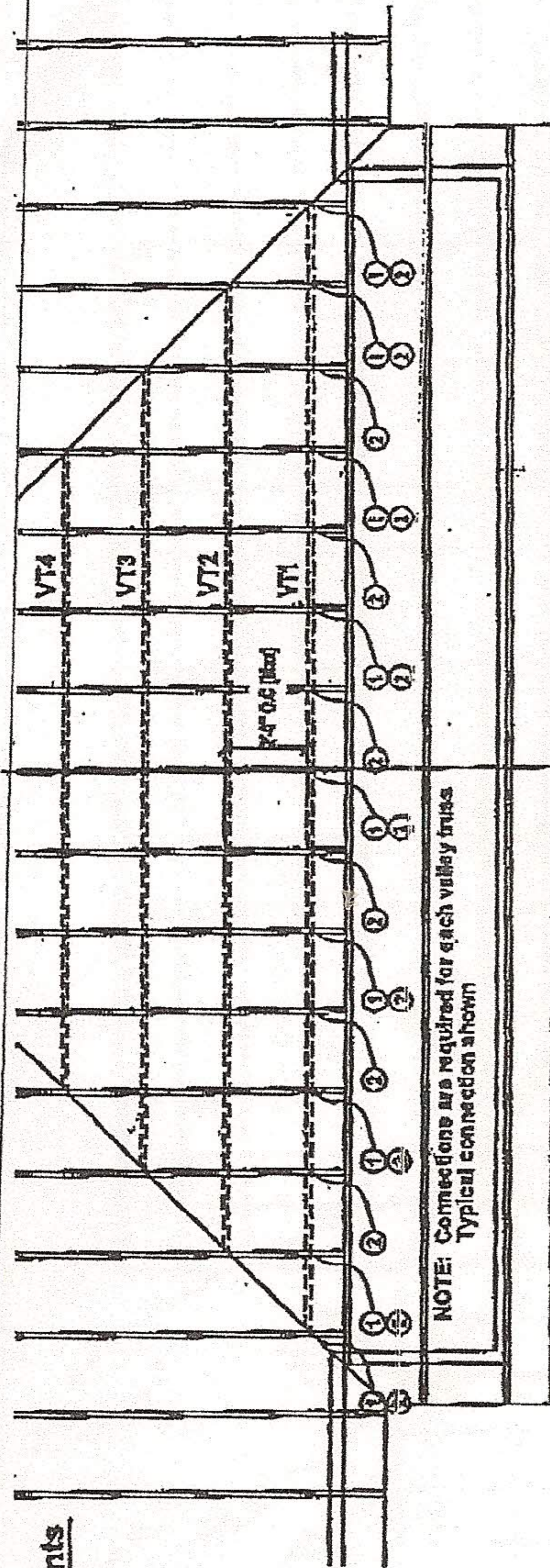


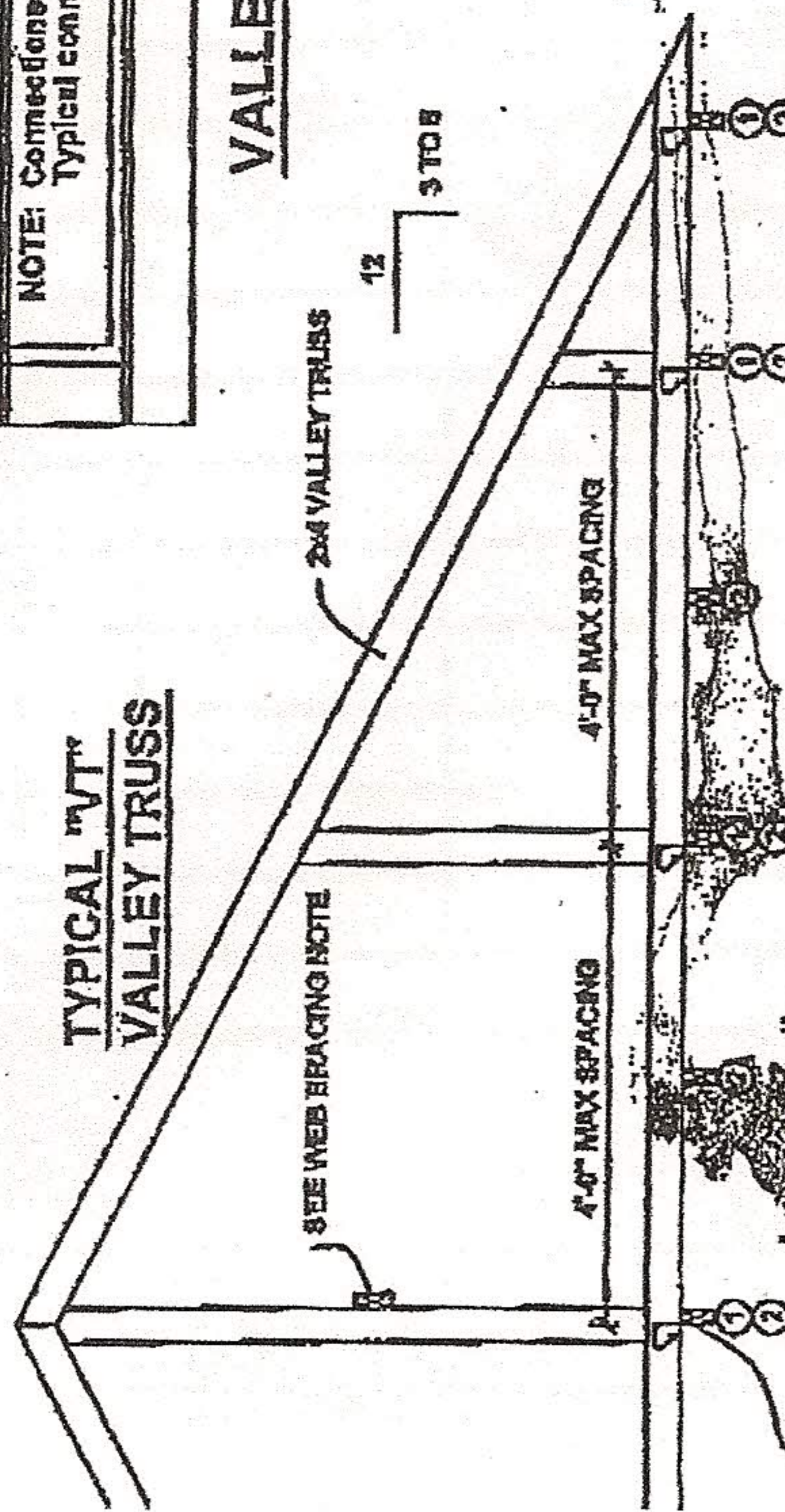
B1

VALLEY TRUSS TO BASE TRUSS CONNECTION DETAIL DWG# TX07060001-001

**Lumber Size and Grade Minimum Requirements**  
See truss engineering for lumber specs



VALLEY ROOF PLAN



TYPICAL CORROSION SPACED 24" O.C.

**General Notes**

- Purlins required 2'-0" O.C. in absence of roof sheathing.
- Valley truss bottom chords are considered purlins when nailed according to the requirements.
- The effects of wet, prevailing weathering below a valley set on the membrane characteristics of the roof must be evaluated by the building designer.
- This drawing applies to valleys with the following conditions:
  - Spans (distance between trusses) 4'-0" or less.
  - Maximum valley truss height (bottom chord to peak) 14'-0"
  - Maximum wind speed: 130 mph
  - Maximum mean roof height: 20 feet
  - Minimum total loadings: 65 psf
  - Meets FBC 2004 code requirements
  - Exposure Category 'B'
  - Enclosed Building

**Web Bracing, & Blocking Notes**

- 4x4 boronized lateral bracing (CLB) is required for webs 8'-0" to 10'-0" long nailed with 2x4s at 12" o.c. or 1x4s or 2x4s nailed to the edge of webs with 8d nails at 1'-0" o.c. 1" or more metal ties 80% of rafter length. Webs over 12'-0" long require two CLB's at both ends of 1" or more. Use above grade lumber A, B or common, n.b.
- Apply all nailing in accordance to 1995 requirements.

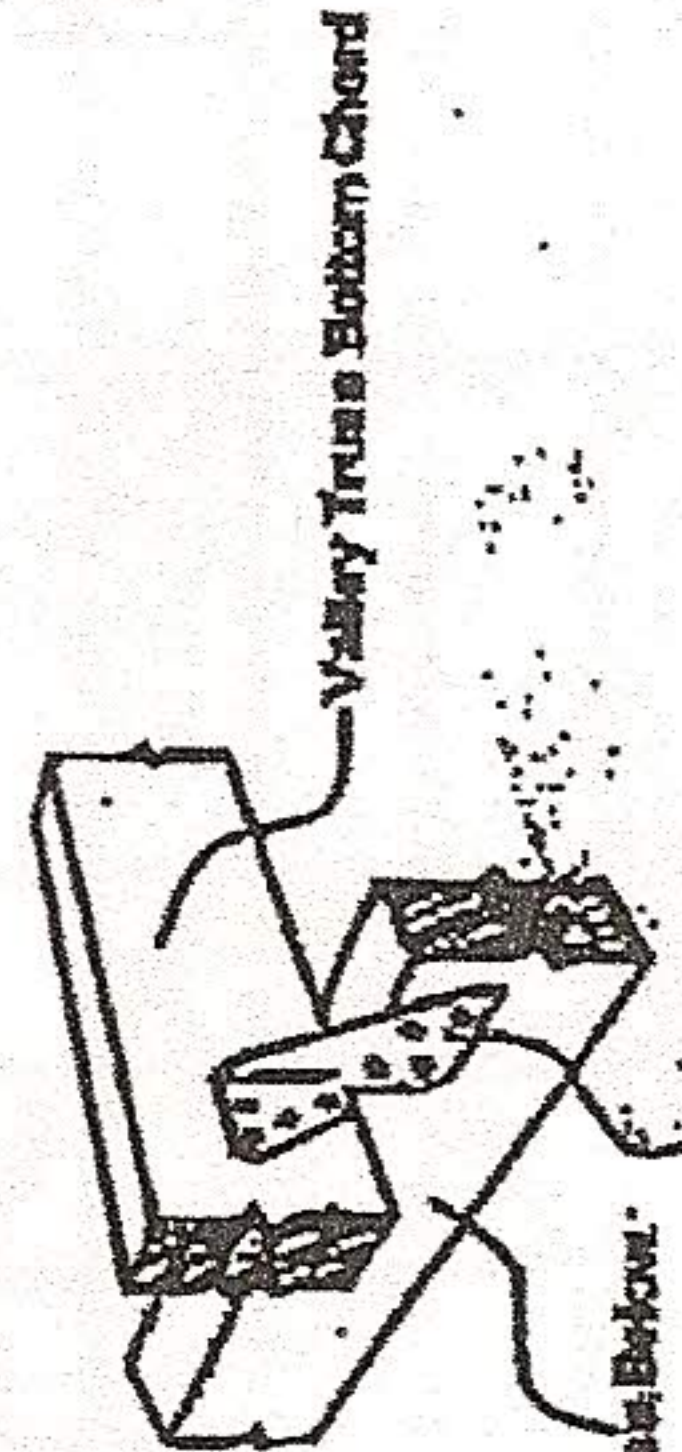
**Diagonal Bracing**

Diagonal bracing in accordance to the building designer's specifications. For further information, refer to "Design Responsibility" section of ANSI/TPI-1 and "Requirements for Permanent Bracing of Metal Purlin Connected Wood Trusses," published by the Wood Truss Council of America.

See BC 11 or ANSI/TPI-1 for more information regarding temporary and permanent bracing of wood trusses.

**Connection Requirement Notes**

- 1 Simpson "H4" Hurricane Tie (4) 9d Common Wire Nails to each member (Every 12" in reaction)
- 2 Truss to Truss connection (2) 16d Common Wire Toenails (Connections based on 3x, Pine lumber and 2x4 valley truss bottom chord and 2x4 lower truss top chord.)



**WARNING Read all notes on this sheet and give a copy of it to the erecting contractor.**

This design is for an individual building component, not a truss system. It has been based on specifications provided by the component manufacturer and does not constitute a design. The building designer shall ascertain that the loads are to be verified by the component manufacturer and/or building designer prior to fabrication. The building designer shall ascertain that the loads used on this design meet or exceed the loads imposed by the local building code and the particular application. It is assumed that the top chord is braced by the roof or floor sheathing and the bottom chord is laterally braced by a rigid ceiling material directly attached, unless otherwise noted. Bracing around the top and bottom chords is required to reduce buckling length. This component shall not be placed in any environment that will cause the moisture content of the wood to exceed 19% and 1 or cause connector plate corrosion. Fabricate, handle, install and brace this truss in accordance with the following standards: Joint and Cutting Reports, available as output from Trussal software, ANSI/TPI-1; WTCA 1; Wood Truss Council of America Standard Design Responsibility, BUILDING COMPONENT SAFETY INFORMATION; (BCSI 1-03) AND "BCSI SURVIVAL SHEET" by WTCA and TPI. The Truss Plus Website (TP) is located at 9375 Condit Dr., Bedford, Massachusetts 01710. The American Forest and Paper Association (AFPA) is located at 111 39th St., NY, NY 10018, Washington, DC 20008.

Revisions:  
3/1/2007 130 mph / 20' mean ht.

Duration factor: 1.25  
Repetitive member bending: 1.15  
O.C. Spacing: 2-0-0  
Max loading (PSF): TL-20 TD-25 BD-10  
Design specs: NDS, ANSI/TPI-1  
ASCE7



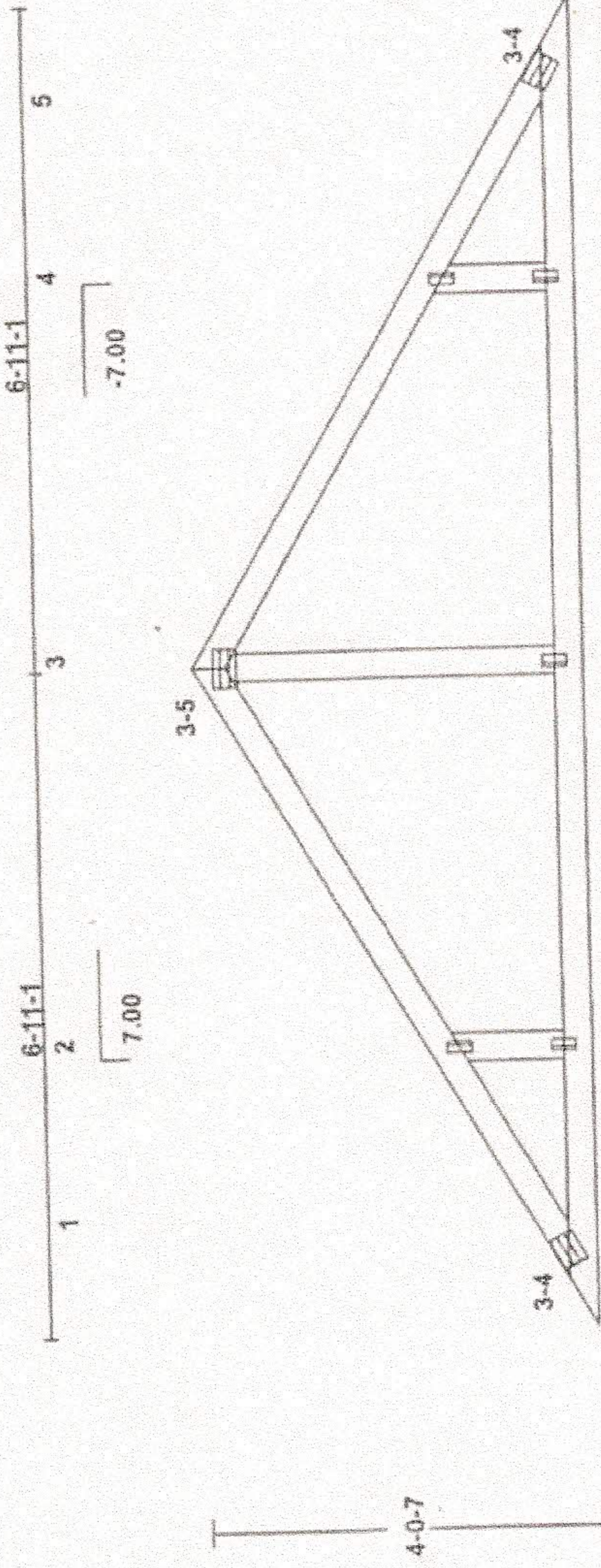
TC 2x4 SP #2  
 BC 2x4 SP #2  
 GBL BLK 2x4 SP #3  
 Loaded for 10 PSF non-concurrent BCLL.  
 Valley Truss application only; not designed  
 for wind load applied to the face. Web  
 bracing is required if shown.

Plating spec: ANSI/TPI - 1995  
 THIS DESIGN IS THE COMPOSITE RESULT OF  
 MULTIPLE LOAD CASES.  
 IRC/IBC truss plate values are based on  
 testing and approval as required by IBC 1703  
 and ANSI/TPI and are reported in available  
 documents such as ICBO #1607.  
 Gable verticals are 2x 4 web material spaced  
 at 48.0" o.c. unless noted otherwise.

This truss is designed using the  
 ASCE7-98 Wind Specification  
 Bldg Enclosed = Yes, Importance Factor = 1.00  
 Truss Location = Not End Zone  
 Hurricane/Ocean Line = No, Exp Category = B  
 Bldg Length = 40.00 ft, Bldg Width = 30.00 ft  
 Mean roof height = 27.02 ft, mph = 130  
 TPI Standard Occupancy, Dead Load = 9.0 psf  
 Designed as Main Wind Force Resisting System  
 and Components and Cladding  
 Tributary Area = 28 sqft

*SUPPOSEDLY REFINED FOR WIND  
 YET, NO ULTIMATE  
 REACTIONS LISTED.*

Joint Locations	
1	0-0-0 6 0-0-0
2	2-11-1 7 2-11-1
3	6-11-1 8 6-11-1
4	10-11-1 9 10-11-1
5	13-10-1 10 13-10-1



B2

B1

*B2*

TYPICAL PLATE: 1.5-3

All plates are 20 gauge Truswal Connectors unless preceded by "MX" for HS 20 gauge or "H" for 16 gauge, positioned per Joint Detail Reports available from Truswal software, unless noted.

OVER CONTINUOUS SUPPORT

Scale: 1/32" = 1'

9/22/2004

WO: DW8351BQR

**WARNING** Read all notes on this sheet and give a copy of it to the Erecting Contractor.

This design is for an individual building component not truss system. It has been based on specifications provided by the component manufacturer and done in accordance with the current versions of TPI and AFPA design standards. No responsibility is assumed for dimensional accuracy. Dimensions are to be verified by the component manufacturer and/or building designer prior to fabrication. The building designer must ascertain that the loads utilized on this design meet or exceed the loading imposed by the local building code and the particular application. The design assumes that the top chord is laterally braced by the roof or floor sheathing and the bottom chord is laterally braced by a rigid sheathing material directly attached, unless otherwise noted. Bracing shown is for lateral support of components members only to reduce buckling length. This component shall not be placed in any environment that will cause the moisture content of the wood to exceed 19% and/or cause connector plate corrosion. Fabricate, handle, install and brace this truss in accordance with the following standards: 'Joint and Cutting Detail Reports available as output from Truswal software', 'ANSI/TPI 1', 'WTCA 1', 'Wood Truss Council of America Standard Design Responsibilities', 'HANDLING INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES' - (HIB-91) and 'HIB-91 SUMMARY SHEET' by TPI. The Truss Plate Institute (TPI) is located at D'Oonofrio Drive, Madison, Wisconsin 53719. The American Forest and Paper Association (AFPA) is located at 1111 19th Street, NW, Ste 800, Washington, DC 20036.



1101 N. Great S.W. Pkwy., Arlington TX 76011

Chk: SZ	Dsgnr: BGS	TC Live	TC Dead	BC Live	BC Dead	TOTAL
		20.00 psf	10.00 psf	0.00 psf	10.00 psf	40.00 psf
		DurFacs L=1.15 P=1.15	Rep Mbr Bnd 1.15	O.C.Spacing 2-0-0	Design Spec IRC	Seqn T6.4.15-0



Job: 309751 Truss: V06 Truss Type: VALLEY Qty: 1 Ply: 1 309751/Pulte/Cumberland/01144/Reserve

Builders FirstSource, Sumter, SC

Job Reference (optional)  
6.500 s Aug 27 2007 MiTek Industries, Inc. Mon Sep 28 10:54:12 2009

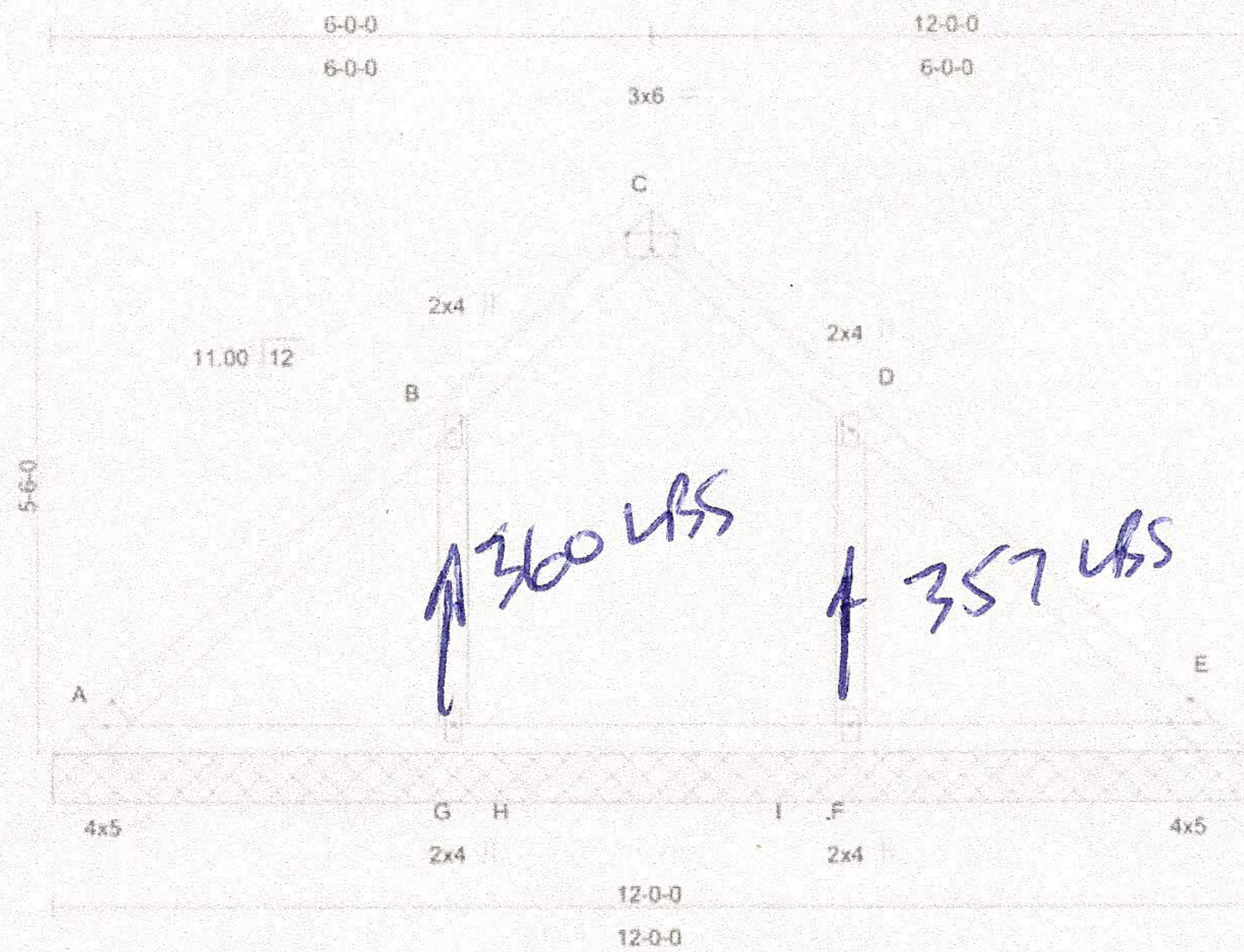


Plate Offsets (X,Y): [C-0-3-0,Edge]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plates Increase 1.15	BC 0.14	Vert(LL) n/a - n/a 999		
BCLL 0.0	Lumber Increase 1.15	WB 0.09	Vert(TL) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	(Matrix)	Horz(TL) 0.00 E n/a n/a		
	Code IRC2003/TPI2002				Weight: 50 lb

**LUMBER**

TOP CHORD 2 X 4 SYP No.2  
BOT CHORD 2 X 4 SYP No.2  
OTHERS 2 X 4 SYP No.3

**BRACING**

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

**REACTIONS** (lb/size) A=140/12-0-0, E=140/12-0-0, F=367/12-0-0, G=367/12-0-0

Max Horz A=250(LC 5)  
Max Uplift A=-13(LC 4), E=-7(LC 5), F=-357(LC 7), G=-360(LC 6)  
Max Grav A=140(LC 1), E=140(LC 1), F=370(LC 11), G=370(LC 10)

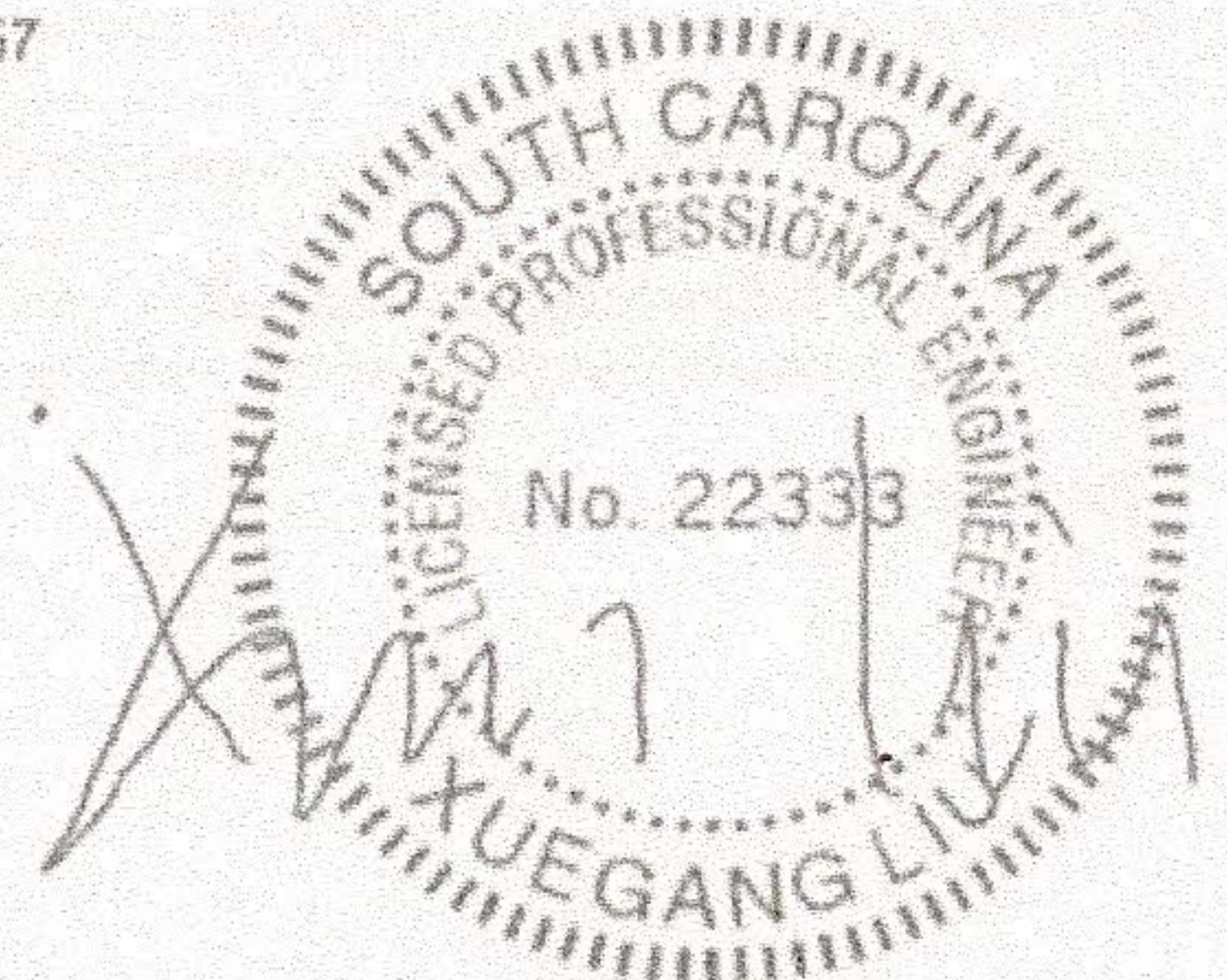
**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD A-B=-230/70, B-C=-105/58, C-D=-105/58, D-E=-227/61  
BOT CHORD A-G=-45/264, G-H=-45/264, H-I=-45/264, F-I=-45/264, E-F=-45/264  
WEBS D-F=-205/353, B-G=-205/355

**NOTES** (8)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-02; 130mph; h=16ft; TC DL=4.2psf; BC DL=3.0psf; Category II; Exp B; enclosed; MWFRS gable end zone and C-C Exterior(2) zone; Lumber DOL=1.60 plate grip DOL=1.60. This truss is designed for C-C for members and forces, and for MWFRS for reactions specified.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) Gable requires continuous bottom chord bearing.
- 5) \* 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 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 13 lb uplift at joint A, 7 lb uplift at joint E, 357 lb uplift at joint F and 360 lb uplift at joint G.
- 7) This truss is designed in accordance with the 2003 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

**LOAD CASE(S)** Standard



September 28, 2009

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10-08 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI1 Quality Criteria, D5B-89 and BCSI Building Component Safety Information - available from Truss Plate Institute, 281 N. Lee Street, Suite 312, Alexandria, VA 22314.



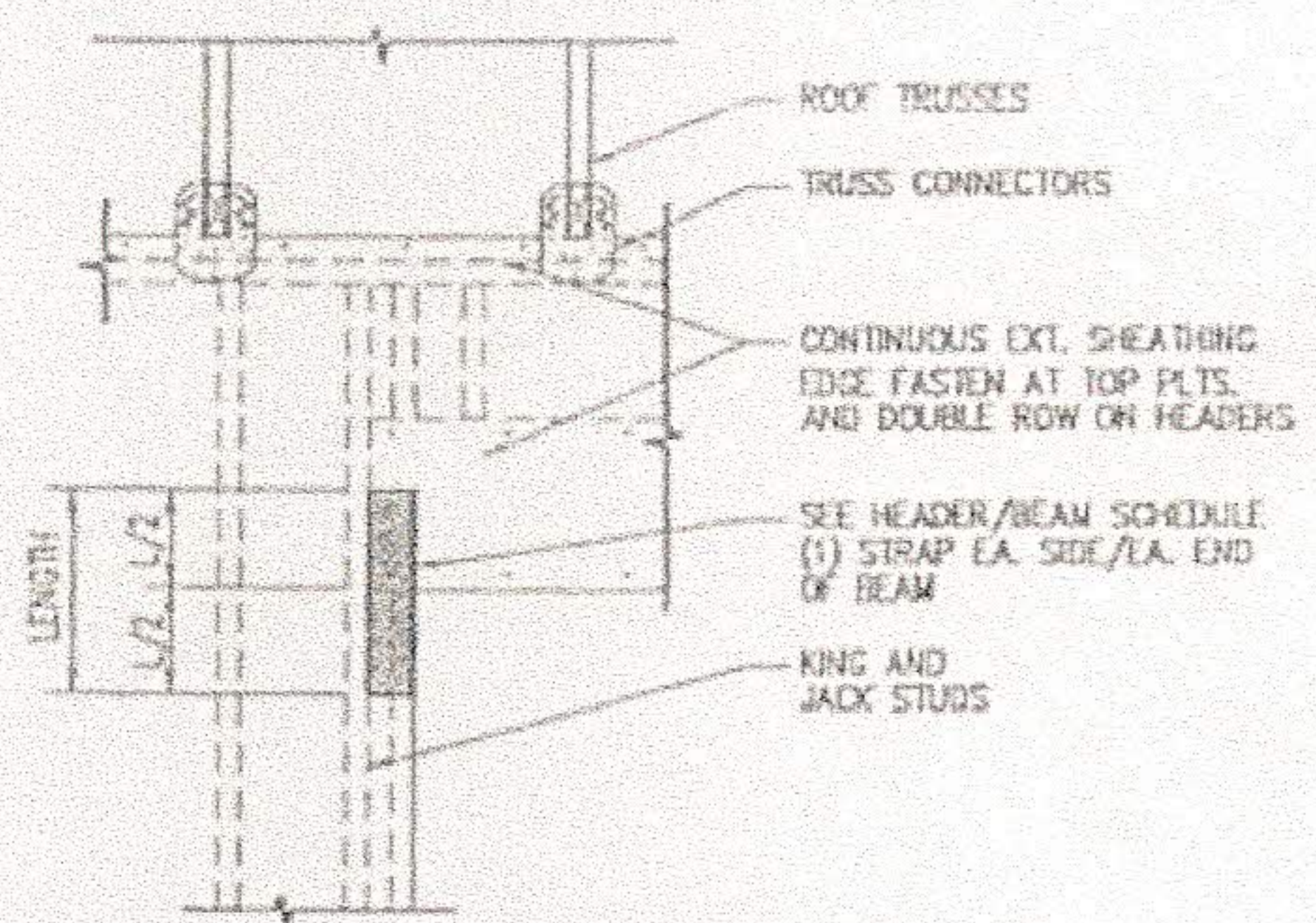
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Chesterfield, MO 63017



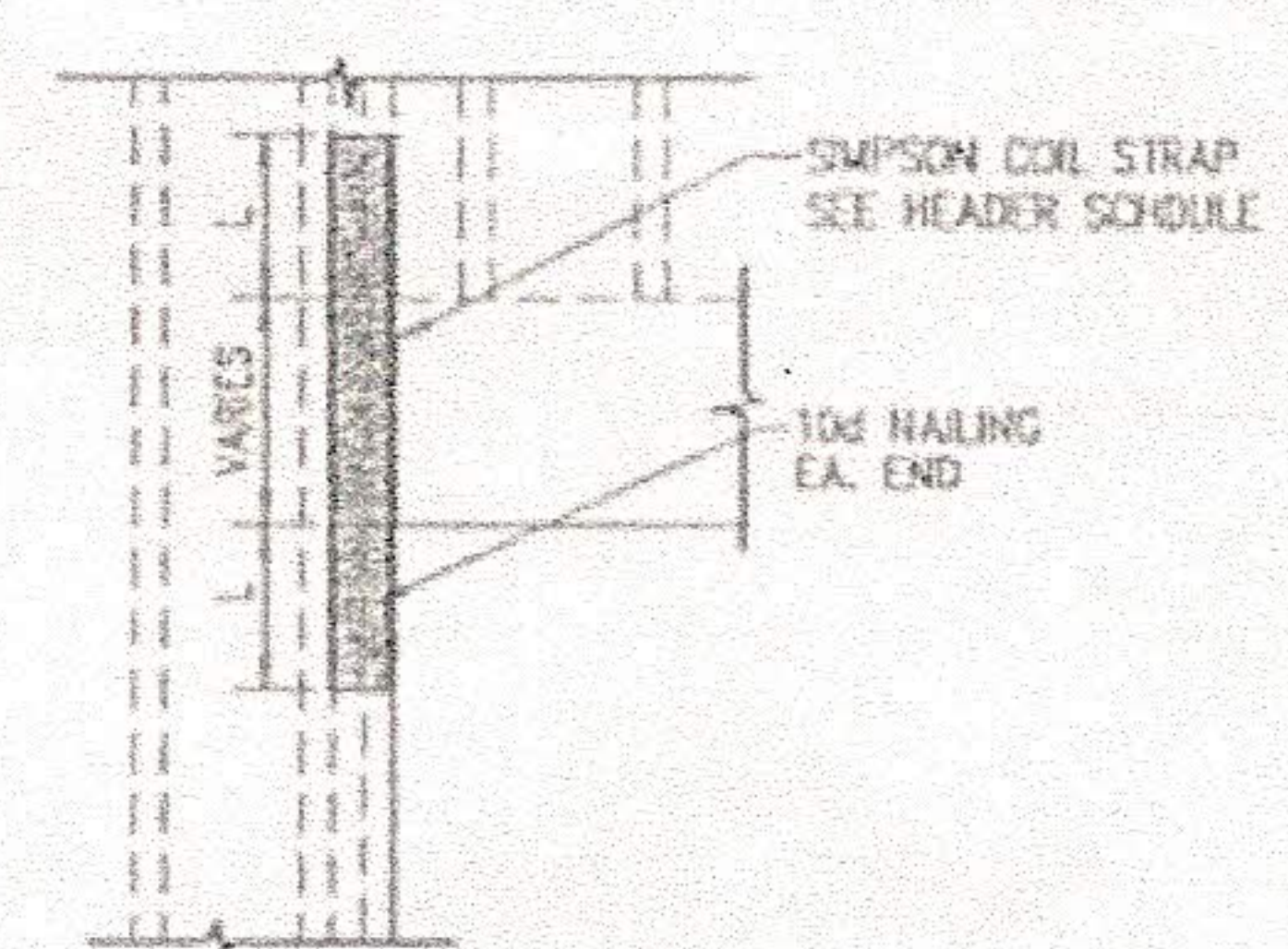
BY

Atlantic Area  
 3805 Crestwood Pkwy, Suite 450  
 Duluth, GA 30096 (770) 381-3450

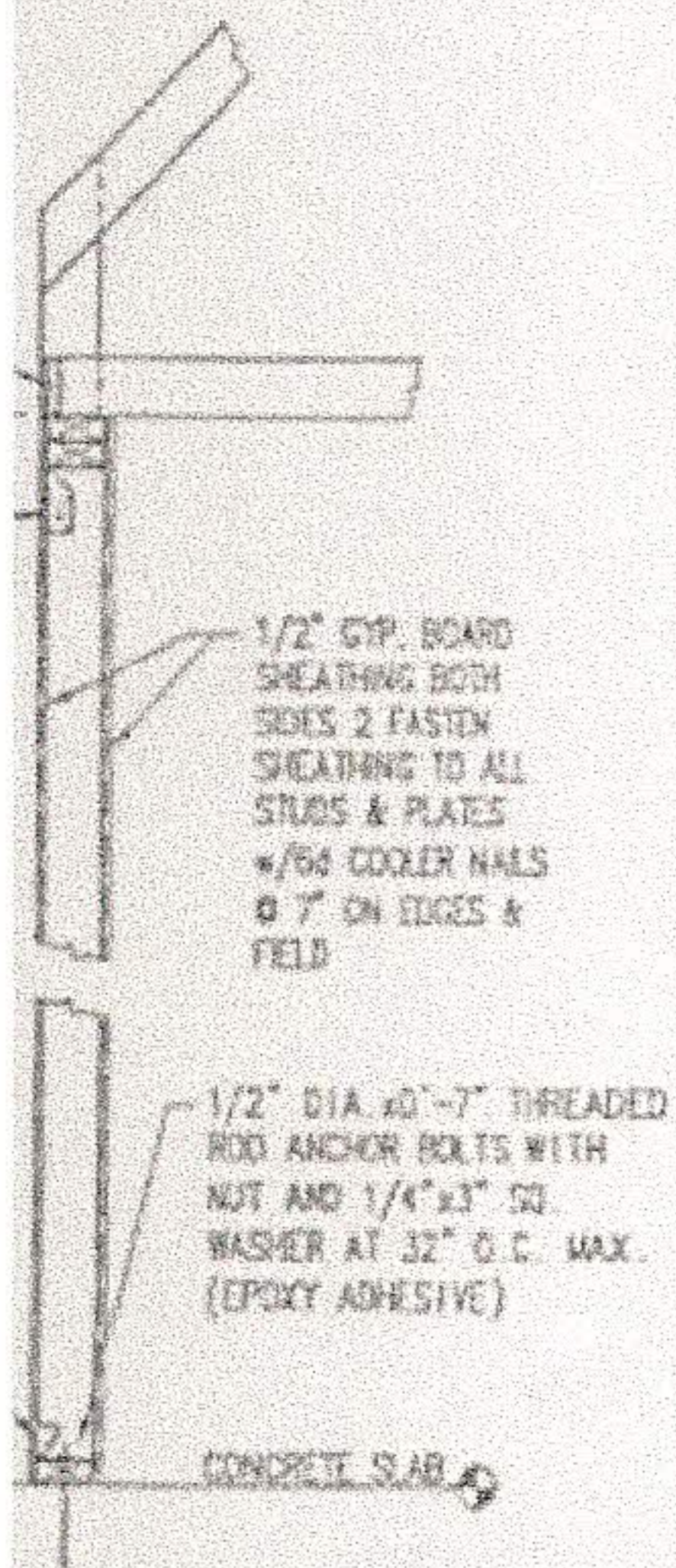
Del Webb



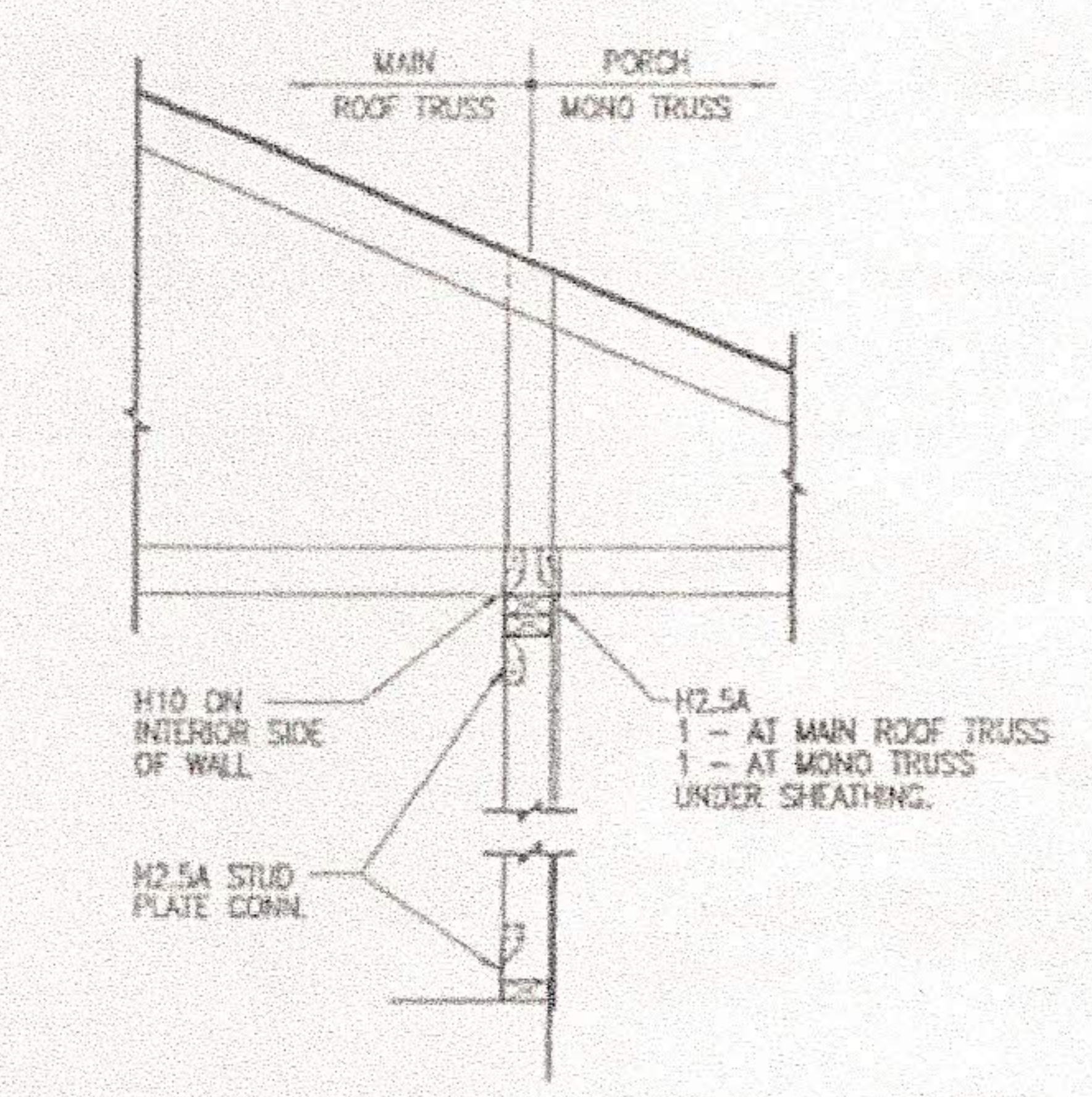
**C EXTERIOR HEADER**  
 SCALE: 3/4" = 1'-0"  
 (APPLICABLE W/ EXT. OSB SHEATHING)



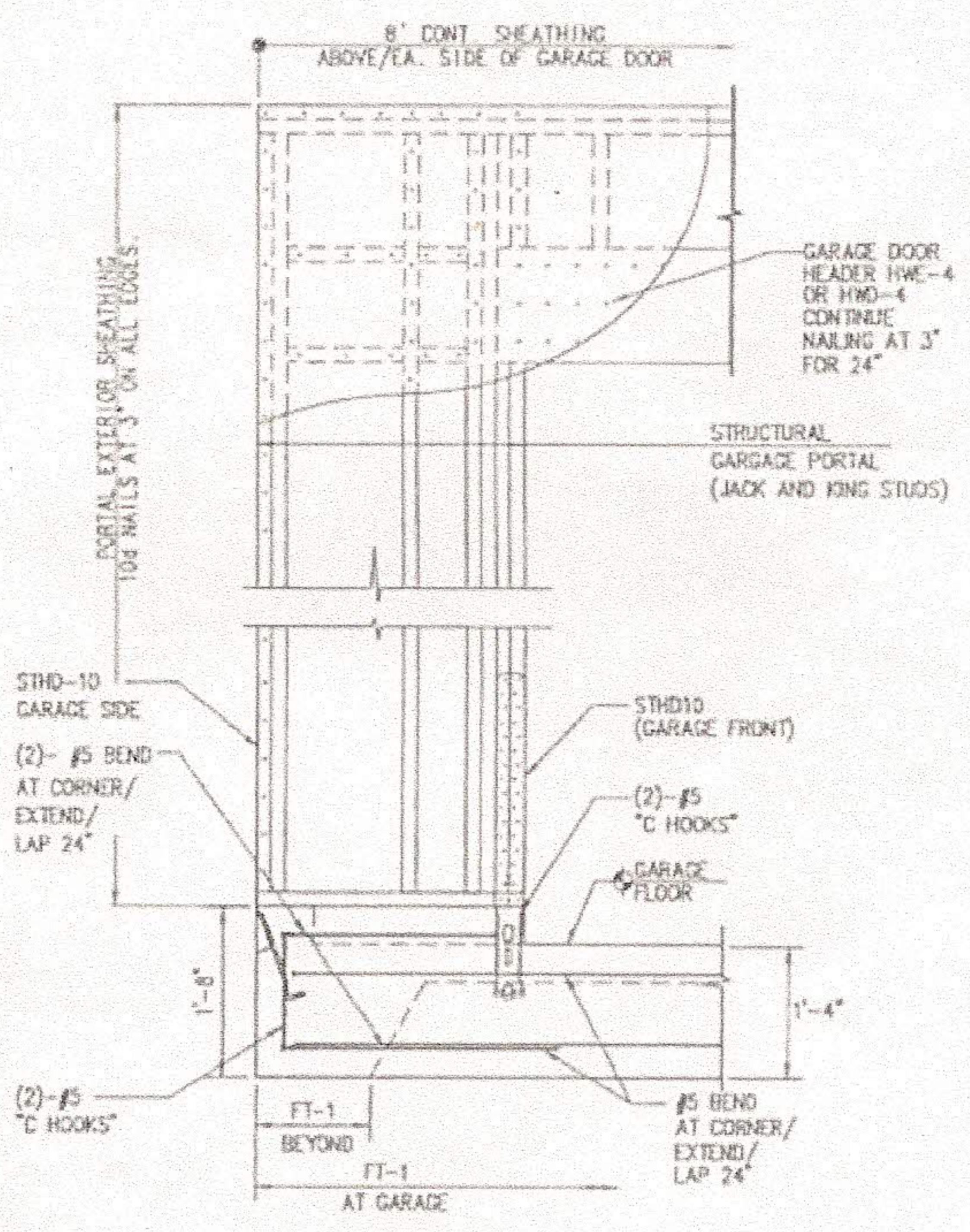
**D EXTERIOR HEADER**  
 SCALE: 3/4" = 1'-0"



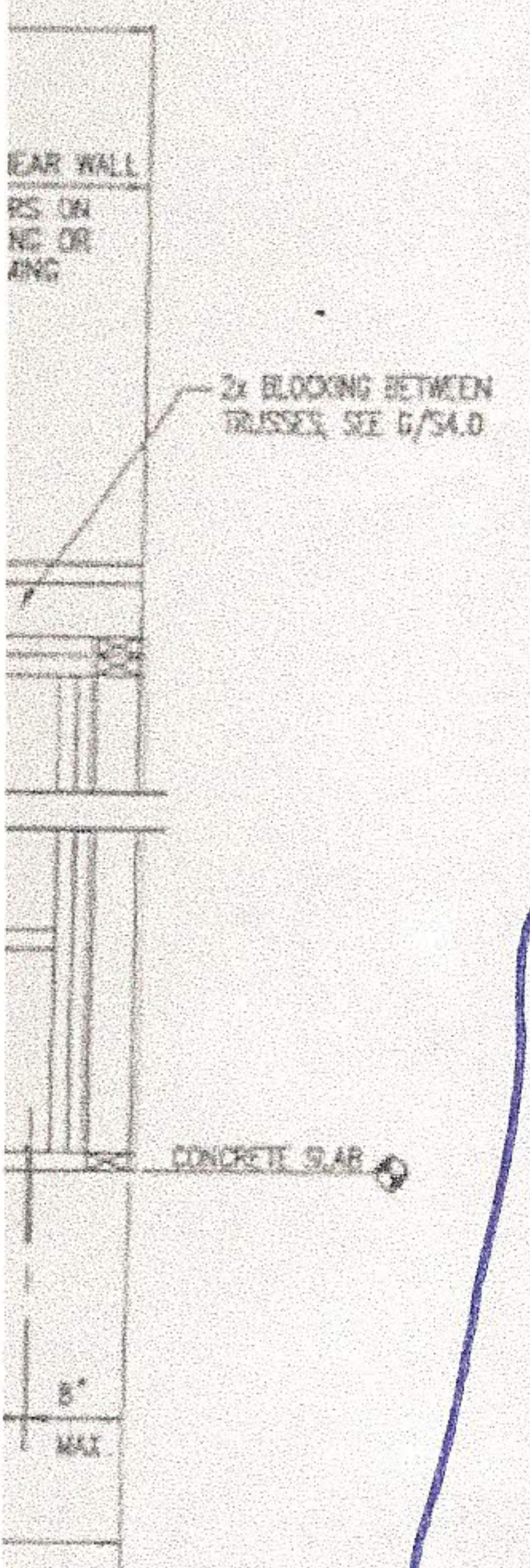
**E OF TRUSS BRG. WALL**  
 SCALE: 1'-0"



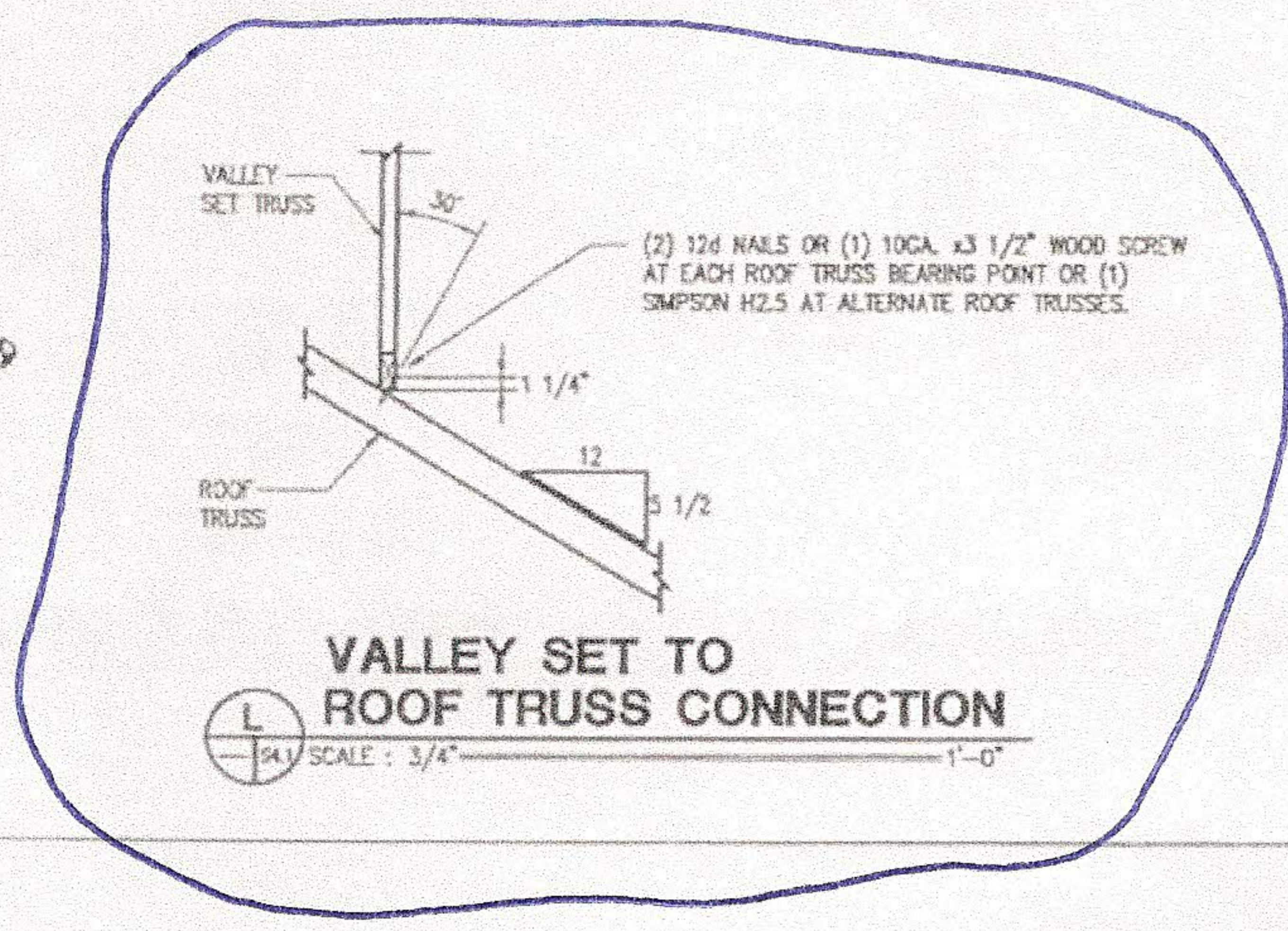
**G DOUBLE TRUSS BEARING WALL**  
 SCALE: 3/4" = 1'-0"



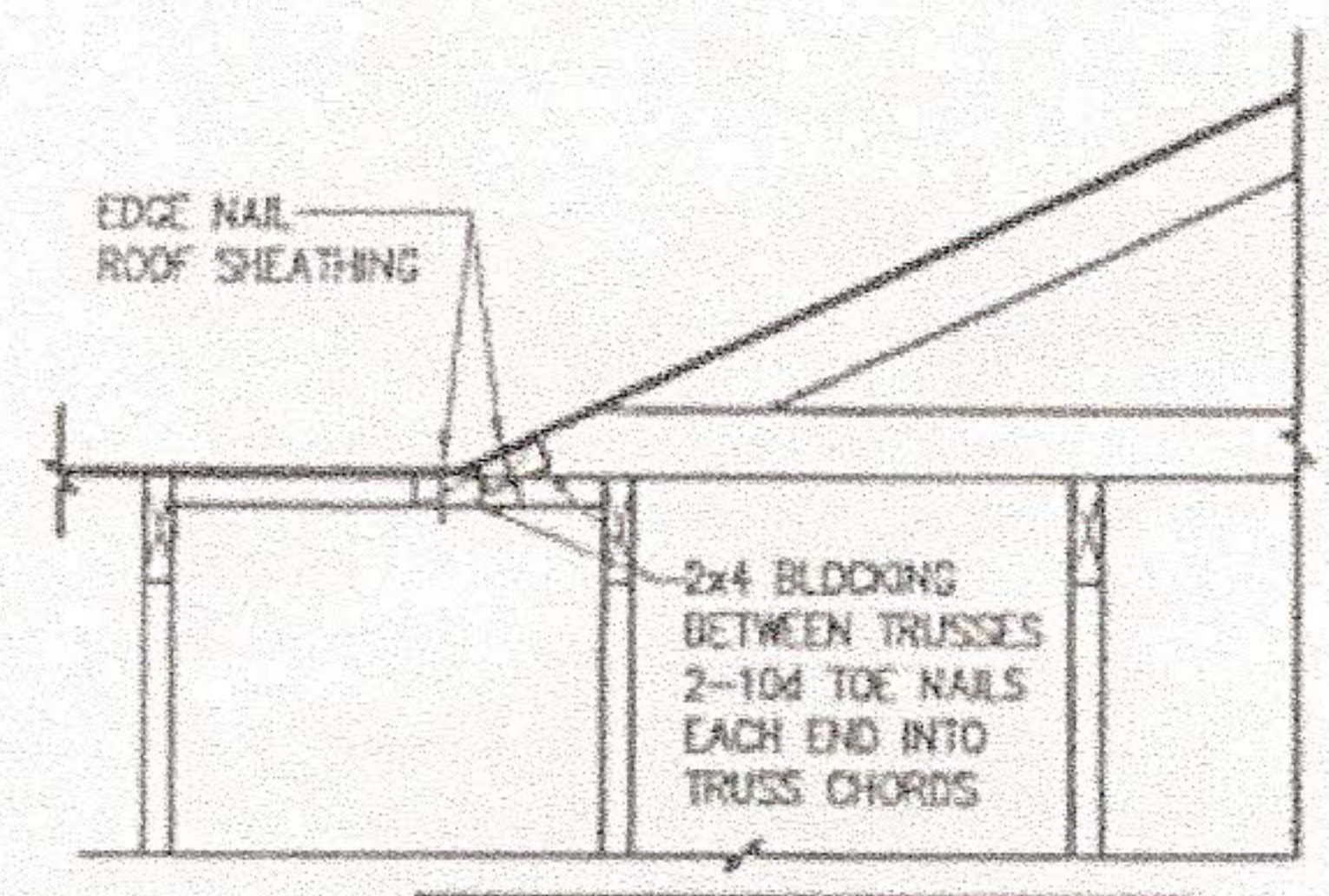
**H GARAGE DOOR PORTAL**  
 SCALE: 3/4" = 1'-0" WW2



**I REAR WALL**  
 SCALE: 1'-0"



**L VALLEY SET TO ROOF TRUSS CONNECTION**  
 SCALE: 3/4" = 1'-0"



NOT APPLICABLE WHERE ROOF SHEATHING CONTINUOUS BELOW VALLEY SET ROOF TRUSSES

**M SECTION**  
 SCALE: 3/4" = 1'-0"

PROJECT MANAGER	SEA
CURRENT RELEASE DATE:	6/30/19
REV / DATE / DESCRIPTION	
△	
△	
△	
△	
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PROJECT TYPE  
**SINGLE FAMILY**

CONTRACT NAME  
**COASTAL CAROLINA**  
 LARGER COMMENTS: D

GARAGE HARDING

SPECIFICATION LEVEL

PLAN NAME  
**DETAILS**  
 NYC PLAN NUMBER

LARGER PLAN ID

LEADCT PLAN NUMBER / NAME

SHEET  
**S4.1**



CGTJR

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 • PROJECT NUMBER: 08032.1D