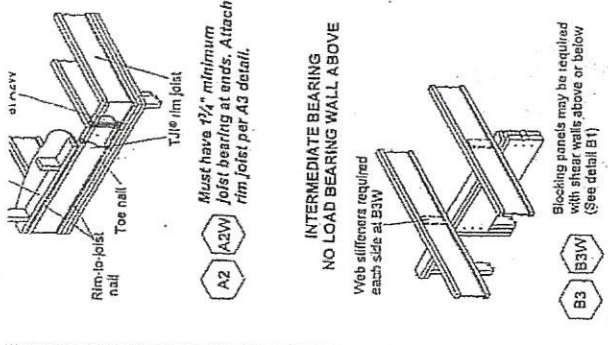
Wall to extend to ceiling and be sheetrocked on both sides

Scale: 1/4" = 1'

2nd Floor

Scale: 1/4" = 1'





**FASTENING OF FLOOR PANELS**

Guidelines for Closest On-Center Spacing per Row

Nail Size	JOIST		Rim Board	PSL
	110, 210, and 230 EQ.	360 and 560 EQ.		
8d (0.131" x 2 1/2")	4"	3"	1 1/2" LSL	3"
10d (0.148" x 3")	4"	4"	4"	4"
16d (0.162" x 3 1/2")	6"	6"	6" (2")	8"

- (1) One row of fasteners permitted (two at abutting panel edges) for diaphragms. Stagger nails when using 4" on-center spacing and maintain 3/8" joist and panel edge distance. For other applications, multiple rows of fasteners are permitted if the rows are offset at least 1/2".
- (2) Can be reduced to 4" on-center if nail penetration into the narrow edge is no more than 1 3/4" (to avoid splitting).
- Recommended nailing is 12" on-center in field and 6" on-center along panel edge.
- Fastening requirements on engineered drawings supersede recommendations listed above.
- Recommended use of a non-polyurethane subfloor adhesive on all contact points between panels and floor framing.
- Nailing rows must be offset at least 1/2" and staggered.
- 14 ga. staples may be substituted for 8d (0.113" x 2 1/2") nails if minimum penetration of 1" into the joist or rim board is achieved.
- Maximum spacing of nails is 18" on-center for joists.

**\* SEE JOIST EQUIVALENCY CHART**

Depth	110 EQ.		210 EQ.		230 or 360 EQ.		560 EQ.	
	9 1/2" or 11 1/2"	14"	9 1/2" or 11 1/2"	14" or 18"	14" or 18" or 20"	11 1/2"	14" or 18" or 20"	
Filler Block (1) (Detail H2)	2x6	2x8	2x6 + 3/8" sheathing	2x8 + 3/8" sheathing	2x6 + 1/2" sheathing	2x8 + 1/2" sheathing	Two 2x6	
Can'tilever Filler (Detail E4)	4'-0" long	6'-0" long	2x6 + 3/8" sheathing	2x8 + 3/8" sheathing	2x6 + 1/2" sheathing	2x8 + 1/2" sheathing	2x6	
Backer Block (1) (Detail F1 or H2)	5/8" or 3/4"	3/4" or 7/8"	4'-0" long	6'-0" long	4'-0" long	6'-0" long	Not applicable	

- (1) If necessary, increase filler and backer block height for face mount hangers and maintain 1/4" gap at top of joist; see detail W. Filler and backer blocks should accommodate required rafter raftering without spilling.
- (2) Minimum for backer blocks and 2" minimum for filler blocks.
- Joists must be laterally supported at cantilever and end bearings by blocking panels, hangers, or direct attachment to a rim board or rim joist.
- Safety bracing (4x4 minimum) at 8' on-center (8' on-center for 110 or equivalent Joists) and extended to a braced end wall. Fasten at each joist with two 8d (0.131" x 2 1/2") nails minimum (see WARNING).
- DO NOT overhang cut ends on top or bottom face of support member.

**\* SEE JOIST EQUIVALENCY CHART**

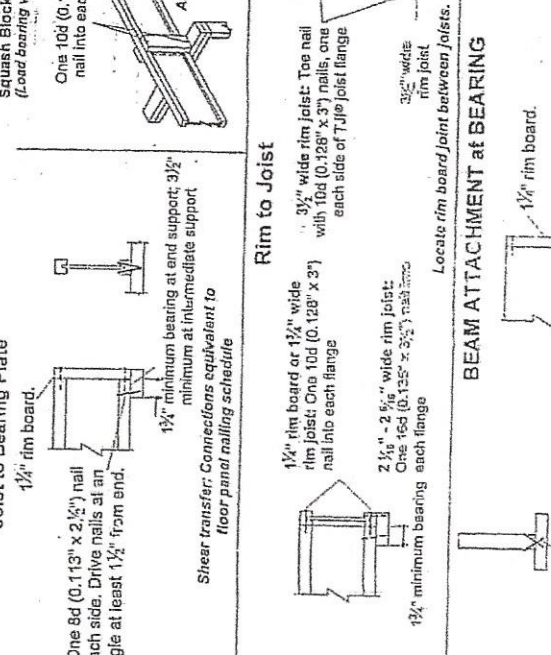
Depth	110 EQ.		210 EQ.		230 or 360 EQ.		560 EQ.	
	9 1/2" or 11 1/2"	14"	9 1/2" or 11 1/2"	14" or 18"	14" or 18" or 20"	11 1/2"	14" or 18" or 20"	
Filler Block (1) (Detail H2)	2x6	2x8	2x6 + 3/8" sheathing	2x8 + 3/8" sheathing	2x6 + 1/2" sheathing	2x8 + 1/2" sheathing	Two 2x6	
Can'tilever Filler (Detail E4)	4'-0" long	6'-0" long	2x6 + 3/8" sheathing	2x8 + 3/8" sheathing	2x6 + 1/2" sheathing	2x8 + 1/2" sheathing	2x6	
Backer Block (1) (Detail F1 or H2)	5/8" or 3/4"	3/4" or 7/8"	4'-0" long	6'-0" long	4'-0" long	6'-0" long	Not applicable	

- (1) If necessary, increase filler and backer block height for face mount hangers and maintain 1/4" gap at top of joist; see detail W. Filler and backer blocks should accommodate required rafter raftering without spilling.
- (2) Minimum for backer blocks and 2" minimum for filler blocks.
- Joists must be laterally supported at cantilever and end bearings by blocking panels, hangers, or direct attachment to a rim board or rim joist.
- Safety bracing (4x4 minimum) at 8' on-center (8' on-center for 110 or equivalent Joists) and extended to a braced end wall. Fasten at each joist with two 8d (0.131" x 2 1/2") nails minimum (see WARNING).
- DO NOT overhang cut ends on top or bottom face of support member.

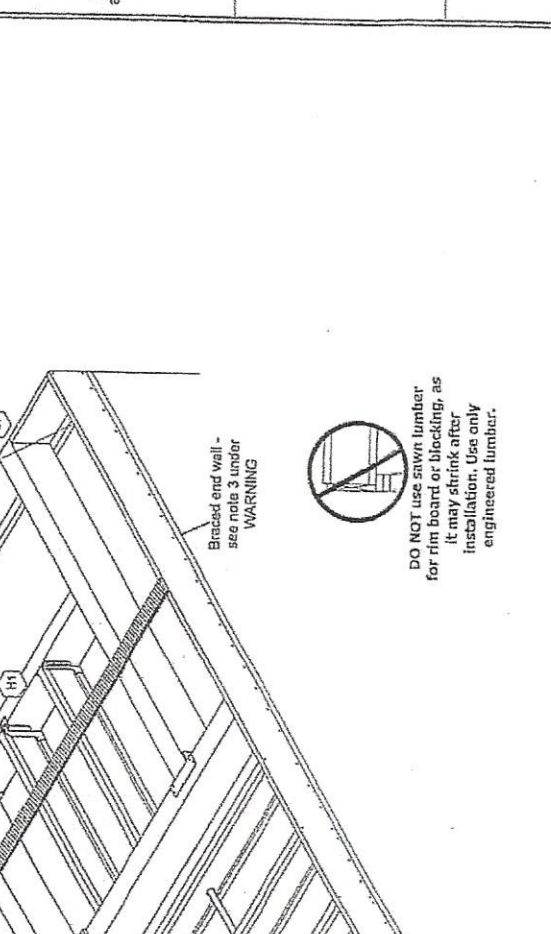
**\* JOIST EQUIVALENCY CHART**

Depth	Manf. & Series	Manf. & Series
9 1/2"	TJI - 110	BCI 4500
	TJI - 210	BCI 5000
	TJI - 230	BCI 6000
11 1/2"	TJI - 110	BCI 4500
	TJI - 210	BCI 5000
	TJI - 230	BCI 6000
14"	TJI - 360	BCI 6500
	TJI - 560	BCI 90'S
	TJI - 110	BCI 4500
16"	TJI - 210	BCI 5000
	TJI - 230	BCI 6000
	TJI - 360	BCI 6500
	TJI - 560	BCI 90'S
	TJI - 110	BCI 4500
	TJI - 210	BCI 5000
	TJI - 230	BCI 6000
	TJI - 360	BCI 6500
	TJI - 560	BCI 90'S
	TJI - 110	BCI 4500
	TJI - 210	BCI 5000
	TJI - 230	BCI 6000
	TJI - 360	BCI 6500
	TJI - 560	BCI 90'S

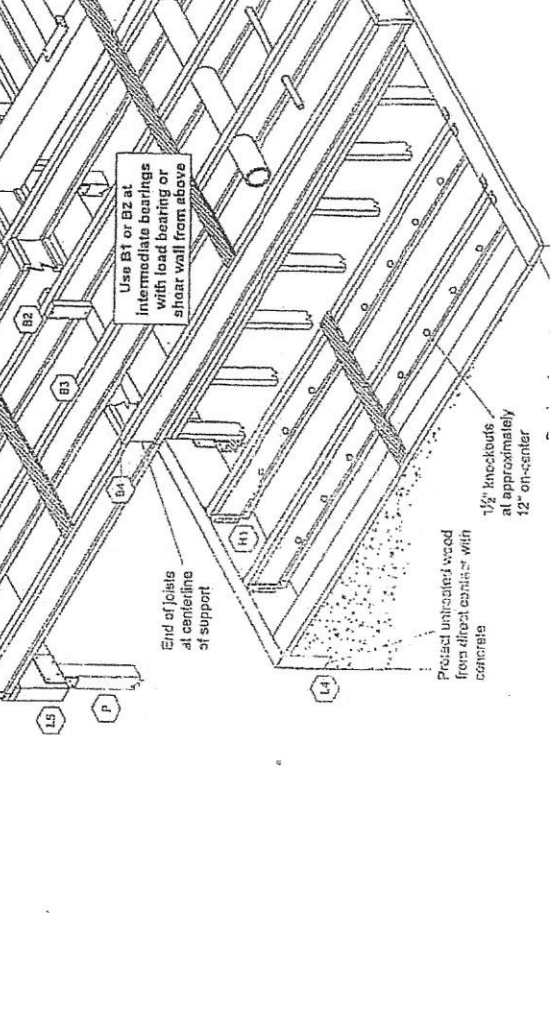
**JOIST NAILING REQUIREMENTS at BEARING**



**JOIST NAILING REQUIREMENTS at BEARING**

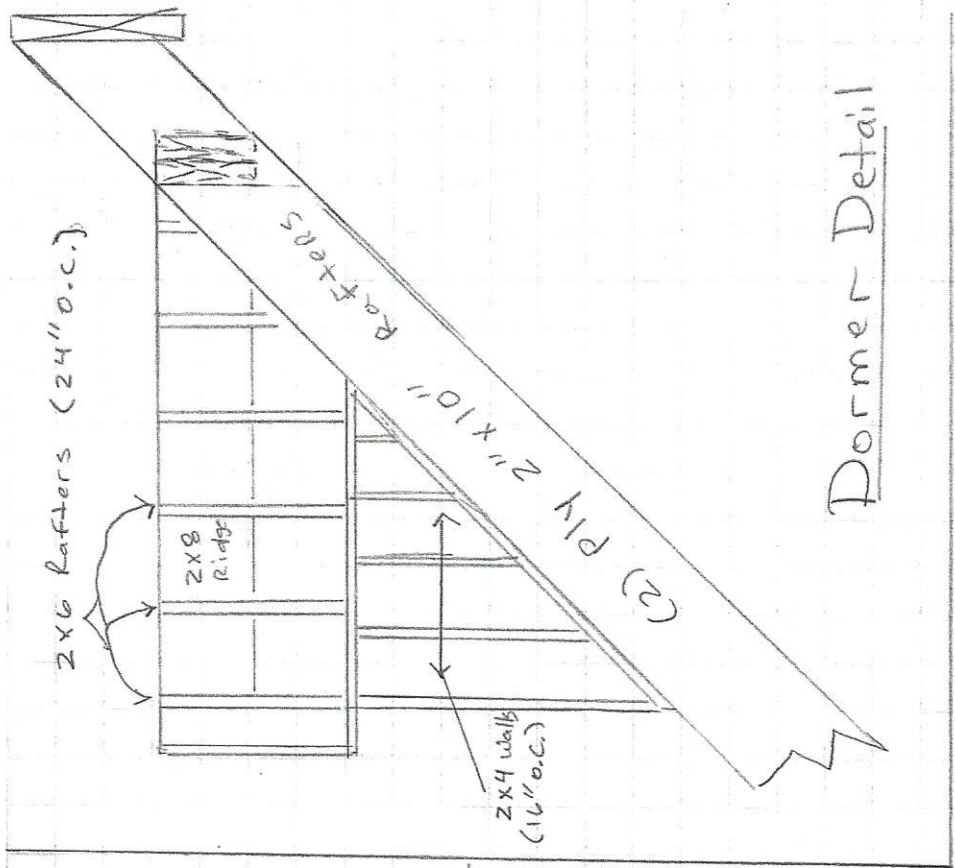
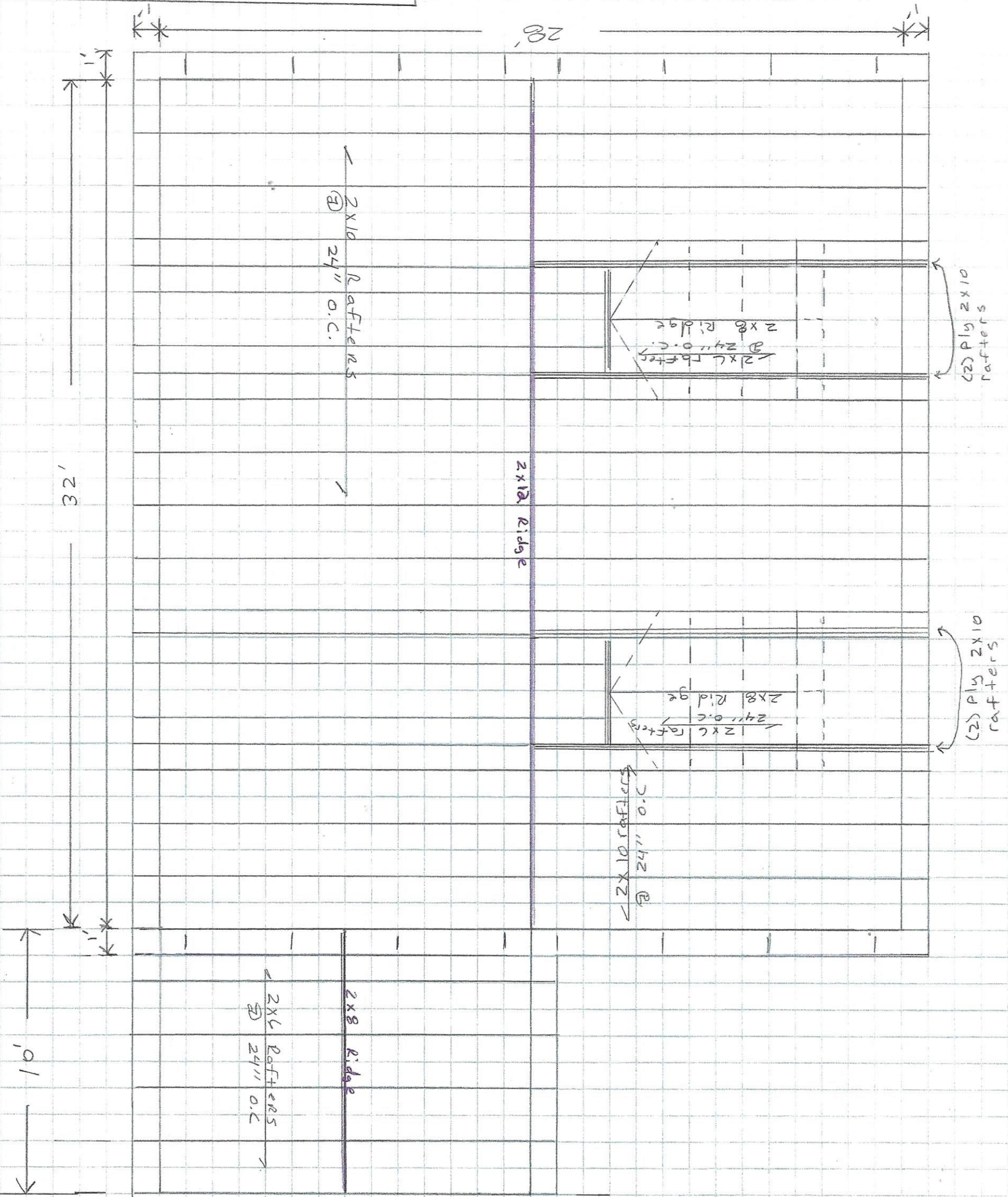


**JOIST NAILING REQUIREMENTS at BEARING**

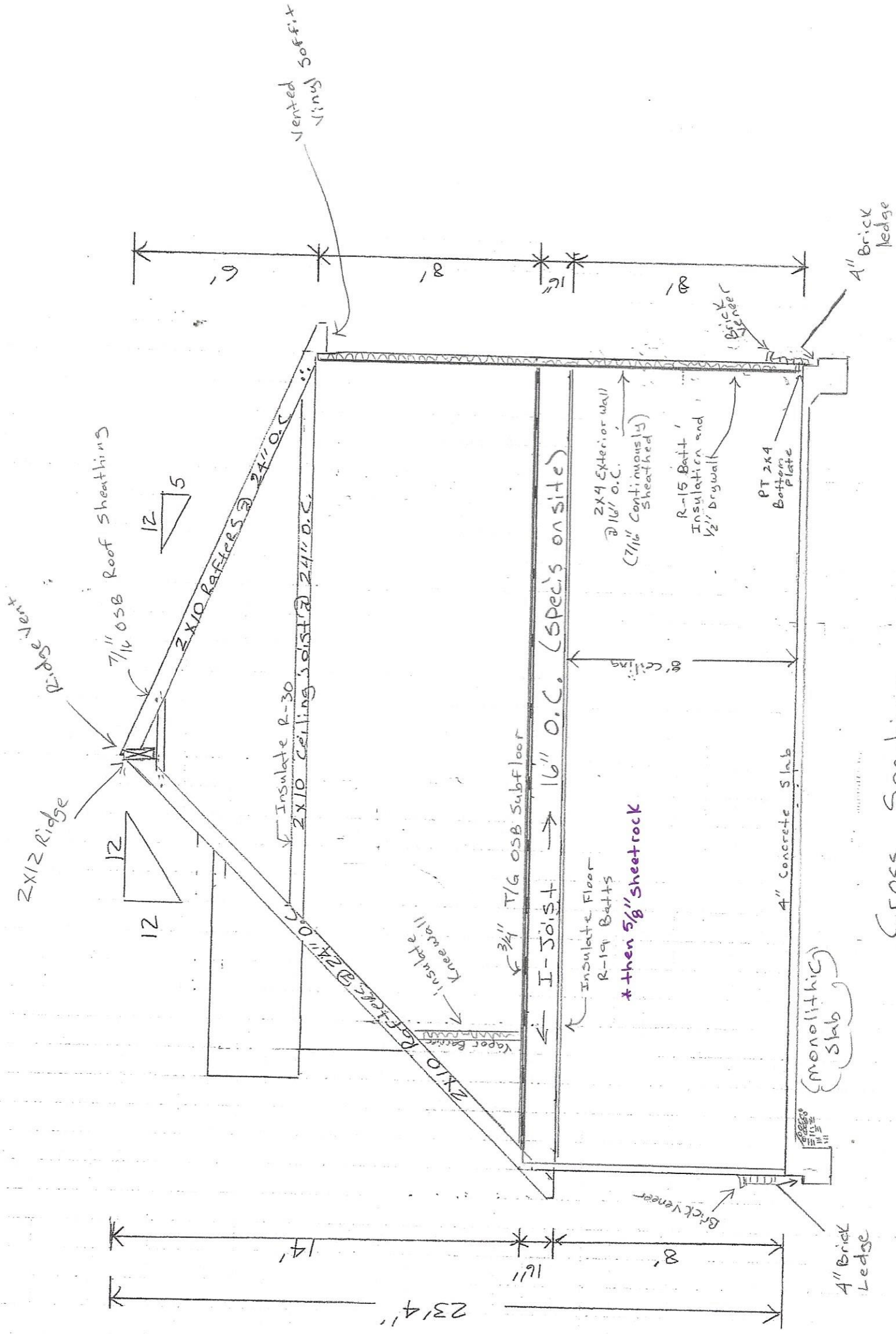


DO NOT use sawn lumber for rim board or blocking, as it may shrink after installation. Use only engineered lumber.

Roof  
Scale: 1/4" = 1'



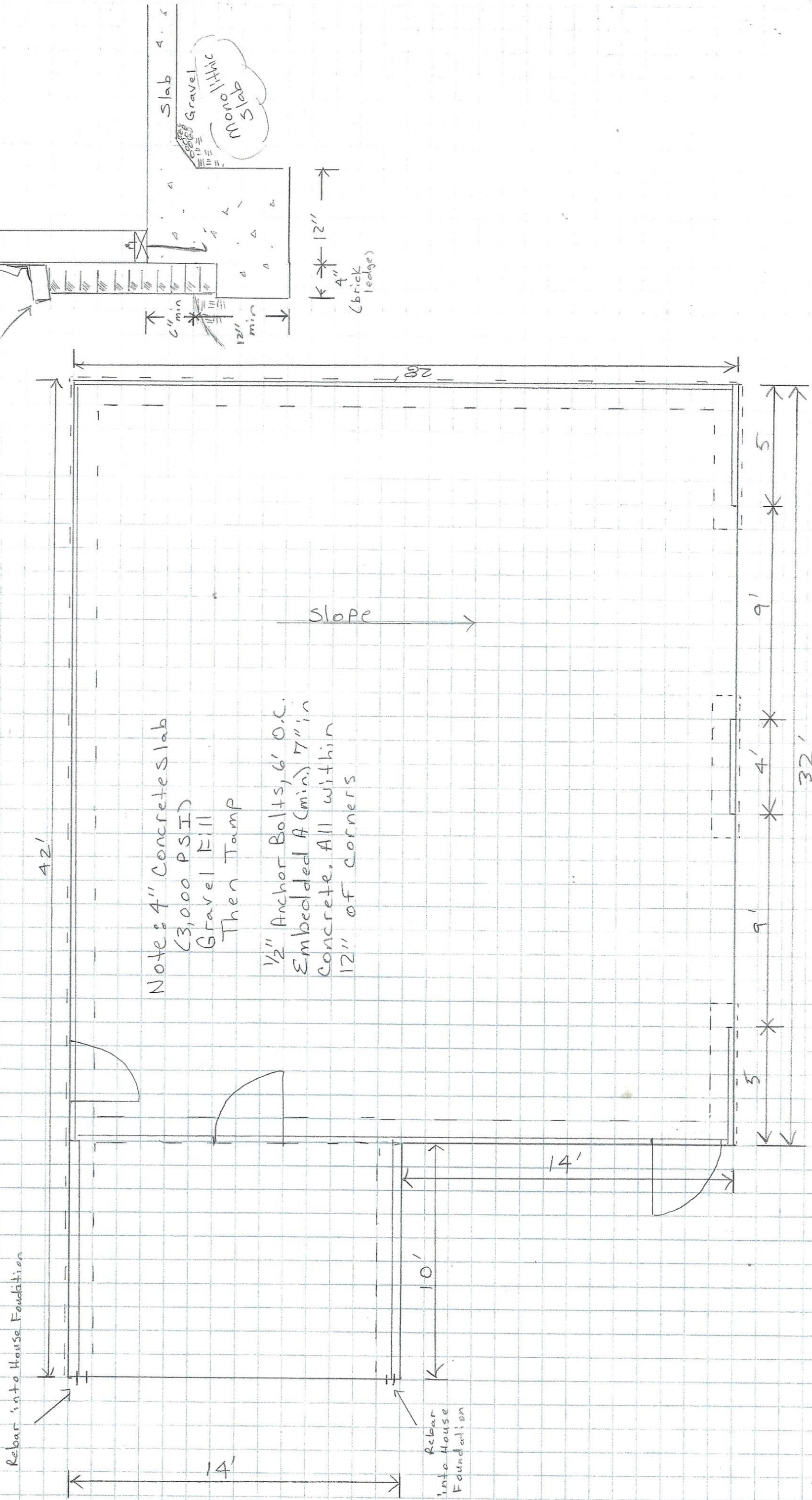




Cross Section  
 Scale: 1/4" = 1'

# Foundation

Scale: 1/4" = 1'



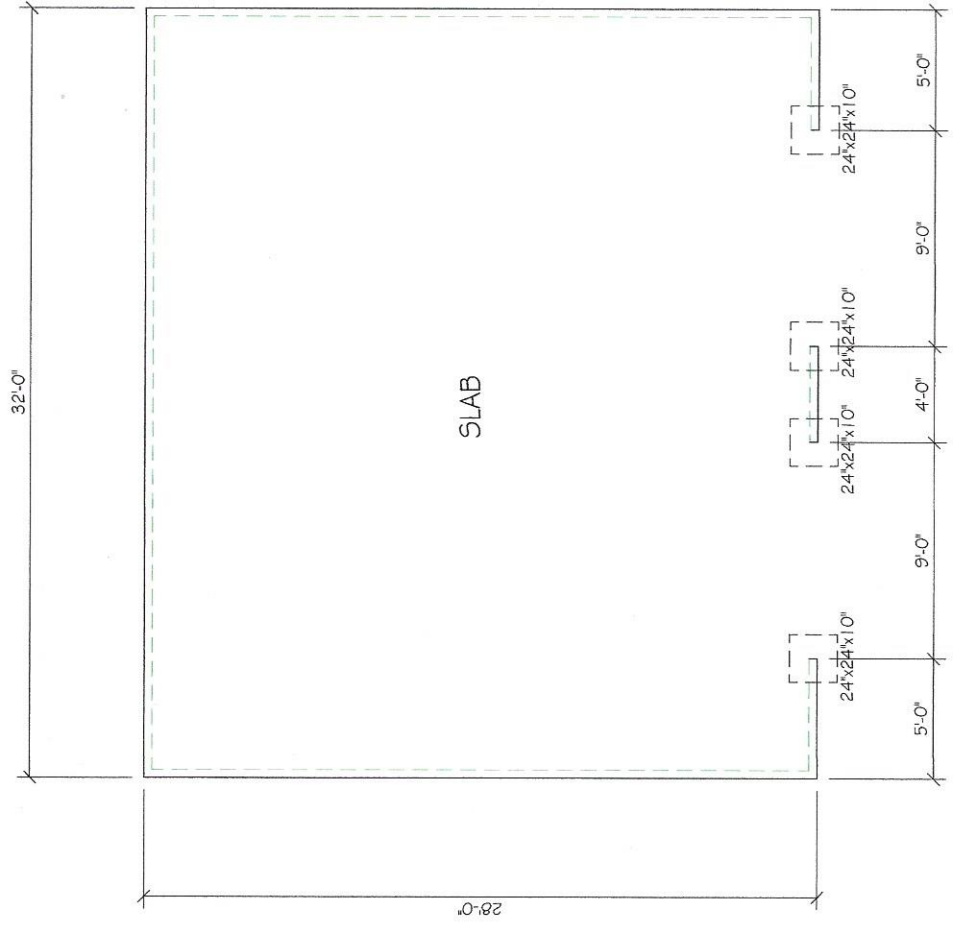
Note: 4" Concrete slab  
(3,000 PSI)  
Gravel Fill  
Then Tamp

1/2" Anchor Bolts, 6' O.C.  
Embedded 7" in  
concrete. All within  
12" of corners

SCALE: 1/4" = 1'

DESIGN LOADS		MATERIALS		
LIVE & ROOF LOAD	MARK	REQ'D	LENGTH	ITEM
REFER TO CURRENT NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE				
DEAD LOAD				
FLOOR				20PSF
ATTIC/DECK				10PSF
CEILING/ROOF				10PSF
VAULTED CLG.				15PSF

CERTIFIED FOR PIEDMONT WHOLESALE ENGINEERED PRODUCTS ONLY

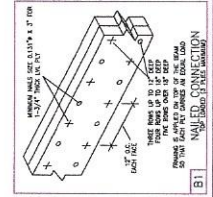


Kevin L. Miller, PE  
 1548 Odell Owen Road  
 Lexington, NC 27295

SLAB

HANGERS	EA	X
X	EA	X
X	EA	X
X	EA	X

PIER WEIGHT (LBS)	FOOTING SIZE (MINIMUM)	INTERIOR PIER SIZE (MINIMUM)
0-7,500	2'-0" x 2'-0" x 8"	8" x 16"
7,500-13,000	2'-8" x 2'-8" x 10"	16" x 16"
13,000-16,500	3'-0" x 3'-0" x 10"	16" x 16"
16,500-20,500	3'-4" x 3'-4" x 12"	16" x 16"
20,500-29,500	4'-0" x 4'-0" x 12"	16" x 24"
29,500-OVER	REQUIRES SPECIFIC DESIGN	



FOOTINGS BASED ON 2000 psf MIN. SOIL BEARING PRESSURE AND 3000 psf MIN. CONCRETE COMPRESSIVE STRENGTH.  
 HOLLOW PIERS MAY NOT EXCEED 4:1 HEIGHT TO WIDTH RATIO. SOLID FILLED PIERS MAY NOT EXCEED 10:1 HEIGHT TO WIDTH RATIO.

FOUNDATION		1	OF	4
DEALER: STARMOUNT	JOB NO.: 220202	FILE NAME: 4420NC210		
BUILDER: IRON NAIL	DATE: 5/6/22	SCALE: B: 1/8"=1'-0" D: 1/4"=1'-0"		
JOB: 4420 NC 210 N	DESIGNER: KM	DRAWN BY: JS		

**PIEDMONT WHOLESALE**  
Copyright © 2016

GREENSBORO, NC (800) 854-7352  
 (336) 378-0209 (336) 378-2558 FAX  
 E-MAIL: sales@pedmontwholesale.com

DESIGN IS FOR LAYOUT PURPOSES ONLY. MATERIAL LIST IS BEST ESTIMATE ONLY. DELIVERIES AND INSTALLATIONS SHOULD BE RECONCILED AT THE JOB END. LOADS AND STRENGTHS ARE CERTIFIED. DIMENSIONS ARE SUBJECT TO VERIFICATION BY GENERAL CONTRACTOR. THE USE OF THIS DRAWING IN CONJUNCTION WITH MATERIAL NOT PROVIDED BY PIEDMONT WHOLESALE WILL BE AT THE USER'S RISK. THE PRODUCER OF THIS DRAWING WILL NOT BE RESPONSIBLE FOR THE CONSTRUCTION OF THE PROJECT.

SERVICES INCLUDE:  
 PLAN TAKEOFFS  
 LAYOUT DESIGN  
 DELIVERY-AS REQUIRED BY BUILDER  
 JOB SITE DELIVERY  
 TECHNICAL SUPPORT  
 INSTALLATION SUPERVISION

COLOR KEY:  
 JOIST  
 BEAMS  
 BEARING BELOW  
 LOAD ABOVE

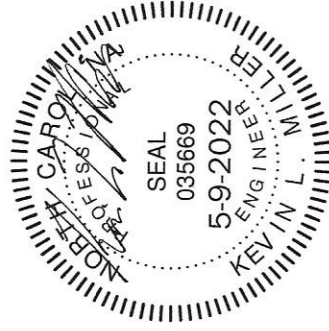
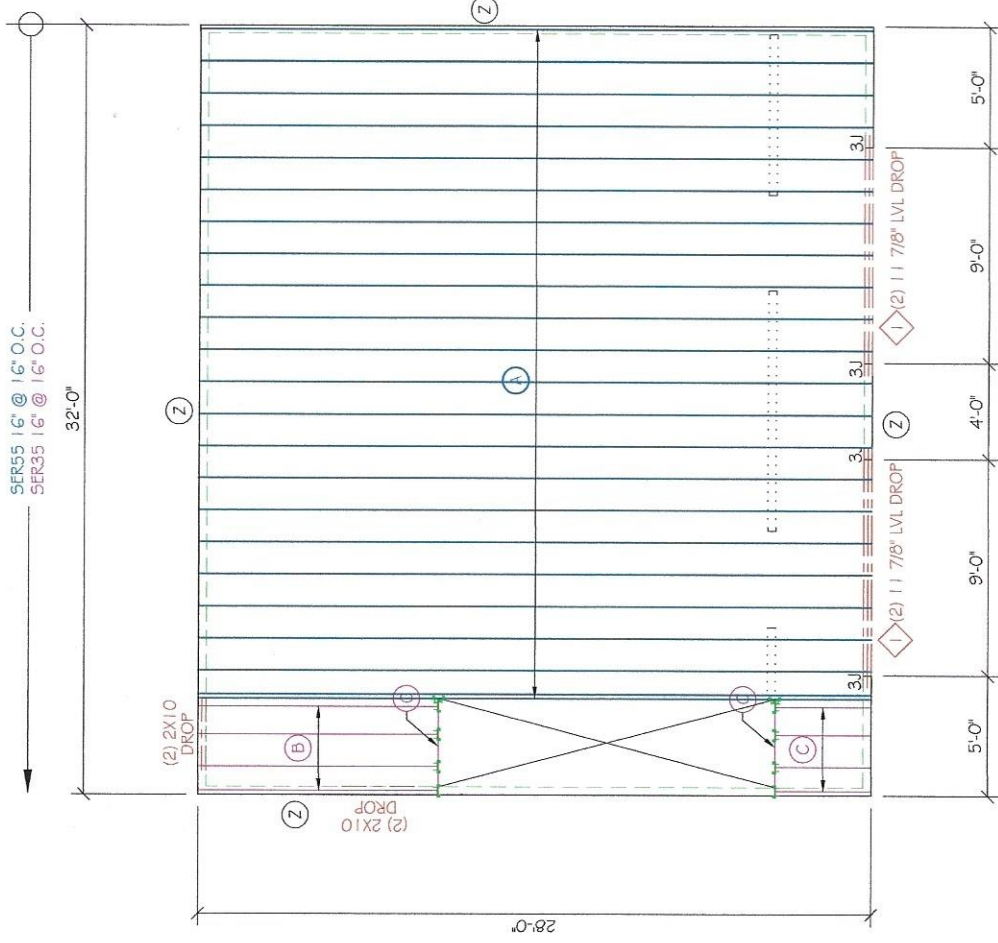
**GENERAL NOTES**

- DROP WALLS FOR JOIST DEPTH.
- ALL 2x4,5,8 #2 SPF OR BETTER (U.N.O.)
- ALL 2x10,12 #1 SYP OR BETTER (U.N.O.)
- THIS LAYOUT IS NOT AN ALL INCLUSIVE STRUCTURAL PLAN AND SHOULD NOT BE CONSIDERED AS SUCH. FOR ITEMS NOT DEFINED OR DETAILED ON THE LAYOUT, REFER TO THE APPLICABLE BUILDING CODE. NON-COMFORMING STRUCTURAL ELEMENTS EXIST. FOR FULL EVALUATION AND DESIGN MAY BE REQUIRED.
- PLUMBING DROP
- #1 = NUMBER OF SPF#2 2x4 JACKS/STUDS REQ'D @ 9'
- POST DOWN TO BEARING
- WALL OR BEAM
- (F) = DETAIL CALLOUT

REVISIONS	DATE	BY

DESIGN LOADS		MATERIALS	
LIVE & ROOF LOAD	MARK	REQ'D LENGTH	ITEM
REFER TO CURRENT NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE	A	23	SER55 16"
	B	4	SER35 16"
	C	6	SER35 16"
DEAD LOAD	Z	10	12" RIMBOARD
FLOOR			20PSF
ATTIC/DECK			10PSF
CEILING/ROOF			10PSF
VAULTED CLG.			15PSF

CERTIFIED FOR PIEDMONT WHOLESALE ENGINEERED PRODUCTS ONLY



Kevin L. Miller, PE  
1548 Odell Owen Road  
Lexington, NC 27295

<b>F19</b> SQUASH BLOCKS AT CONCENTRATED LOADS	<b>F1</b> ATTACHMENT AT BEARING	<b>F21</b> DOUBLE JOIST CONSTRUCTION
<b>F20</b> SQUASH BLOCKS AT INTERIOR BEARING	<b>D9</b> DON'TI: SQUEEZE OF DON'TI	<b>F22</b> JOIST TO BEAM CONNECTION
<b>F23</b> SQUASH BLOCKS AT END BEARING	<b>D10</b> DON'TI: SQUEEZE OF DON'TI	<b>F24</b> STEEL BEAM
<b>F24</b> SQUASH BLOCKS AT END BEARING	<b>D11</b> DON'TI: SQUEEZE OF DON'TI	<b>F25</b> STEEL BEAM

SECOND FLOOR

2 of 4

DEALER: STARMOUNT      JOB NO.: 220202  
 BUILDER: IRON NAIL      DATE: 5/6/22  
 JOB: 4420 NC 210 N  
 DESIGNER: KM      DRAWN BY: JS

FILE NAME: 4420NC210  
 SCALE: 1/8"=1'-0"  
 D: 1/4"=1'-0"

PIEDMONT WHOLESALE

Copyright © 2016  
 GREENSBORO, NC (800) 854-7352  
 (336) 378-0209 (336) 378-2558 FAX  
 EMAIL: sales@pedmontwholesale.com

**SERVICES INCLUDE:**  
 PLAN TAKEOFFS  
 LAYOUT DESIGN  
 DELIVERY AS REQUIRED BY BUILDER  
 JOB SITE DELIVERY  
 TECHNICAL SUPPORT  
 INSTALLATION SUPERVISION

**COLOR KEY:**  
 BEAMS  
 BEARING BELOW  
 LOAD ABOVE

DESIGN IS FOR LAYOUT PURPOSES ONLY. MATERIAL LIST IS BEST ESTIMATE ONLY. ADDITIONS AND DELETIONS TO BE RECONCILED AT THE JOB END. LOADS AND STRENGTHS ARE CERTIFIED. DIMENSIONS ARE SUBJECT TO VERIFICATION BY GENERAL CONTRACTOR. THE USE OF THIS DRAWING IN CONJUNCTION WITH ENGINEERED PRODUCTS IS NOT PERMITTED AND THE PRODUCER OF THIS DRAWING IS NOT RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSONS OR PROPERTY.

**GENERAL NOTES**

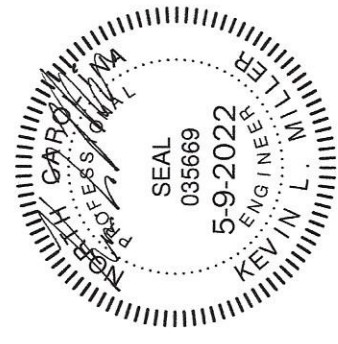
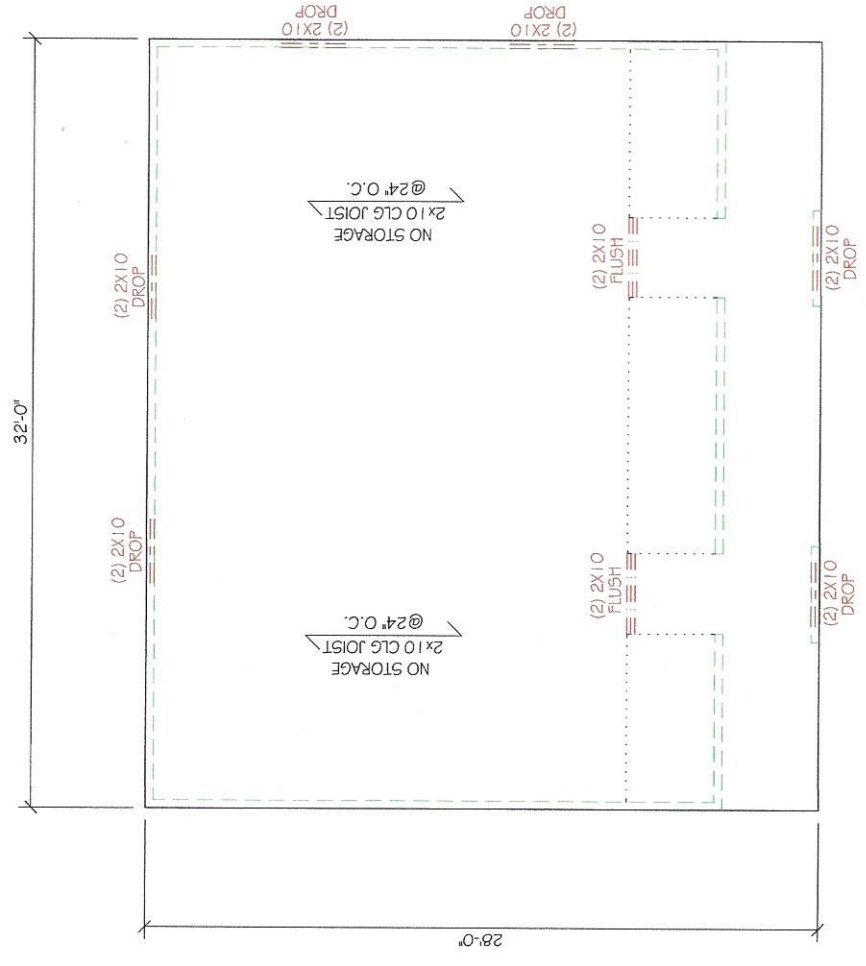
- DROP WALLS FOR JOIST DEPTH.
- ALL 2x4, 5, 8, #2 SPF OR BETTER (U.N.O.)
- ALL 2x10, 12, #1 SYP OR BETTER (U.N.O.)
- THIS LAYOUT IS NOT AN ALL INCLUSIVE STRUCTURAL PLAN AND SHOULD NOT BE CONSIDERED AS SUCH. FOR ITEMS NOT DEFINED OR DETAILED ON THE LAYOUT, REFER TO THE APPLICABLE BUILDING CODE. IF NON-CONFORMING STRUCTURAL ELEMENTS EXIST, ADDITIONAL EVALUATION AND DESIGN MAY BE REQUIRED.

● = PLUMBING DROP  
 #U = NUMBER OF SPF #2 2x4  
 JACKS/STUDS REQ'D @ 9'  
 POST DOWN TO BEARING  
 WALL OR BEAM  
 (F1) = DETAIL CALLOUT

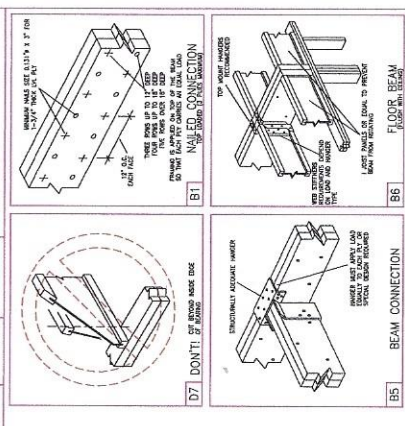
REVISIONS	DATE	BY

DESIGN LOADS		MATERIALS	
LIVE & ROOF LOAD	MARK	REQ'D LENGTH	ITEM
REFER TO CURRENT NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE			
DEAD LOAD			
FLOOR			20PSF
ATTIC/DECK			10PSF
CEILING/ROOF			10PSF
VAULTED CLG.			15PSF

CERTIFIED FOR PIEDMONT WHOLESALE ENGINEERED PRODUCTS ONLY



Kevin L. Miller, PE  
 1548 Odell Owen Road  
 Lexington, NC 27295



REVISIONS	DATE	BY

**GENERAL NOTES**

- PLUMBING DROP
- NUMBER OF SPF#2 2x4 JACKS/STUDS REQ'D @ 9' POST DOWN TO BEARING WALL OR BEAM
- DETAIL CALLOUT
- DROP WALLS FOR JOIST DEPTH.
- ALL 2x4-6.8 #2 SPF OR BETTER (U.N.O.)
- ALL 2x10, 12 #1 SYP OR BETTER (U.N.O.)
- THIS LAYOUT IS NOT AN ALL INCLUSIVE STRUCTURAL PLAN AND SHOULD NOT BE CONSIDERED AS SUCH. FOR ITEMS NOT DEFINED OR DETAILED ON THE LAYOUT, REFER TO THE APPLICABLE BUILDING CODE. IF NON-CONFORMING STRUCTURAL ELEMENTS EXIST, PROFESSIONAL EVALUATION AND DESIGN MAY BE REQUIRED.

DESIGN IS FOR LAYOUT PURPOSES ONLY. MATERIAL LIST IS BEST ESTIMATE ONLY. ADDITIONS AND DELETIONS TO BE RECORDED AT THE JOB END. LOADS AND STRENGTHS ARE CERTIFIED. DIMENSIONS ARE SUBJECT TO VERIFICATION BY GENERAL CONTRACTOR. THE USE OF THIS DRAWING IN CONJUNCTION WITH MATERIAL NOT PROVIDED BY PIEDMONT WHOLESALE ENGINEERED PRODUCTS IS NOT PERMITTED AND THE PRODUCER OF THIS DRAWING ASSUMES NO RESPONSIBILITY FOR THE CONSEQUENCES OF ANY MISREPRESENTATION OF THE INFORMATION CONTAINED HEREIN.

SERVICES INCLUDE:  
 PLAN TAKEOFFS  
 LAYOUT DESIGN  
 MATERIAL QUANTITIES  
 DELIVERIES REQUIRED BY BUILDER  
 JOB SITE DELIVERY  
 TECHNICAL SUPPORT  
 INSTALLATION SUPERVISION

COLOR KEY:  
 BEAMS  
 BEARING BELOW  
 BEARING ABOVE

**PIEDMONT WHOLESALE**  
 Copyright © 2016  
 GREENSBORO, NC (800) 854-7352  
 (336) 378-0209 (336) 378-2558 FAX  
 EMAIL: sales@pedmontwholesale.com

**CEILING**

3 of 4

DEALER: STARMOUNT  
 BUILDER: IRON NAIL  
 JOB: 4420 NC 210 N  
 DESIGNER: KM

JOB NO.: 220202  
 DATE: 5/6/22

FILE NAME: 4420NC210  
 SCALE: B: 1/8"=1'-0"  
 C: 1/4"=1'-0"

