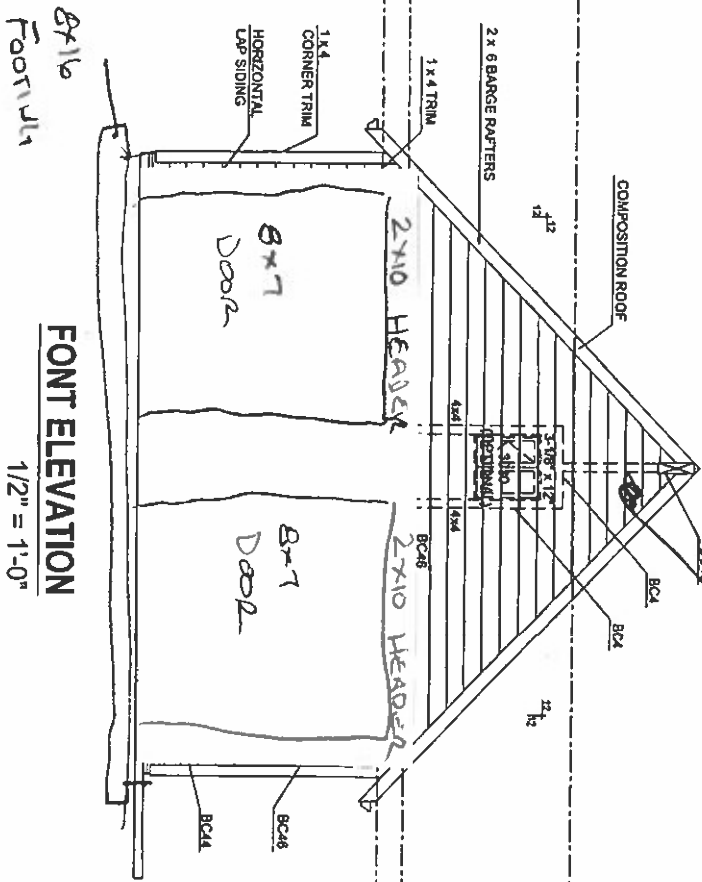
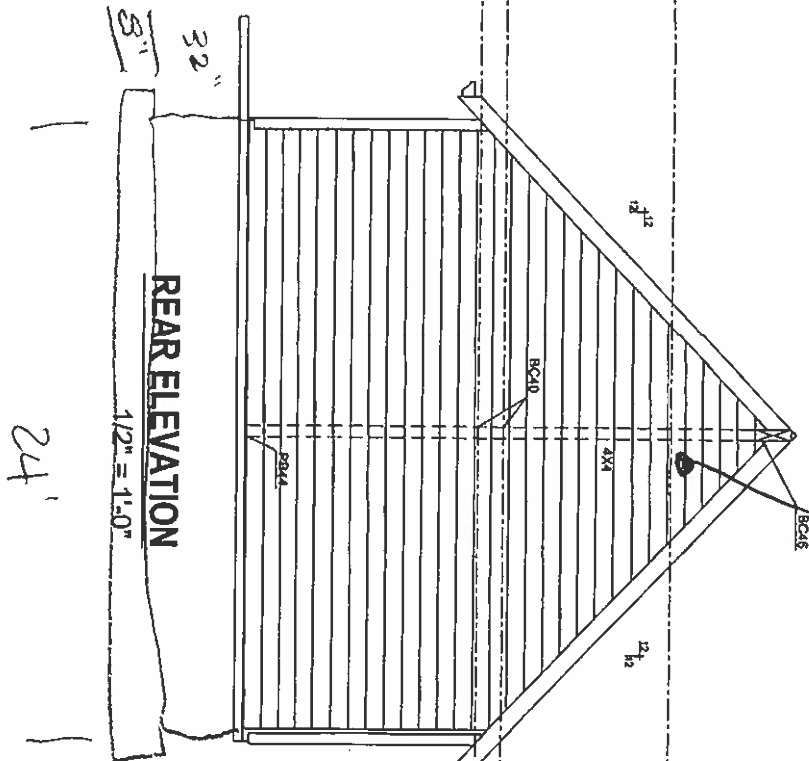


24' x 24' TWO CAR GARAGE WITH LOFT



FONT ELEVATION
 1/2" = 1'-0"



REAR ELEVATION
 1/2" = 1'-0"

NO.	REVISION	DATE	BY	CHKD BY	DESCRIPTION
1	ISSUED FOR PERMIT	08/08/20	ES	ES	
2	ISSUED FOR CONSTRUCTION	08/08/20	ES	ES	
3	ISSUED FOR REVIEW	08/08/20	ES	ES	

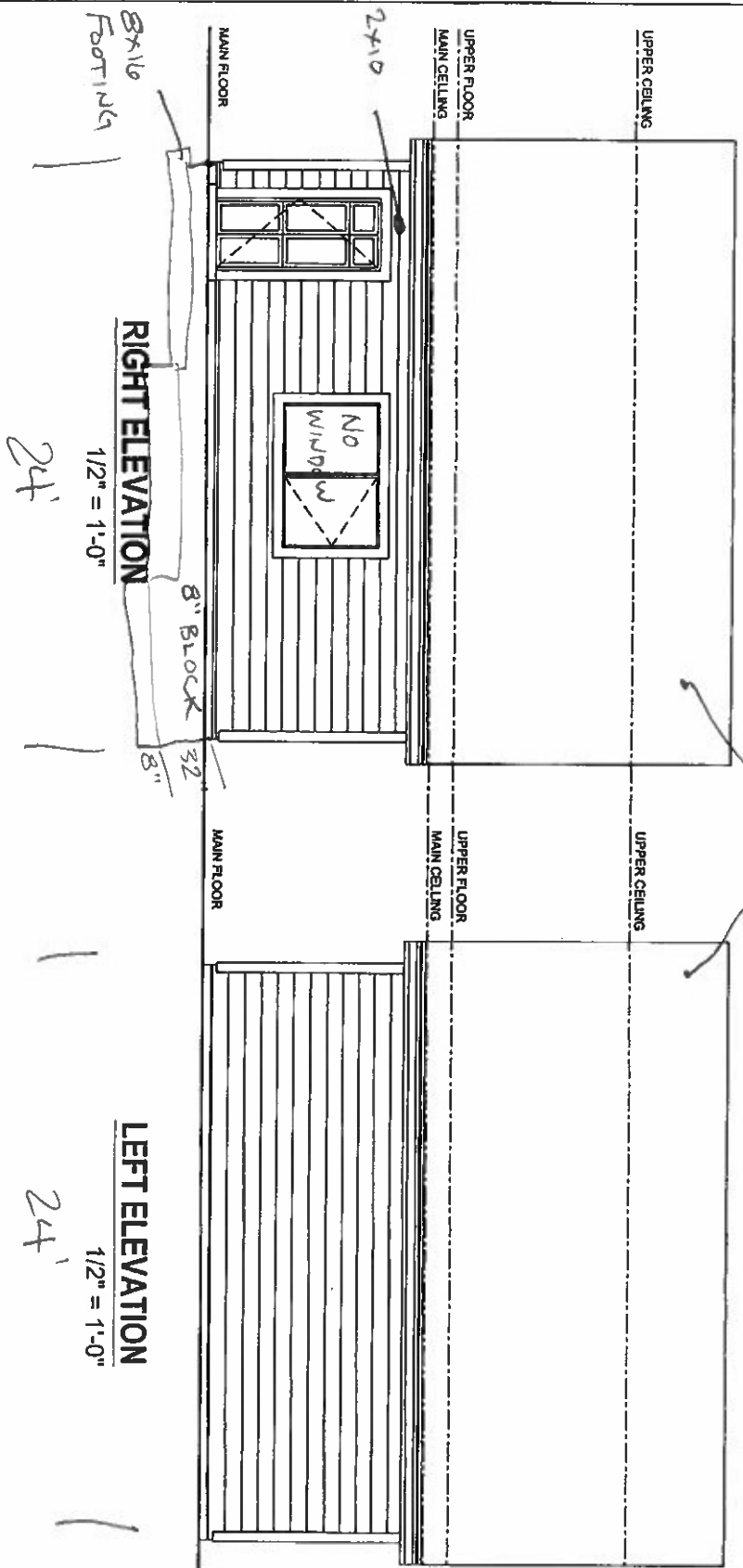
NO.	REVISION	DATE	BY	CHKD BY	DESCRIPTION
1	ISSUED FOR PERMIT	08/08/20	ES	ES	
2	ISSUED FOR CONSTRUCTION	08/08/20	ES	ES	
3	ISSUED FOR REVIEW	08/08/20	ES	ES	

NO.	REVISION	DATE	BY	CHKD BY	DESCRIPTION
1	ISSUED FOR PERMIT	08/08/20	ES	ES	
2	ISSUED FOR CONSTRUCTION	08/08/20	ES	ES	
3	ISSUED FOR REVIEW	08/08/20	ES	ES	

24'x24' 2 CAR GARAGE WITH LOFT

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SEE TRUSS DRAWINGS



NO.	REVISION	DATE	BY	DESCRIPTION
1	REVISION ORIGINAL DESIGN			
2	ASBUILT FOR CONSTRUCTION			
3	ASBUILT FOR REVIEW			

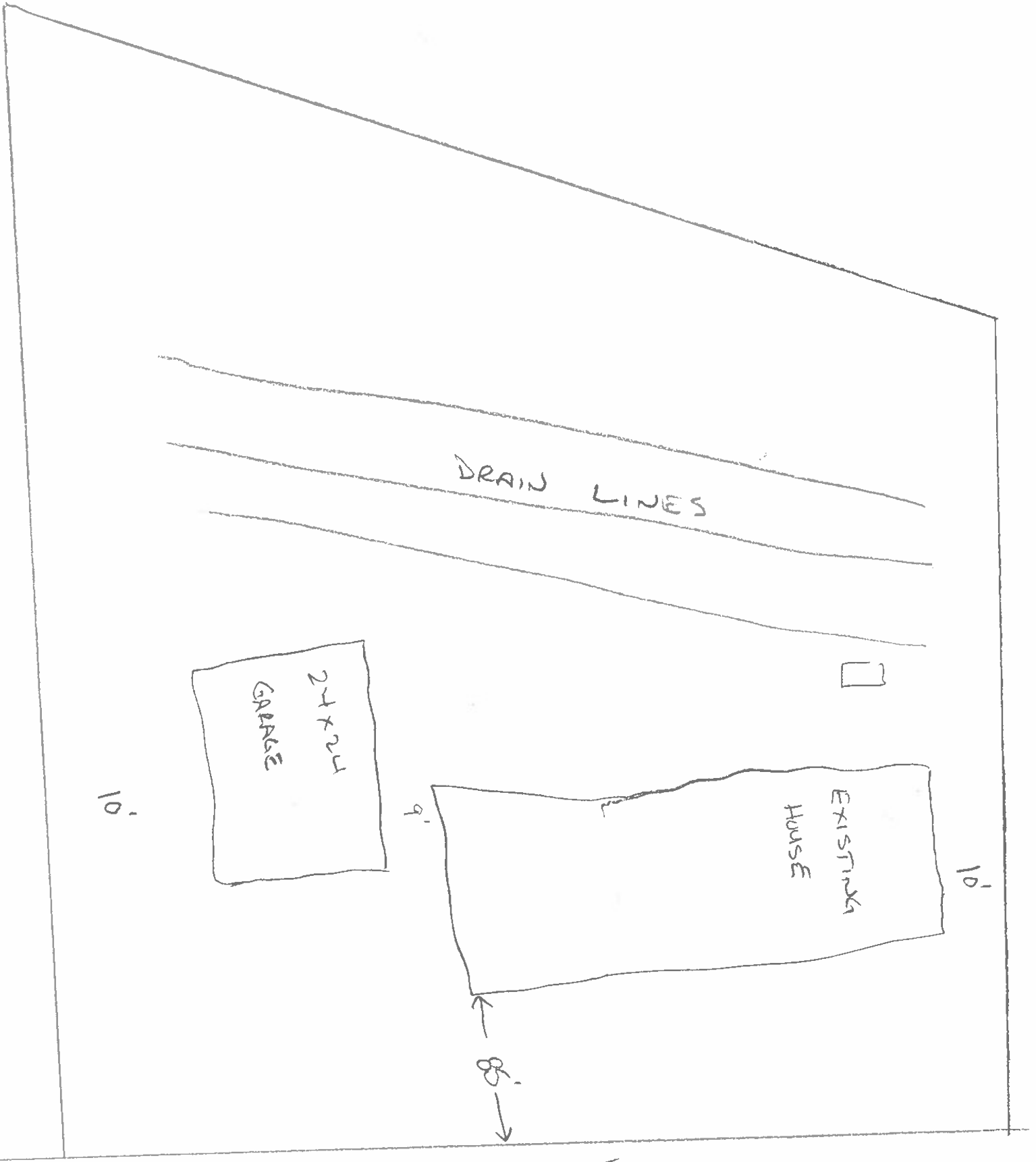
NO.	REVISION	DATE	BY	DESCRIPTION
1	ISSUED FOR CONSTRUCTION			
2	ISSUED FOR REVIEW			

NO.	REVISION	DATE	BY	DESCRIPTION
1	ISSUED FOR CONSTRUCTION			
2	ISSUED FOR REVIEW			

NO.	REVISION	DATE	BY	DESCRIPTION
1	ISSUED FOR CONSTRUCTION			
2	ISSUED FOR REVIEW			

24'x24' 2 CAR GARAGE WITH LOFT

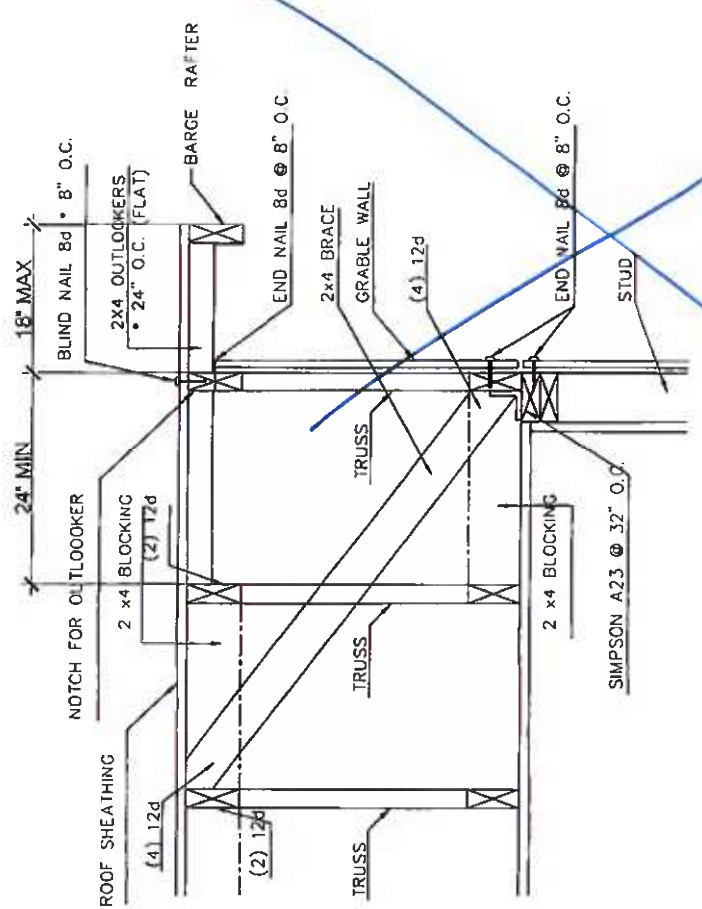
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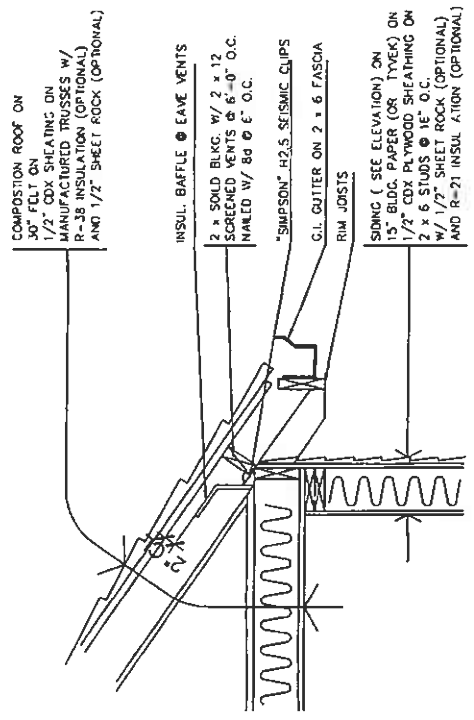
621

NATCHEZ

TRACE



GABLE END DETAIL
(TRUSS ROOF) AT 6'-0" O.C.



ALTERNATE FOUNDATION SECTION
NOT TO SCALE

REVISION		APP	DATE	DESCRIPTION
1	REVISION OVERALL DESIGN	BS	BS	
2	REVISION OVERALL DESIGN	CS	BS	
3	REVISION OVERALL DESIGN	BS	BS	
4	REVISION OVERALL DESIGN	BS	BS	

SECTION	SCALE	DATE
SECTION 1	B. STONE	JAN 11
SECTION 2	B. STONE	JAN 11

APPROVED BY:	DATE:

SECTION	SCALE	DATE
SECTION 1	B. STONE	JAN 11
SECTION 2	B. STONE	JAN 11

APPROVED BY:	DATE:

SECTION	SCALE	DATE
SECTION 1	B. STONE	JAN 11
SECTION 2	B. STONE	JAN 11

APPROVED BY:	DATE:

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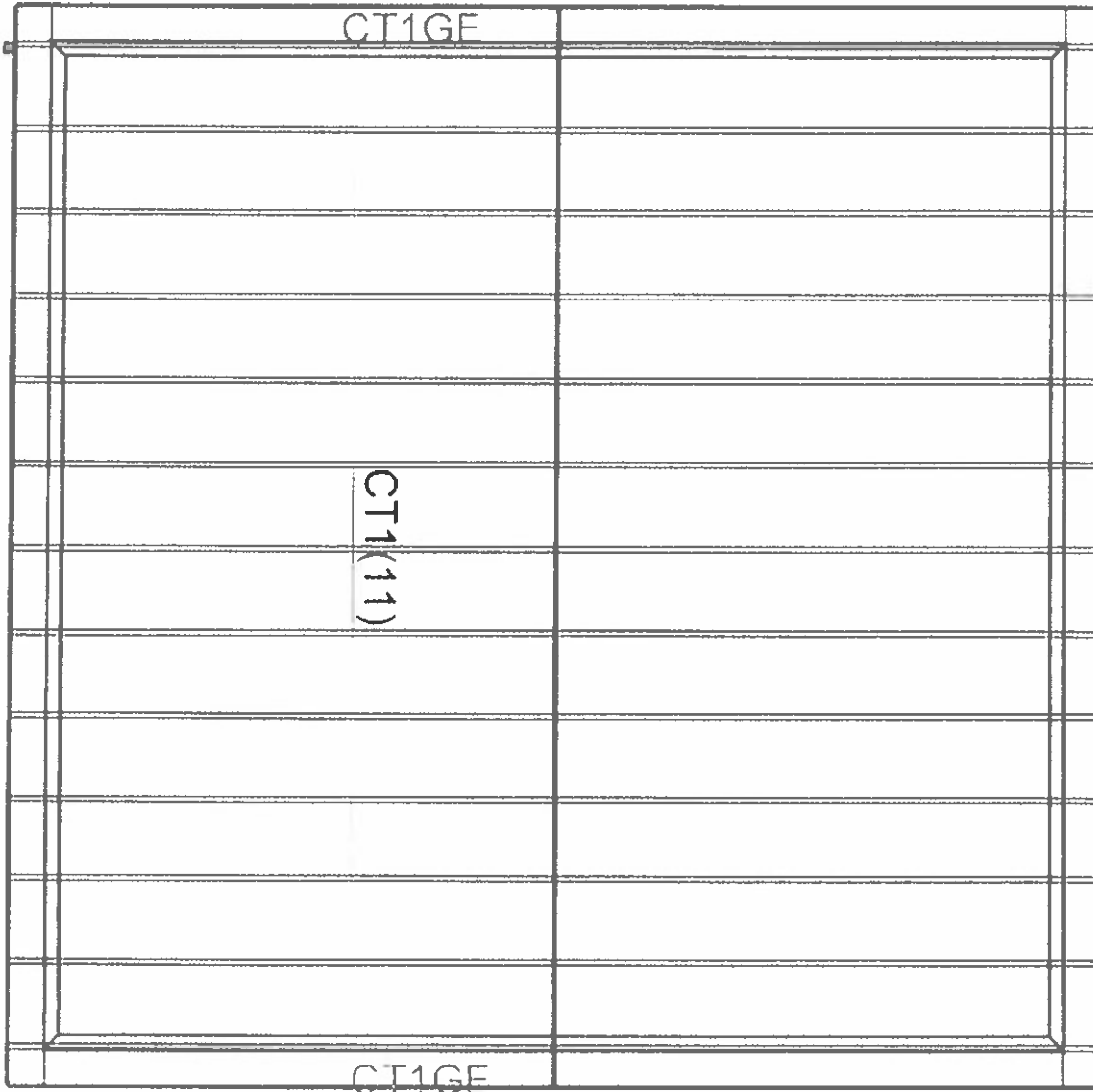
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2 1/2" X 24" 2 CAR GARAGE WITH LOFT

24-00-00

24-00-00

24-00-00



24-00-00



10401 Chapel Hill Rd
Morrisville, NC 27560
Ph. 919-467-9988
Fax. 919-481-3255

DO200830
JAMES MORSE
621 NATCHEZ TRACE
FUQUAY-VARINA, NC

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: DO200830
JAMES MORSE

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Truss Builders, Inc..

Pages or sheets covered by this seal: E14799040 thru E14799041

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844



August 28, 2020

Gilbert, Eric

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2

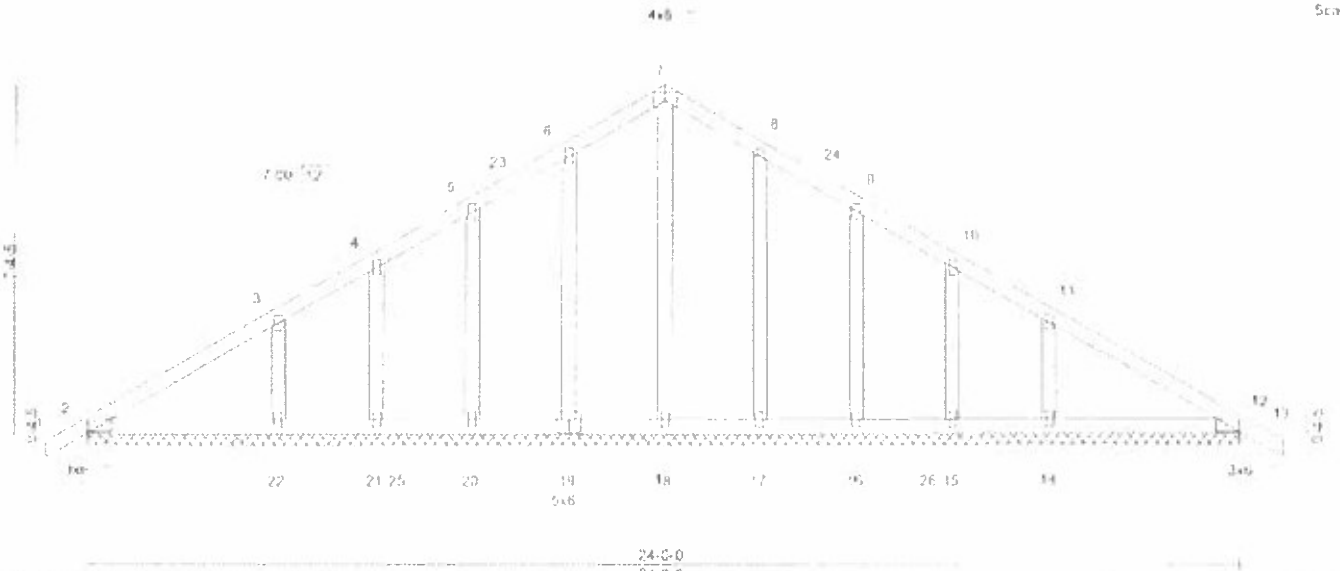


Plate Offsets (X, Y) = [2 0 3 3 0 1 8] [12 0 3 3 0 1 8], [19 0 3 0 0 3 0]

LOADING (psf)	SPACING-	2-0-0	CSI	DEFL.	in	(loc)	Vdefl	Lid	PLATES	GRIP
TCLL (roof)	Plate Grip DOL	1.15	TC	Vert(LL)	0.00	13	n/r	120	MT20	244/100
Snow (Pl)	Lumber DOL	1.15	BC	Vert(CT)	0.01	13	n/r	120		
TCOL	Repl Stress Incr	YES	WB	Horz(CT)	0.00	12	n/a	n/a		
BCLL	Code IBC2015/IBC2014		Matrix						Weight: 137 lb	FT = 6%
BCDL										

LUMBER-
 TOP CHORD 2x4 SP No 2
 BOT CHORD 2x4 SP No 2
 OTHERS 2x4 SP No 3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 bc purlins
 BOT CHORD Rigid ceiling directly applied or 10-0-0 bc bracing

REACTIONS: All bearings 24-0-0.
 (lb) - Max Horz 2=145(LC 10)
 Max Up/Lift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 18, 15, 14
 Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 17, 16, 15, 12 except 22=317(LC 26),
 14=317(LC 27)

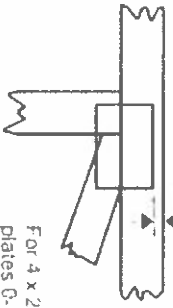
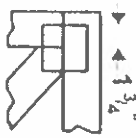
FORCES: (lb) - Max Comp /Max Ten - All forces 250 (lb) or less except when shown.

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind ASCE 7-10: Vult=115mph (3-second gust) Vasc=91mph TCCL=0 psf, BCDL=0 psf, h=25ft, Cat II, Exp B, Endosed, MWFRS (envelope) gable and zone, cantilever left and right exposed, end vertical left and right exposed, Lumber DOL=1.33 plate grip DOL=1.33
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Cable End Details as applicable, or consult qualified building designer as per ANSUTPI 1.
 - TCCL ASCE 7-10: Pre=20.0 psf (roof live load, Lumber DOL=1.15 Plate DOL=1.15) Pl=15.0 psf (flat roof snow, Lumber DOL=1.15, Plate DOL=1.15), Category II, Exp B, Fully Exp., Ct=1.10
 - Unbalanced snow loads have been considered for this design.
 - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 24-0-0 oc.
 - This truss was designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 Lx4 by 4-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 17, 18, 15, 14.



Symbols

PLATE LOCATION AND ORIENTATION



- Plate location details available in **MiTek 2020 software** or upon request.

PLATE SIZE

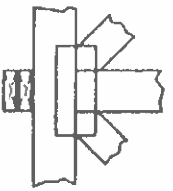
4 X 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots

LATERAL BRACING LOCATION



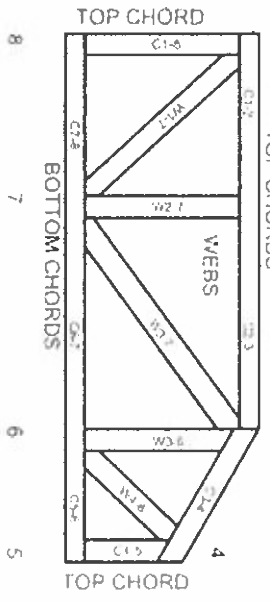
BEARING



Industry Standards:
ANSI/TPI 1

- National Design Specification for Metal Plate Connected Wood Truss Construction.
- Design Standard for Bracing.
- Building Component Safety Information.
- Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports

- ESR-1311, ESR-1352, ESR-1988
- ESR-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3. These truss designs rely on lumber values established by others.

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional shoring/bracing for truss system is required or shoring, is always required. See ICC-ES.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral bracing dimensions may require bracing, or alternative T-11 bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of the truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear evenly against each other.
6. Place plates on each face of truss at each joint and embed fully. K-rods and nips at joint locations are required by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted this design is not applicable for use with the retardant, preservative treated, or green lumber.
10. Cambr is a non-structural consideration and is the responsibility of truss fabricator. General practice is to chamber for eave load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plying requirements.
12. Lumber used shall be of the species and size and in all respects equal to or better than that specified.
13. Top chords must be straight or purline covered at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft spacing or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project architect before use.
19. Review all corners of truss design front, back, webs and pictures) before use. Reviewing pictures shown is not sufficient.
20. Design assumes manufacturer in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.



