

1 FLOOR PLAN
SCALE: 3/16" = 1'-0"



1. Construction bracing by contractor and shall meet truss manufacturer's recommendations and/or requirements.
2. Design is based on completed building with all structural elements in place.
3. Fabrication and welding per AISC and AWS.
4. Steel to be ASTM A36 minimum.
5. Concrete to be 3000 PSI minimum compressive strength.
6. Assumed soil bearing = 2000 PSF minimum.
7. Soil Friction Resistance to vertical load of 300 PSF is applied.
8. Contractor to verify dimensions before construction and/or ordering material.
9. Pressure treatment of wood to be in accordance with the requirements of AWPA standard C1 for the intended use category.
10. Fasteners installed with treated wood must be manufacturer recommended for use with the associated wood treatment.
11. Where Southern Yellow Pine (SYP) lumber is specified on this drawing, SPF, Doug Fir, or Hem-Fir are acceptable to use if the allowable design stress values meet or exceed that of SYP for the following:
 - Bending (Fb)
 - Tension (Ft) parallel to the grain
 - Compression (Fc) parallel to the grain

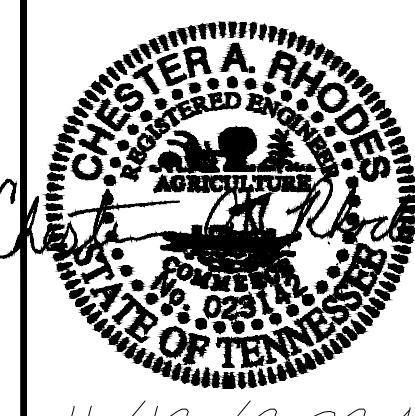
- DESIGN CRITERIA - IBC 2018**
1. Design loads per ASCE 7-10 & 7-16
 2. Structural concrete - ACI 318
 3. Code requirement for steel - AISC 360
 4. Roof live load = 20 PSF
Dead load = 6 PSF
 5. Design wind speed = 150 MPH (3 sec. gust)
 6. Building category II
 7. Wind exposure category B
 8. Importance Factor = 1.0
 9. Ground snow load = 15 PSF

- MATERIAL SPECS.**
- | | |
|------------------|-------------------------------|
| Truss | - See Spec Sheet |
| Concrete | - 3000 PSI Minimum |
| Rebar | - Grade 60 Minimum |
| Structural Steel | - ASTM A36 Minimum |
| Wood - Purlins | #2 SYP Minimum |
| Bracing | #2 SYP Minimum |
| Posts | #2 SYP Minimum |
| Other | #2 SYP Minimum (Unless noted) |

- DRAINAGE NOTE**
1. Final grades must be sloped away from the building on all four sides.
 2. There is to be no standing water within 15' of the building on all four sides.
 3. There is to be one area of positive drainage away from the building provided with the final grade.

- CONSTRUCTION NOTE:**
1. 2x6 SYP Wall Girt @ 24" o.c.
 2. 6" Concrete Monolithic Slab with 16"x12" Turned Down Footer, and fiber reinforced concrete over 10 mil vapor barrier laid out on 4" free draining granulated gravel.
 3. 12" x #4 rebar doweled into the 6x6 post to key into the 4" Concrete slab, typical for each post.
Pressure Treated 2x6 skirt continuous
 4. Pour concrete around post (24" dia. on 6x6 posts). Concrete to be poured against undisturbed or firmly compacted earth. (Bagged Sakrete, or equivalent may be used. Must be mixed and placed wet.) Typical of all earth-embedded posts regardless of size.
 5. 1/2" Galvanized lag screws x 5" long with 2" projected into concrete (2 faces of post), typical.
 6. Compacted soil
 7. 6x6 SYP PT Post with a 24"Ø (Min.) x 3'-0" (Min.) Concrete Footer, typical of all perimeter 6x6 Posts
 8. 29 Ga. Metal Roof / Wall Panel unless noted otherwise.
 9. Layout Posts 1/2" from the edge of the turned down Concrete slab typical on each perimeter post.
 10. Slope grade away from building.
 11. (2) #4 x continuous rebar embedded 4" from bottom of footer @ 8" o.c.
 12. N.A.
 13. N.A.
 14. N.A.
 15. 50' Steel Truss with 4:12 pitch @ 10'-0" o.c
 16. (8) 14'x14' Un-insulated Garage Door
 17. 2x4 SYP PT Purlin @ 2'-0"± o.c.
 18. 40' Steel Truss with 1:12 pitch @ 10'-0" o.c.
 19. Ridge Cap
 20. N.A.
 21. Simpson-StrongTie Truss Anchor Model H2.5A
 22. (2) 2x12 SYP PT Truss Supports
 23. N.A.
 24. N.A.
 25. (8) 14'x14' Un-insulated Garage Door

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11/12/2024
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DATE	BY	CHKD	DESIGN	APPV

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DRAWN	
DESIGN	
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JUSTIN ROBINETTE
POLE BARN
301 CANAAN ROAD, MT PLEASANT, TN 38474
Floor Plan

DWG. No.
A-1.0

SCALE(S) NOTED

CADFILE	JOB No.	REV.

10 - 11 - 2023



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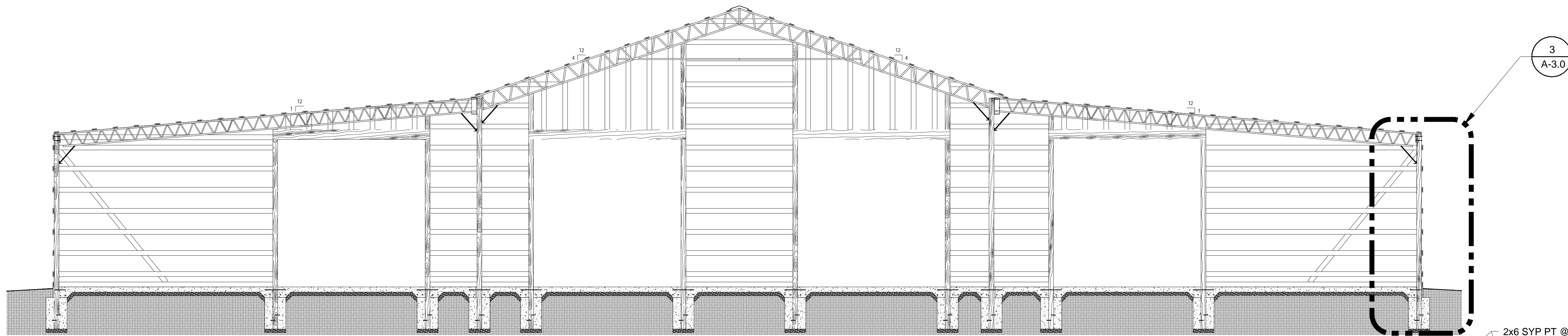
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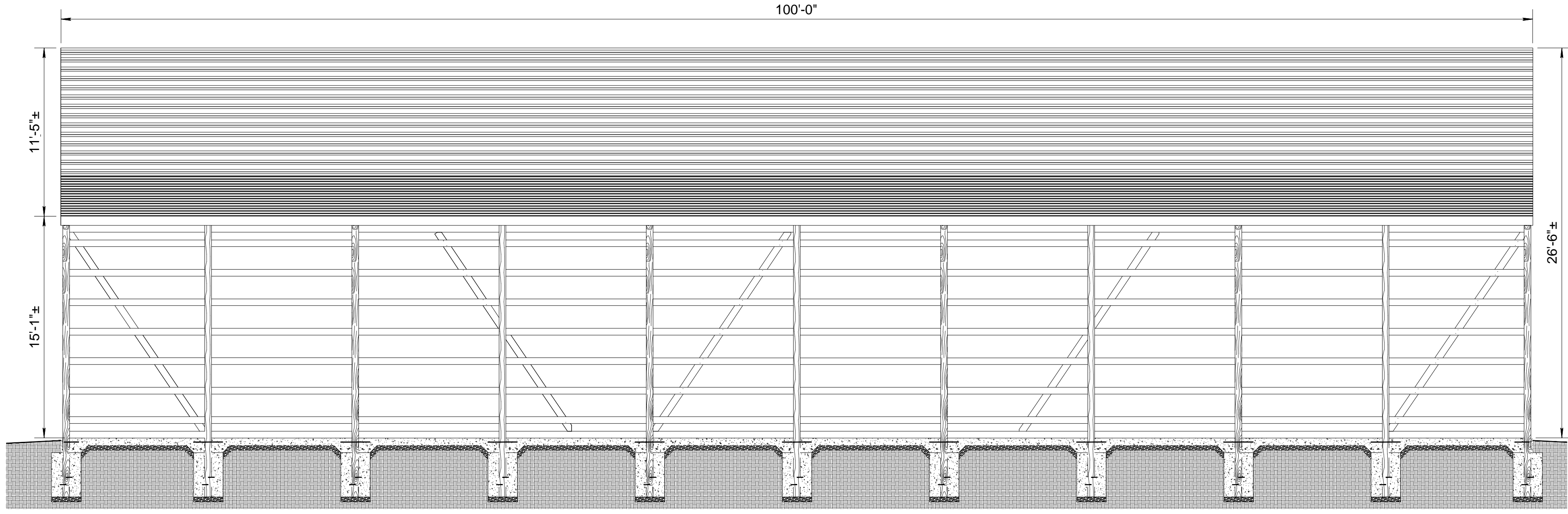
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 POLE BARN
 301 CANAAN ROAD, MT PLEASANT, TN 38474

FRAMING INTERIOR ELEVATIONS

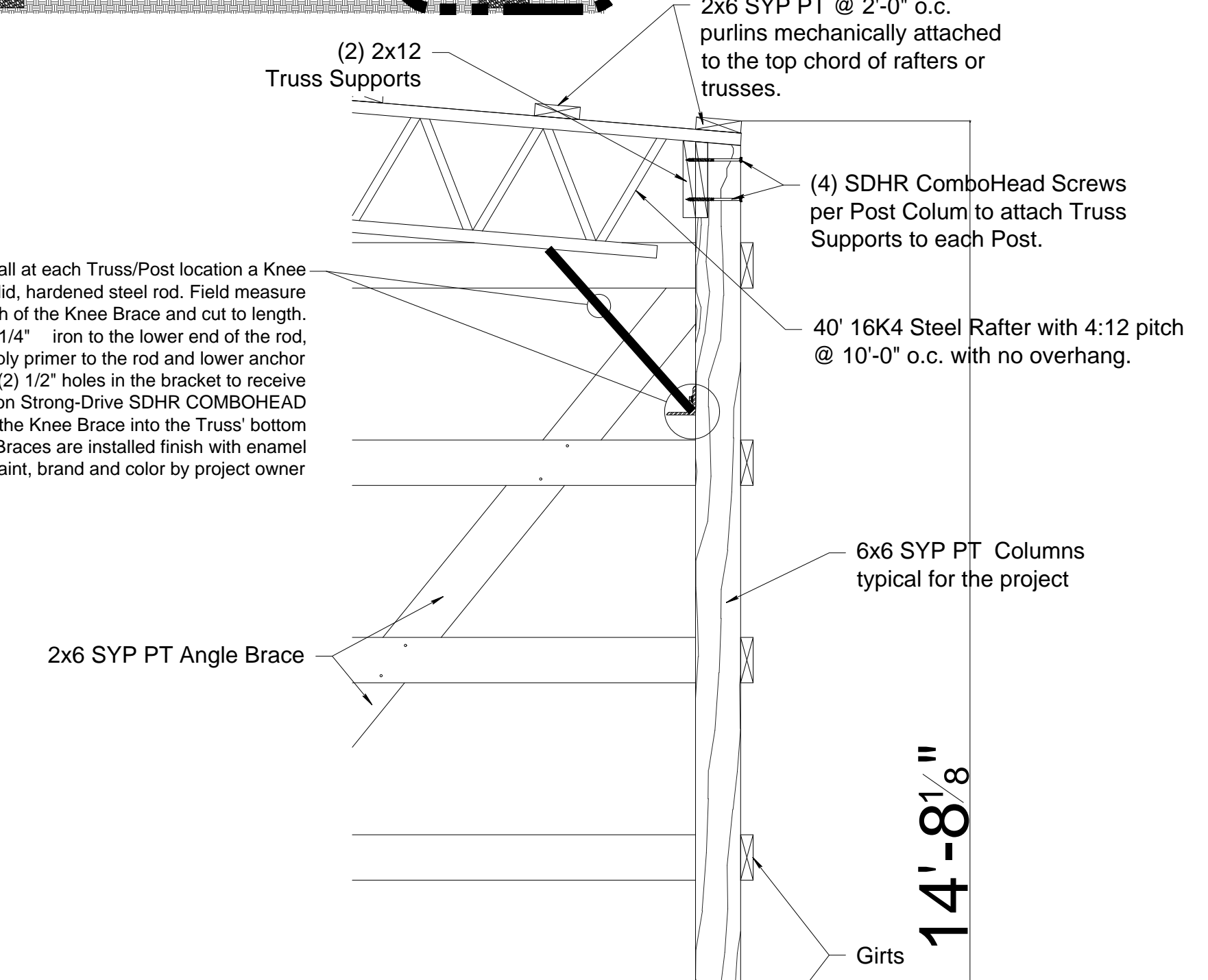


2 FRONT & REAR ELEVATIONS
 SCALE: 3/16" = 1'-0"



1 RIGHT & LEFT ELEVATIONS
 SCALE: 3/16" = 1'-0"

Contractor to install at each Truss/Post location a Knee Brace of 1"Ø solid, hardened steel rod. Field measure the applied length of the Knee Brace and cut to length. Field weld a 2"x2"x1/4" iron to the lower end of the rod, grind weld and apply primer to the rod and lower anchor bracket. Drill two (2) 1/2" holes in the bracket to receive two (2) 4" Simpson Strong-Drive SDHR COMBOHEAD Screw. First weld the Knee Brace into the Truss' bottom chord. After Knee Braces are installed finish with enamel paint, brand and color by project owner



(2) 2x12 Truss Supports
 2x6 SYP PT @ 2'-0" o.c. purlins mechanically attached to the top chord of rafters or trusses.
 (4) SDHR ComboHead Screws per Post Column to attach Truss Supports to each Post.
 40' 16K4 Steel Rafter with 4:12 pitch @ 10'-0" o.c. with no overhang.
 6x6 SYP PT Columns typical for the project
 Girts 14'-8 1/8"
 2x6 SYP PT Angle Brace
 2x6 SYP PT #2 or better @ 2'-0" o.c., typical of the project
 12"x4" rebar doweled into the 6x6 posts to key into the 6" Concrete slab, typical for each post.
 2x6 SYP PT Anti-Pest continuous guard at base of wall.
 (2) #4 x continuous rebar embedded 3" from bottom of footer @ 6" o.c.
 1/2" Galvanized lag screws x 5" long with 2" projected into concrete (2 opposing faces of post), typical.
 4" deep Granulated #57 x 3/4" gravel x 24" diameter
 Pour concrete around post (24" dia. on 6x6 posts). Concrete to be poured against undisturbed or firmly compacted earth. (Bagged Sakrete, or equivalent may be used. Must be mixed and placed wet.) Typical of all earth-embedded posts regardless of size.

3 COLUMN SECTION DETAIL
 SCALE: 3/4" = 1'-0"

- CONSTRUCTION BRACING BY CONTRACTOR AND SHALL MEET TRUSS MANUFACTURER'S RECOMMENDATIONS AND/OR REQUIREMENTS.
- DESIGN IS BASED ON COMPLETED BUILDING WITH ALL STRUCTURAL ELEMENTS IN PLACE.
- FABRICATION AND WELDING PER AISC AND AWS.
- STEEL TO BE ASTM A36 MINIMUM.
- CONCRETE TO BE 3000 PSI MINIMUM COMPRESSIVE STRENGTH.
- ASSUMED SOIL BEARING = 2000 PSF MINIMUM.
- SOIL FRICTION RESISTANCE TO VERTICAL LOAD OF 300 PSF IS APPLIED.
- CONTRACTOR TO VERIFY DIMENSIONS BEFORE CONSTRUCTION AND/OR ORDERING MATERIAL.
- PRESSURE TREATMENT OF WOOD TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF AWPA STANDARD C1 FOR THE INTENDED USE CATEGORY.
- FASTENERS INSTALLED WITH TREATED WOOD MUST BE MANUFACTURER RECOMMENDED FOR USE WITH THE ASSOCIATED WOOD TREATMENT.

- WHERE SOUTHERN YELLOW PINE (SYP) LUMBER IS SPECIFIED ON THIS DRAWING, SPF, DOUG FIR, OR HEM-FIR ARE ACCEPTABLE TO USE IF THE ALLOWABLE DESIGN STRESS VALUES MEET OR EXCEED THAT OF SYP FOR THE FOLLOWING:
 - BENDING (FB)
 - TENSION (FT) PARALLEL TO THE GRAIN
 - COMPRESSION (FC) PARALLEL TO THE GRAIN
- DESIGN CRITERIA - IBC 2012, 2015, & 2018**
- DESIGN LOADS PER ASCE 7-10 & 7-16
 - STRUCTURAL CONCRETE - ACI 318
 - CODE REQUIREMENT FOR STEEL - AISC 360
 - ROOF LIVE LOAD = 20 PSF
 - DEAD LOAD = 6 PSF
 - DESIGN WIND SPEED = 115 MPH (3 SEC. GUST)
 - BUILDING CATEGORY II
 - WIND EXPOSURE CATEGORY B
 - IMPORTANCE FACTOR = 1.0
 - GROUND SNOW LOAD = 15 PSF

MATERIAL SPECS.

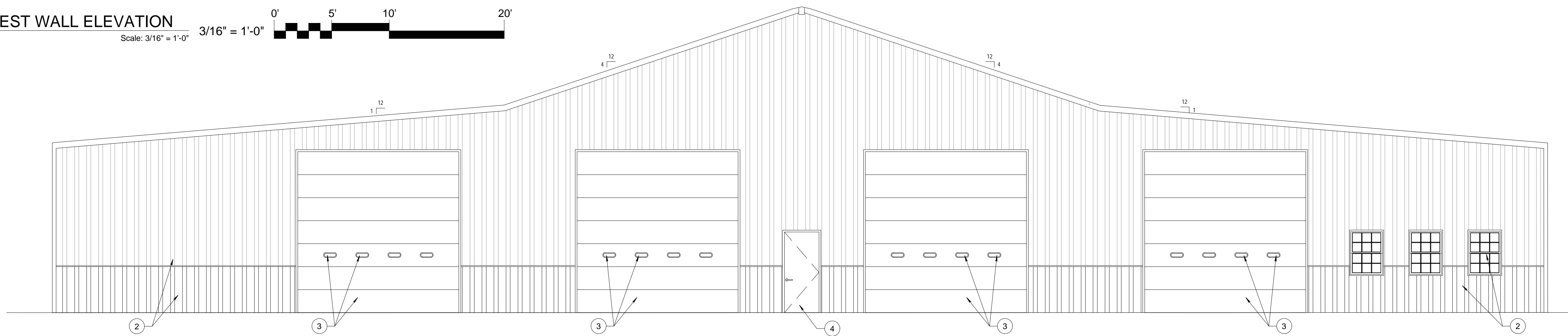
TRUSS	- SEE SPEC SHEET
CONCRETE	- 3000 PSI MINIMUM
REBAR	- GRADE 60 MINIMUM
STRUCTURAL STEEL	- ASTM A36 MINIMUM
WOOD - PURLINS	#2 SYP MINIMUM
BRACING	#2 SYP MINIMUM
POSTS	#2 SYP MINIMUM
OTHER	#2 SYP MINIMUM (UNLESS NOTED)

DRAINAGE NOTE

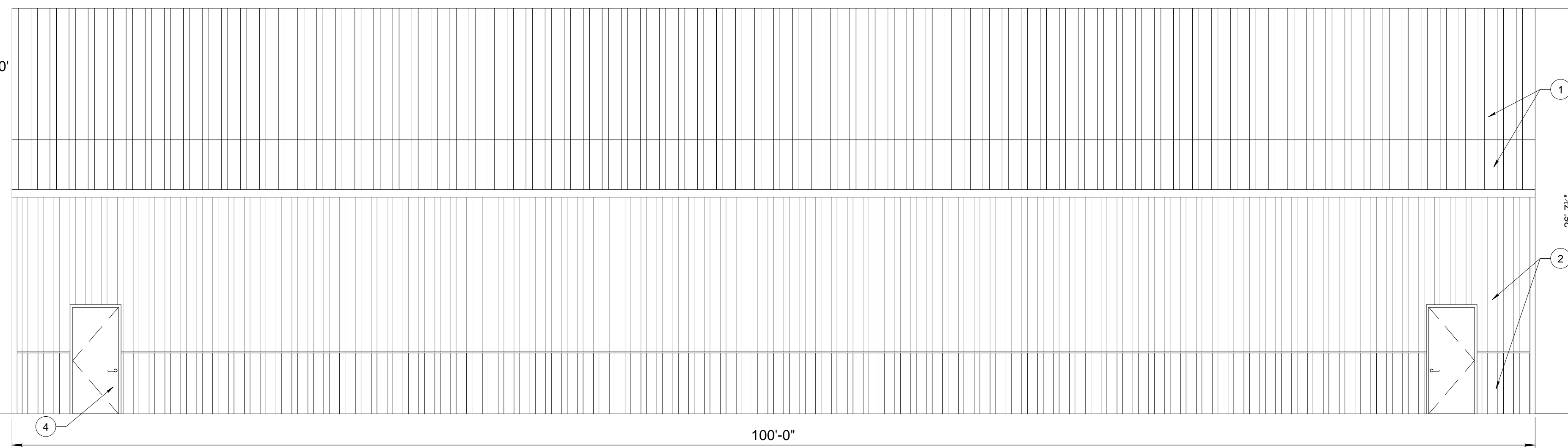
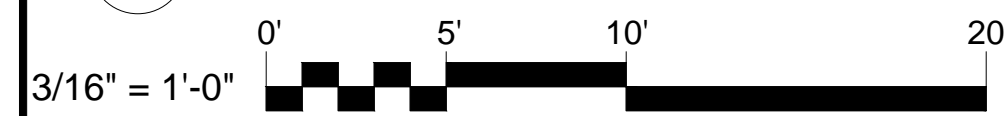
- FINAL GRADES MUST BE SLOPED AWAY FROM THE BUILDING ON ALL FOUR SIDES.
- THERE IS TO BE NO STANDING WITHIN 15' OF THE BUILDING ON ALL FOUR SIDES.
- THERE IS TO BE ONE AREA OF POSITIVE DRAINAGE AWAY FROM THE BUILDING PROVIDED WITH THE FINAL GRADE.

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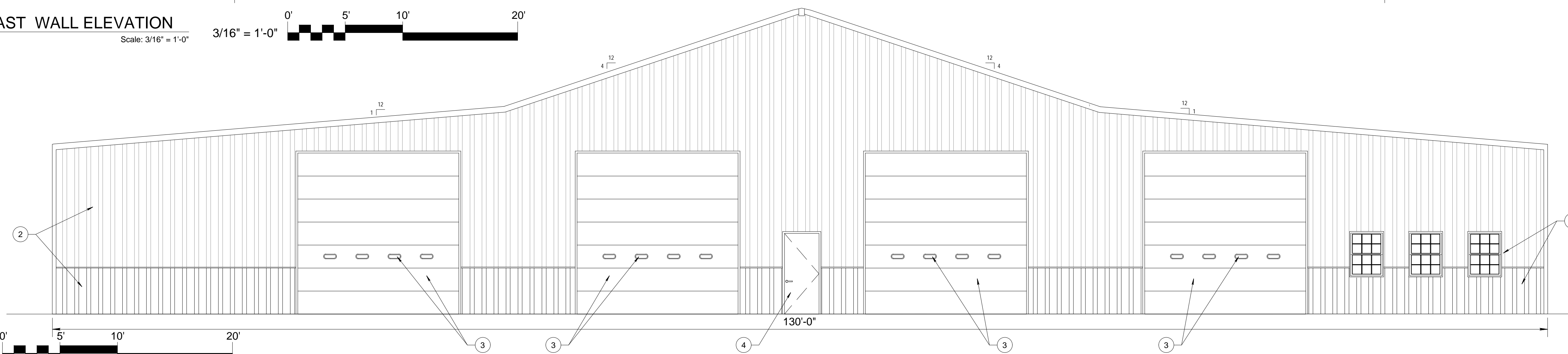
4 WEST WALL ELEVATION
Scale: 3/16" = 1'-0"



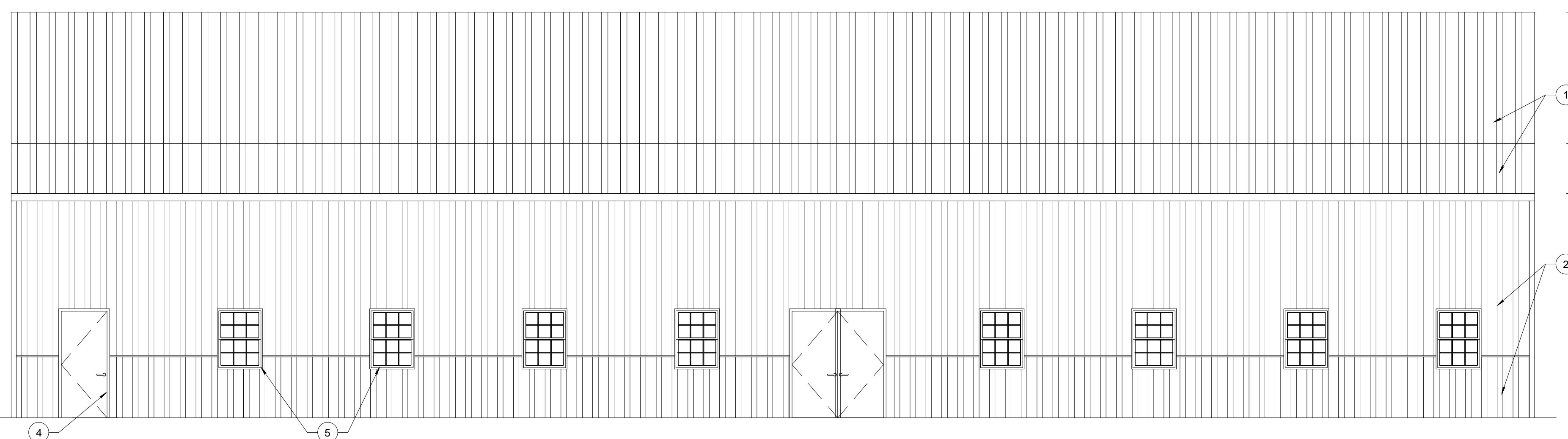
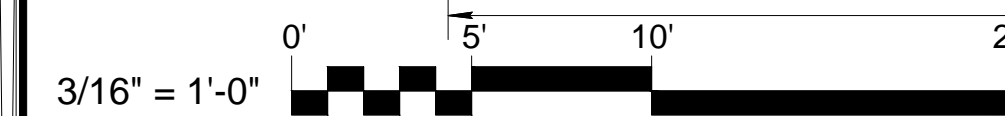
3 NORTH WALL ELEVATION
Scale: 3/16" = 1'-0"



2 EAST WALL ELEVATION
Scale: 3/16" = 1'-0"



1 SOUTH WALL ELEVATION
Scale: 3/16" = 1'-0"



- NOTES:**
- 29 GAUGE PRE-FINISHED STEEL ROOF PANEL 2' WIDE BY LENGTH, COLOR AND STYLE CHOICE BY OWNER.
 - 29 GAUGE PRE-FINISHED STEEL WALL PANEL 2' WIDE BY LENGTH, COLOR AND STYLE CHOICE BY OWNER.
 - 14'X14' GARAGE DOOR WITH NARROW GLASS WINDOWS @ 5' HEIGHT; DOOR LIFT STYLE, COLOR, AND INSULATION CHOICES BY OWNER.
 - 3rd STEEL DOOR
 - 3rd VINYL CLAD DOUBLE HUNG WINDOWS

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- Roof Peak Elevation 26'-8"±
- Main Roof Eave Elevation 18'-0"±
- Lean-to Roof Eave Elevation 14'-9"±
- Finished Floor Elevation 0'-0"

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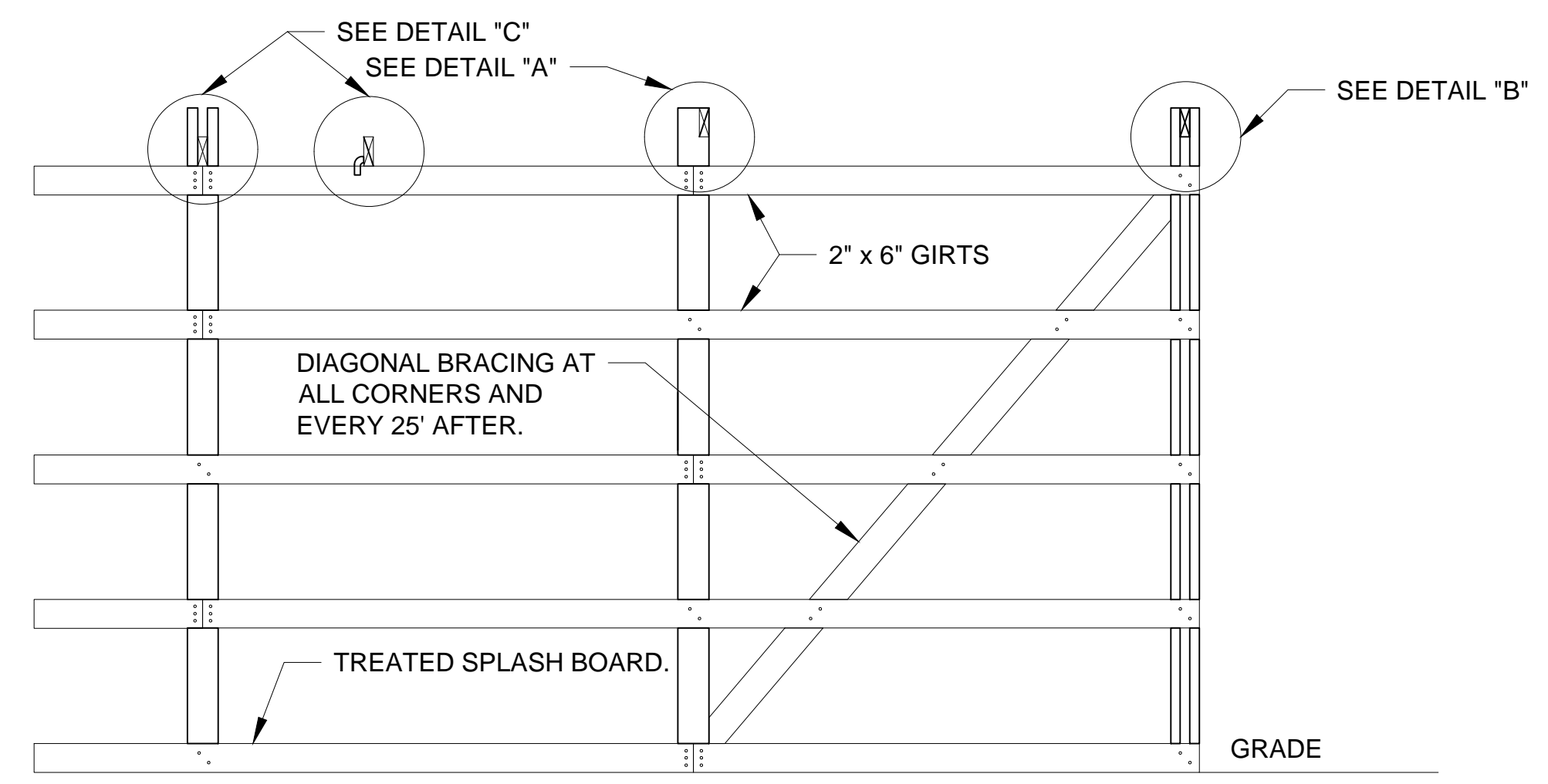
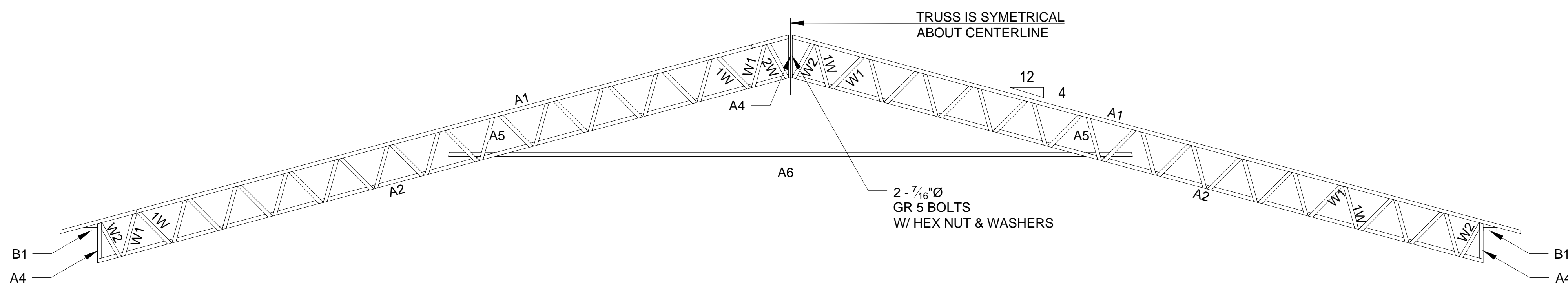
ELEVATIONS

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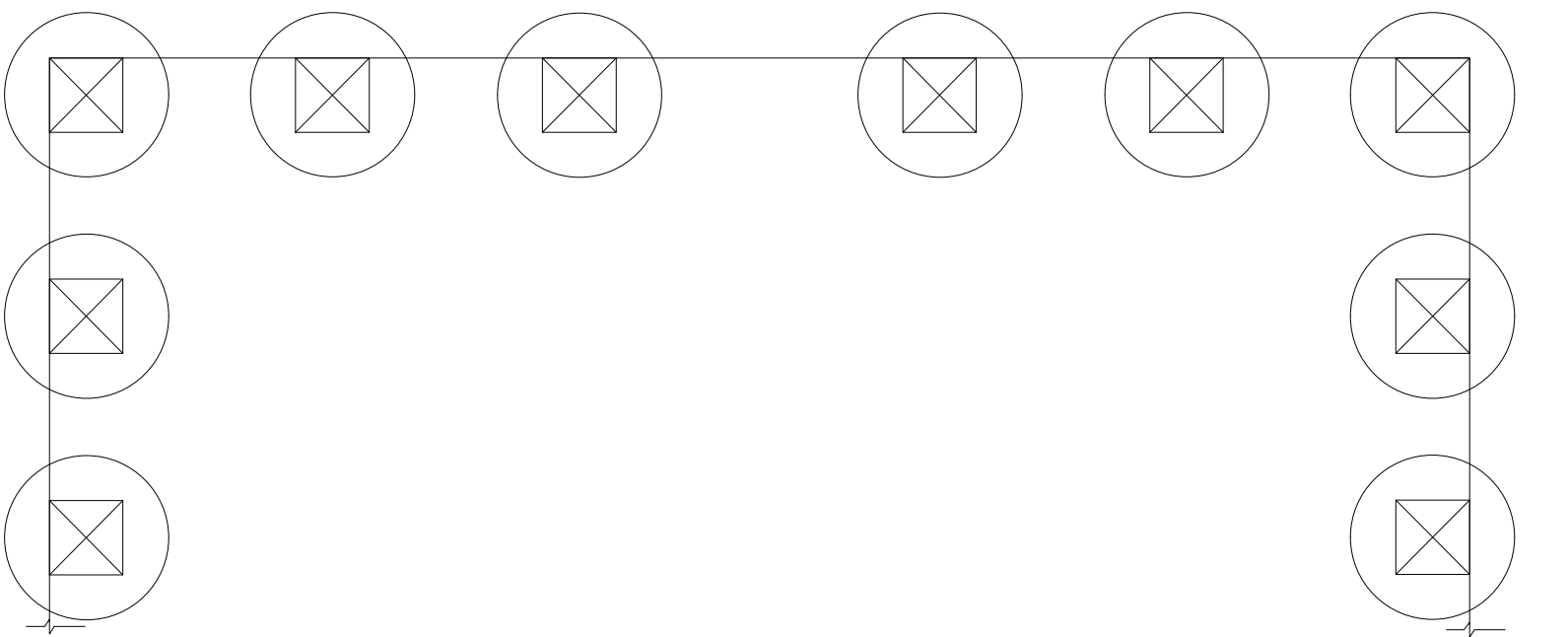
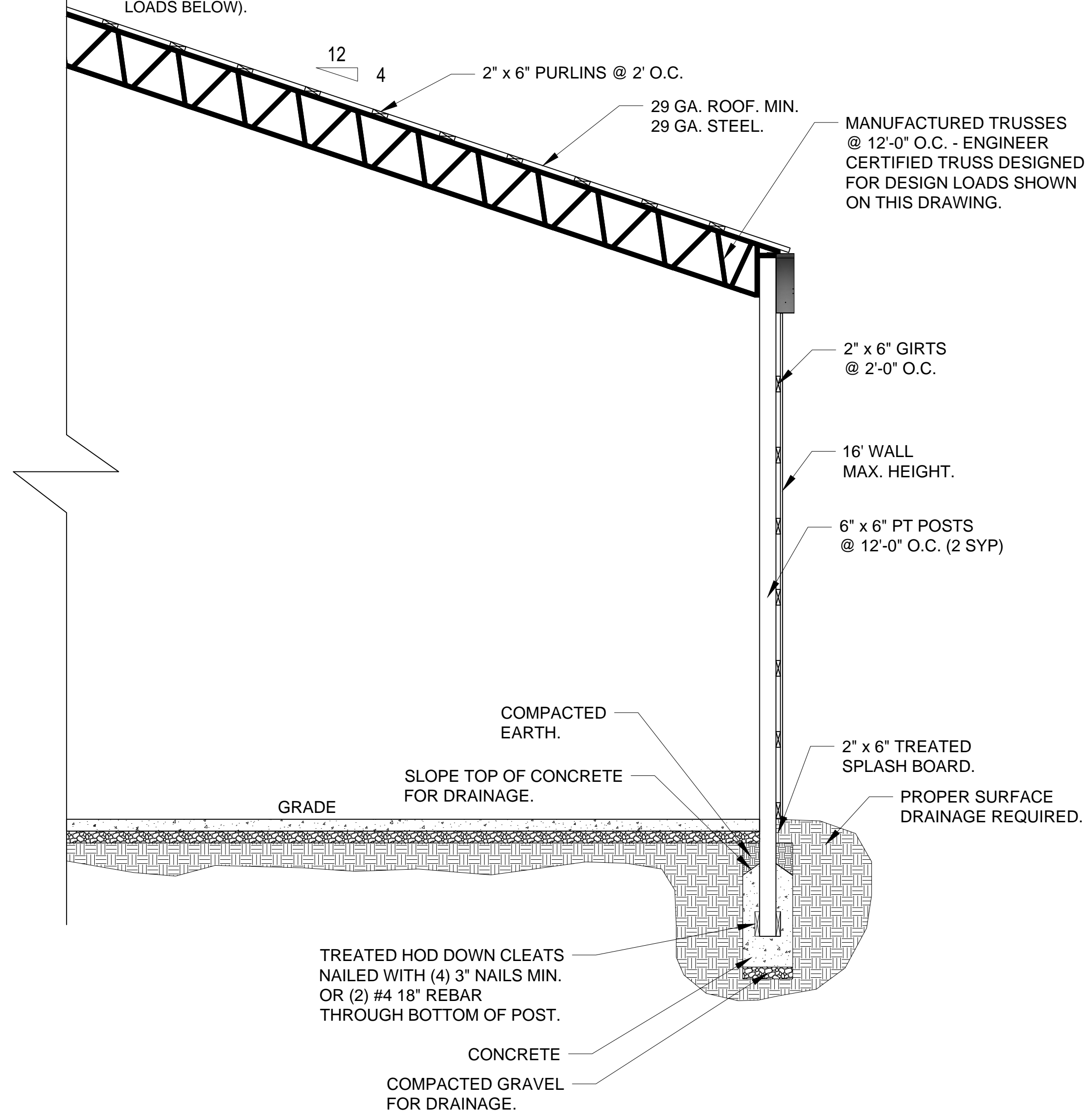
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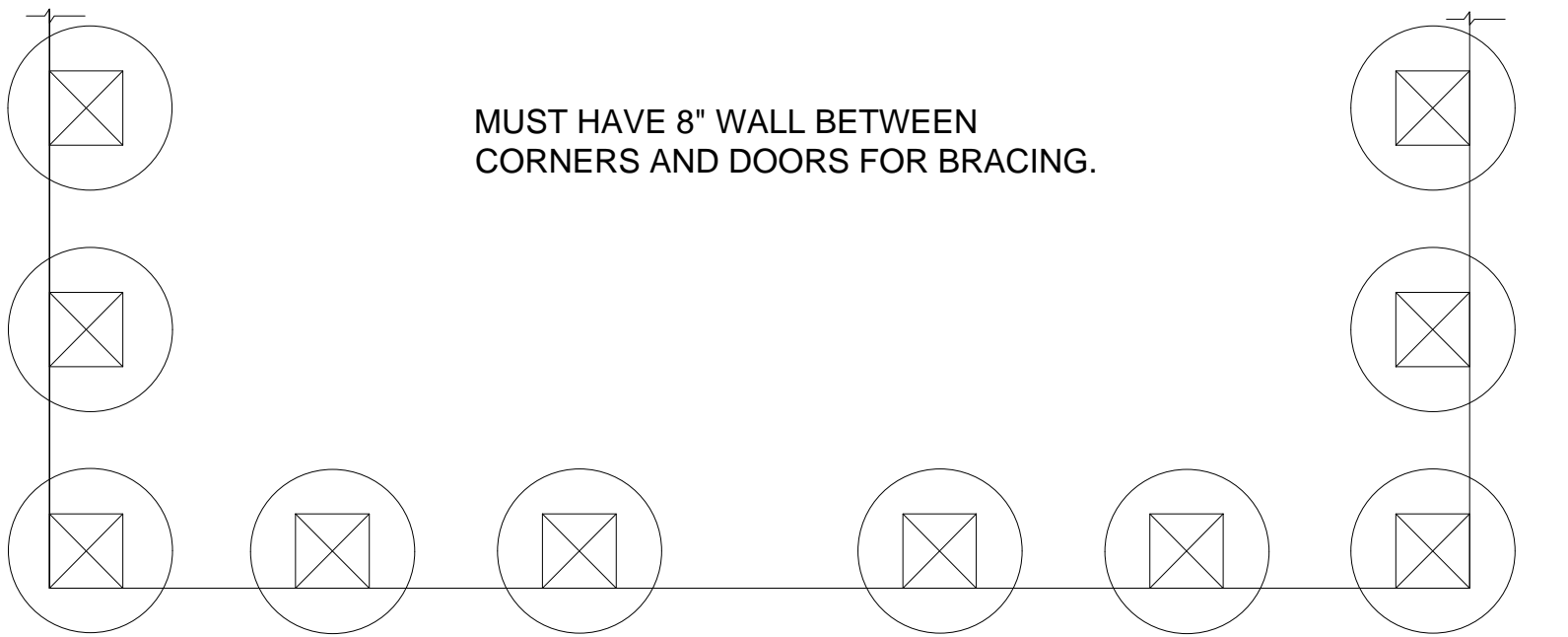
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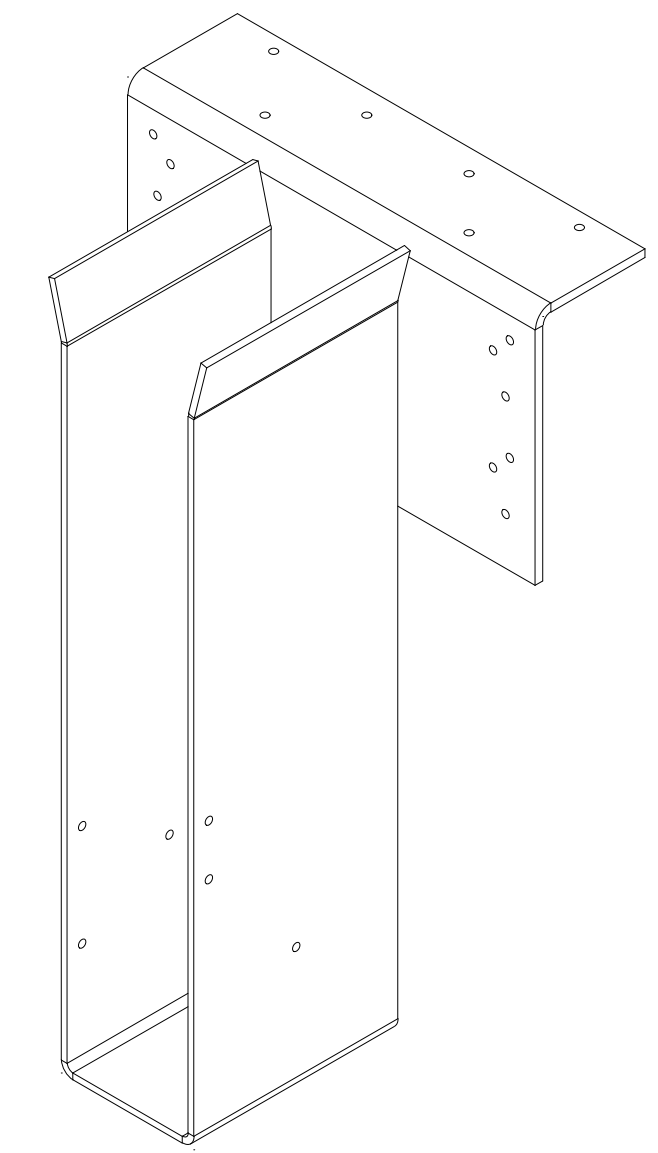
-- THIS DESIGN MAY ALSO BE USED FOR TRUSS LENGTHS SHORTER THAN 40 FEET WITH 4:12 ROOF SLOPE.
 -- THIS DESIGN AND CONFIGURATION MAY BE USED FOR A 24 FT SPAN TRUSS TO PROVIDE A LARGER CAPACITY FOR SNOW LOAD (SEE SNOW LOADS BELOW).



BUILDING LENGTH VARIES.



- USE ALL SPECIFIED FASTENERS. VERIFY THAT THE HEADER CAN TAKE THE REQUIRED FASTENERS SPECIFIED IN THE TABLE. FOR ATTACHING TO MULTI-PLY HEADERS, REFER TO TECHNICAL BULLETIN TOP-FLANGE HANGER REDUCTIONS FOR MULTIPLE-PLY HEADERS (T-C-MPLYHEADR).
- FLATTEN EDGE OF HEADER TO MATCH TOP-FLANGE RADIUS. BEVEL-CUT THE CARRIED BEAM FOR SKEWED HANGERS.
- FOR HANGERS EXCEEDING THE JOIST HEIGHT BY MORE THAN 1/2", ALLOWABLE LOAD IS 50% OF THE TABLE LOAD.
- MAY BE USED FOR WELD-ON APPLICATIONS. MINIMUM REQUIRED WELD IS A 1/4" X 2 1/2" FILLET WELD AT EACH END OF THE TOP FLANGE; SEE GENERAL INSTRUCTIONS FOR THE INSTALLER, NOTE K, FOR WELD INFORMATION. WELD-ON APPLICATIONS PRODUCE MAXIMUM LOADS LISTED. FOR UPLIFT LOADS, REFER TO TECHNICAL BULLETIN TOP-FLANGE HANGERS WELDED TO STRUCTURAL STEEL MEMBERS (T-C-WELDUPFLT).
- MAY BE INSTALLED ON LEDGERS PROVIDED THE LEDGERS ARE MADE OF 4X SOLID SAWN OR 3 1/2" SCL SHOWN IN THE TABLE BELOW. THINNER LEDGERS MUST BE EVALUATED BY THE BUILDING DESIGNER.



1 HGLTV3.520 & HGLTV3.518X SIMPSON STRONG-TIE HGLTV HEAVY TOP-FLANGE JOIST HANGER
 SCALE: 3" = 1'-0"

NOTES: GIRTS 2' O.C. FOR POTENTIAL HOUSE / 3' O.C. ALLOWED FOR BARN OR SHOP ALL COLUMN PADS MUST BE FREE FROM STANDING WATER AT ALL TIMES. FINAL GRADES AROUND BARN MUST DRAIN STORMWATER AWAY FROM STRUCTURE ON ALL 4 SIDES.

BILL OF MATERIALS

MARK	DESCRIPTION	LENGTH	NUMBER REQUIRED	MATERIAL
A1	TOP CHORD	L 1 1/2 x 1 1/2 x 3/16	2	A36
A2	BOTTOM CHORD	L 1 1/2 x 1 1/2 x 3/16	2	A36
A4	VERTICAL END	L 1 1/2 x 1 1/2 x 3/16	4	A36
A5	TIE	L 1 1/4 x 1 1/4 x 1/8	2	A36
A6	TIE	L 1 1/4 x 1 1/4 x 1/8	1	A36
W1	WEB	L 1 1/4 x 1 1/4 x 1/8	38	A36
W2	WEB	L 1 1/4 x 1 1/4 x 1/8	4	A36
B1	BASE	L 1 1/2 x 1 1/2 x 3/16	2	A36

NOTES:

1. PURLINS TO BE # 2 SYP. MINIMUM 2x6 AND SPACED AT A MAXIMUM 2'-0" O.C., UNLESS NOTED.
2. 12 FT TRUSS SPACING NOT ALLOWED FOR 30 PSF GROUND SNOW LOAD.
3. INCREASE IN ALLOWABLE STRESS FOR WIND LOADING HAS BEEN USED.
4. MEMBER DIMENSIONS ARE TO BE ADJUSTED FOR SHORTER TRUSS LENGTHS.
5. WEB CONFIGURATIONS AND PURLINS MAY VARY BUT MAINTAIN MAXIMUM 2'-0" SPACING.
6. CONTRACTOR RESPONSIBLE FOR TEMPORARY CONSTRUCTION & PERMANENT BRACING.
7. FABRICATOR SHALL VERIFY DIMENSIONS BEFORE CUTTING AND/OR FABRICATING TRUSS.
8. FABRICATION AND WELDING PER AISC AND AWS.
9. DESIGN IS FOR TRUSS ONLY.

DESIGN LOADS

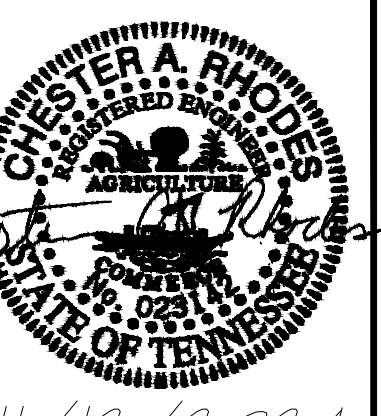
(APPLIED PER INTERNATIONAL BUILDING CODE (IBC) 2009)
TRUSS SPACING = 12' LIVE LOAD = 20 PSF DEAD LOAD = 2 PSF
TRUSS SPACING = 12' LIVE LOAD = 20 PSF DEAD LOAD = 6 PSF
TRUSS SPACING = 8' LIVE LOAD = 20 PSF DEAD LOAD = 10 PSF

WIND LOAD = 90 MPH (IBC 2009)
WIND LOAD = 115 MPH (IBC 2012)
SNOW LOADS = 15 PSF GROUND SNOW LOAD (FOR 40 FT TRUSS)
SNOW LOADS = 30 PSF GROUND SNOW LOAD (FOR 24 FT TRUSS)

ENGINEER MUST APPROVE PAD, LOCATION OF PAD, AND DRAINAGE AROUND POLE BARN AFTER CONSTRUCTION. NO WATER IS TO DRAIN TOWARD FINISHED STRUCTURE.

(8' AND 10' TRUSS SPANS ONLY)

40' X 60' & 36' X 40' TRUSS PLANS



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JUSTIN ROBINETTE
 POLE BARN
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 TRUSS DETAILS

DWG. No. **A-3.2**

SCALE(S) NOTED

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