

ZONE 3

ZONE 2

ZONE 1

ZONE 1

ZONE 2

ZONE 3

WIND PRESSURE - COMPONENTS & CLADDING

WIND EXPOSURE CATEGORY

☒ X

☐ B

☐ C

☐ D

LEAN BUILDING DIMENSIONS

D-5

LEAN WIDTH (FT)	6"X6" POST	8"X8" POST
☒ 24	☒ 23'-6 ^{1/2"}	22'-8"
22	21'-6"	20'-8"
20	19'-6"	18'-8"
18	17'-1"	16'-8"
16	15'-6 ^{1/2"}	15'-6 ^{1/2"}
14	13'-1"	12'-8"
12	11'-6 ^{1/2"}	10'-8"
10	9'-1"	8'-8"
8	7'-1"	6'-8"

ULTIMATE & NOMINAL WIND SPEEDS

ULTIMATE	NOMINAL
120	93
☒ 130	☒ 101
140	☒ 108
150	116
155	120
160	124

DESIGN CRITERIA:

FLORIDA BUILDING CODE 2023 8TH ED.

DESIGN LOADS PER ASCE 7-22

DESIGN SPEED - 130 MPH

ROOF LIVE LOAD - 12.5 PSF

DEAD LOAD - 2.5 PSF

WIND RISK CATEGORY - I

EXPOSURE CATEGORY - B

IMPORTANCE FACTOR - 1.0

INTERNAL WIND PRESSURE - +/- 0.18 PSI

POLE BARN SPECIFICATIONS

GABLE WIDTH : 24'

BUILDING LENGTH : 40'

EAVE HEIGHT : 10'

POLE SPACING : 10'

ROOF PITCH : 1:12

WALLS : OPEN

FLOOR : CONCRETE

ROOF METAL : 29 GA.

SIDE METAL : NONE

POST SIZE : 6"X 6" PT

FOOTING SIZE : 18"X48"

CONCRETE : 3,000 PSI

POST FOOTING SIZE

☒ F-1

☐ 18" DIA. X 48" DEEP

☐ F-2

☐ 24" DIA. X 48" DEEP

ROOF PITCH

☒ 1:12

☐ 4/14

☐ 5/12

☐ 6/12

METAL ROOF

26 GA

☒ 29 GA

POST HEIGHT (D-6)

SIZE CIRCLED OR LESS

OTHER

☒ 10'

☐ 12'

☐ 14'

☐ 16'

☐

POST SPACING D-2 (FT)

☐ 8

☒ 10

☐ 12

POST SIZE

☒ 6"X6"

☐ 8"X8"

☐ 12"X12"



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269 NE Ridge Loop
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Phone 850.973.7864
COA No.: 27216 www.madisonengineer.com

POLE BARN - 24' X 40' LT
ABT TRUSSES
LARRY HICKS (24X40)

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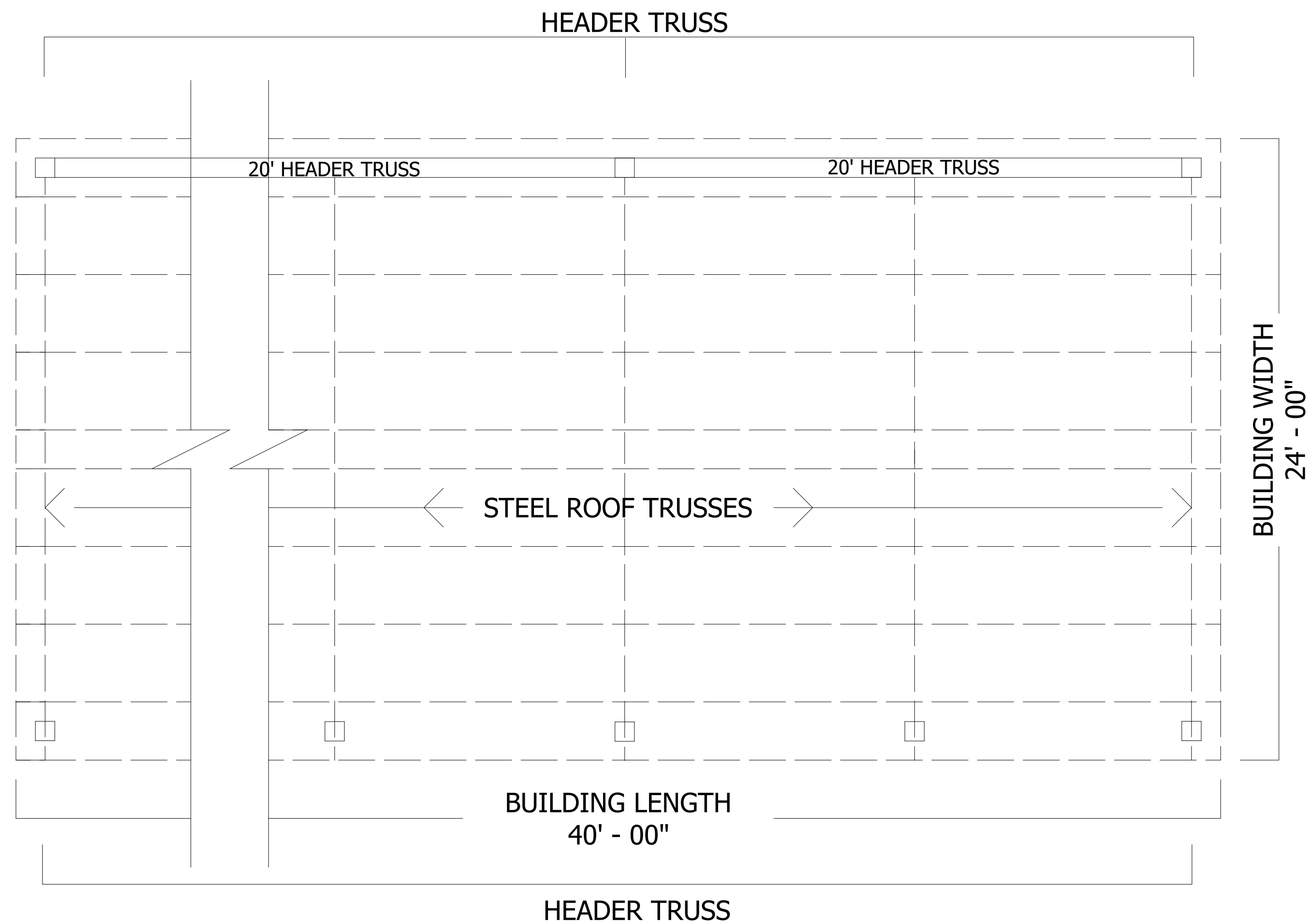
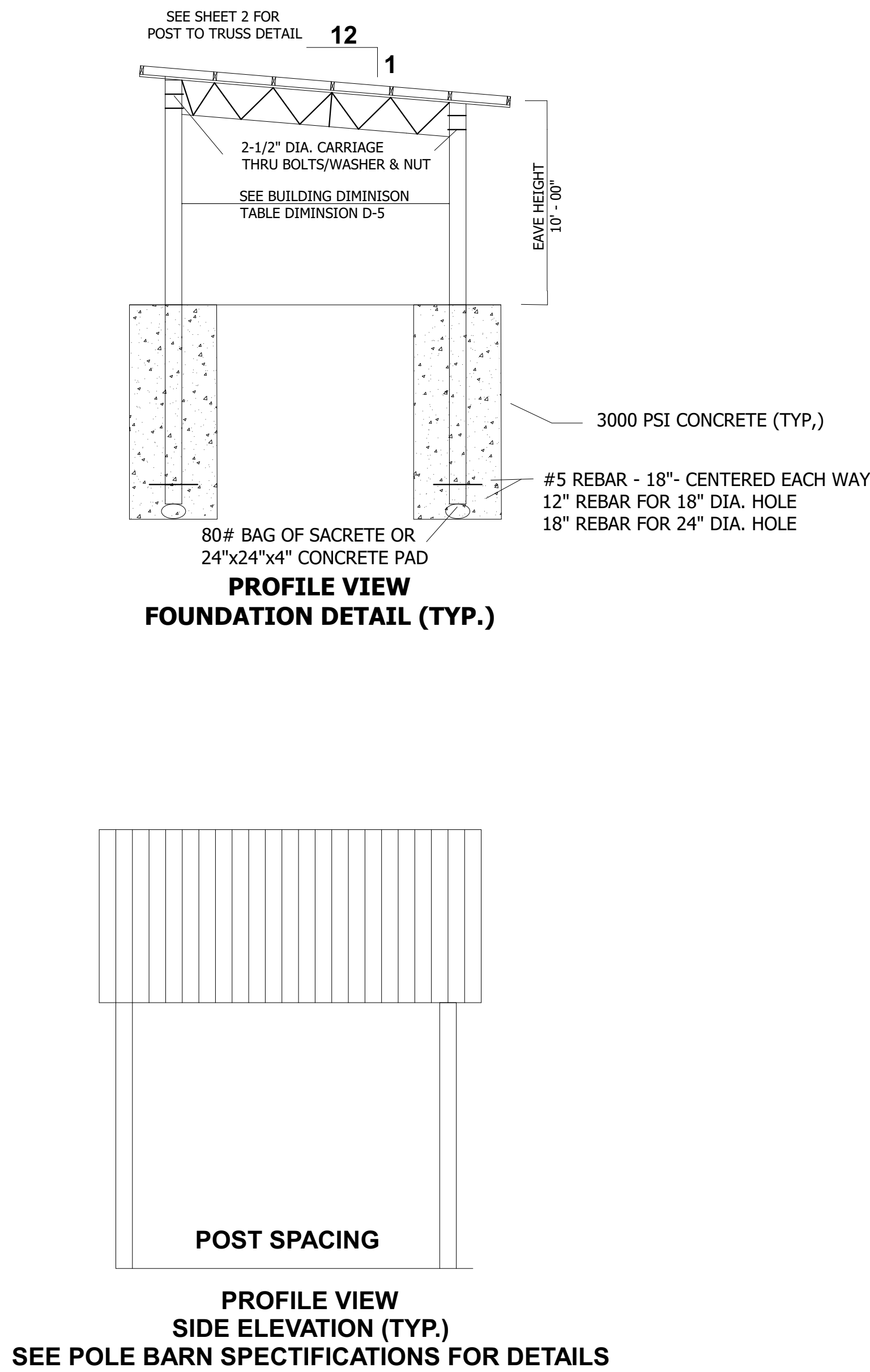
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T. BRENT WHITMAN, P.E.
FL. P.E. REG. NO. 63178

SHEET NO.

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ALACHUA COUNTY
JOB NO.: 35225117
DATE: 10 FEBRUARY 2025



NOTES:

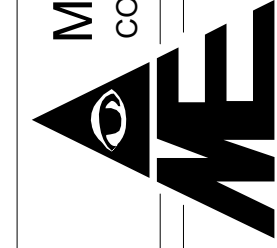
1. PURLINS SHALL BE 2X6 #2 SYP (MAX SPACE @2'-0" O.C.)
2. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY & PERMANENT CONSTRUCTION BRACING.
3. ALL DEMINSIONS SHALL BE VERIFIED PRIOR TO FABRICATION.
4. ALL WELD PER AWS STANDARDS.
5. ALL STELL AND FABRICATION PER ASCI STANDARDS.
7. ITEM DEMINSIONS ARE TO BE MODIFIED FOR SHORTER TRUSS LENGTHS.
8. ALL FASTNERS SHALL BE INSTALLED PER MANUFACTURES SPECIFICATIONS.
9. TRUSS DESIGN CAN BE USED FOR TRUSS LENGTHS SHORTER THAN 25 FEET.
10. CONCRETE WORK SHALL CONFORM TO 'BUILDING CODE REQUIRMENTS FOR REINFORCED CONCRETE' (ACI-318).
11. ALL CONCRETE SHALL BE 3000 PSI MIN. W/ WWF OR FIBER
12. FL PRODUCT APPROVAL CODE ROOF SYSTEM 36904.1



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POLE BARN - 24 X 40 LT
ABT TRUSSES

LARRY HICKS (24X40)

133 SW MARYNIE DR, HIGH SPRINGS, FL 32643

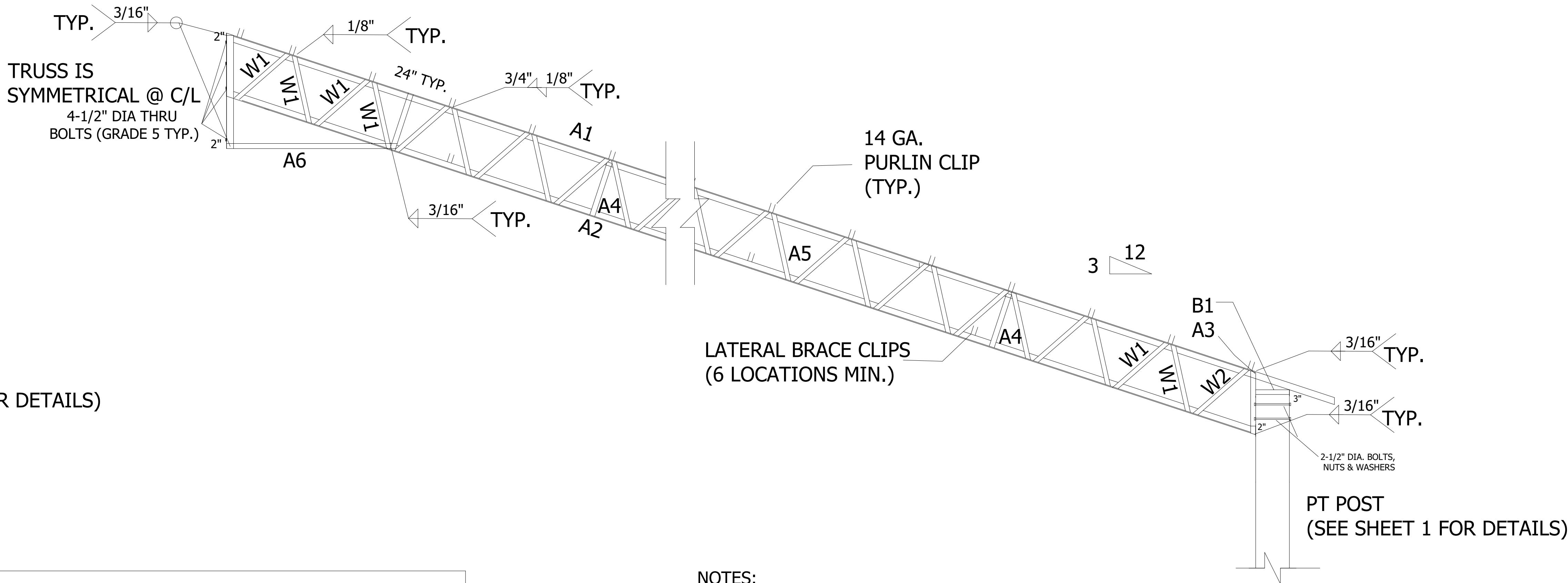
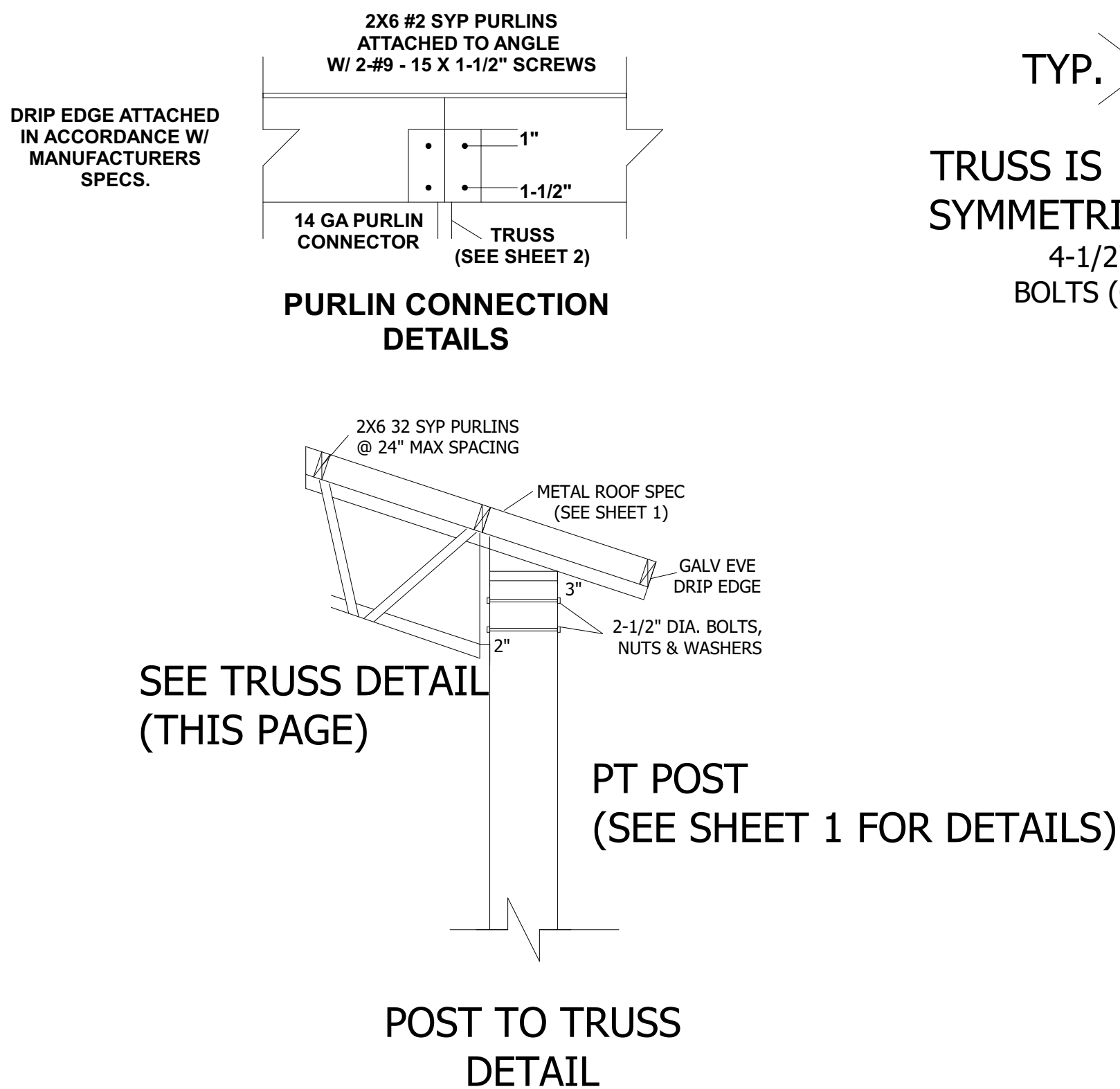
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NOTES: TRUSS CROSS-SECTION

- 1- MATERIALS SHALL CONFORM TO STEEL ASTM 572.
- 2- ALL STEEL SHALL BE 50ksi IN ACCORD WITH CURRENT AISC MANUAL.
- 3- WELDING ELECTRODES SHALL BE TYPE E70XX
- 4- ALL WELDING SHALL BE IN ACCORD WITH CURRENT AWS REQUIREMENTS
- 5- ALL WELDING SHALL BE DONE BY A CERTIFIED WELDER.
- 6- BOL TS SHALL BE ASTM A325. w/ NUTS & WASHERS. TYP)
- 7- WELD STRENGTH 70 KSI MIN:
- 8- ALL POST SHALL BE #2 DENSE PRESSURE TREATED GROUND CONTACT.
- 9- PRIMING & PAINTING SHALL BE DONE BY TRUSS MANUFACTURER.
- 10- MIN EDGE DISTANCE FOR BOLTS HOLES SHALL BE 3/4" MIN
- 11- MAX TRUSS SPACING SHALL NOT EXCEED 12'-0" UNO.
- 12-THE DESIGNER DISCLAMS ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF POOR WORKMANSHIP, OR IMPROPER USE, AND ACCEPTS NO RESPONSIBIL TY OR EXERCISES NO CONTROL WITH REGUARD TO FABRICATION, HANDLING, AND INSTALLATION OF TRUSSES.

NOTES:

1. PURLINS SHALL BE 2X6 #2 SYP (MAX SPACE @2'-0" O.C.)
2. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY & PERMANENT CONSTRUCTION BRACING.
3. ALL DEMINSIONS SHALL BE VERIFIED PRIOR TO FABRICATION.
4. ALL WELD PER AWS STANDARDS.
5. ALL STELL AND FABRICATION PER ASCI STANDARDS.
7. ITEM DEMINSIONS ARE TO BE MODIFIED FOR SHORTER TRUSS LENGTHS.
8. ALL FASTNERS SHALL BE INSTALLED PER MANUFACTURES SPECIFICATIONS.
9. TRUSS DESIGN CAN BE USED FOR TRUSS LENGTHS SHORTER THAN 50 FEET.
10. WELDING ELECTRODES SHALL BE E70XX
11. ALL WELDS SHALL BE IN ACCORDANCE WITH AWS REQUIRMENTS.
12. ALL POST SHALL BE #2 DENSE PRESSURE TREATED.

BILL OF MATERIALS

ITEM NO.	DESCRIPTION	MATERIAL (50 KSI)
A1	TOP CHORD	LL 2 X 2 X 3/16*
A2	BOTTOM CHORD	LL 2 X 2 X 3/16*
A3	VERTICAL CHORD	LL 3 X 2 X 3/8*
A4	VERTICAL CHORD	L 1 1/2 X 1 1/2 X 3/16
A5	TIE	L 2 X 2 X 3/16
A6	TIE	L 3 X 2 X 3/16
W1	WEB	L 1-1/4 X 1-1/2 X 3/16
W2	WEB	L 1-1/4 X 1-1/2 X 3/16
B1	BASE	LL 2 X 2 X 3/16*

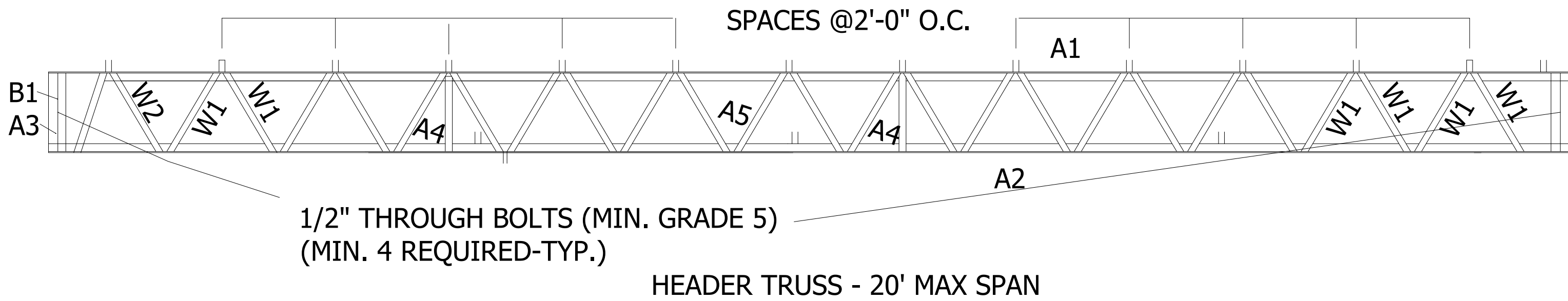
NOTE: LL * DENOTES DOUBLE ANGELS



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DRAWN			ALACHUA COUNTY		
MADISON ENGINEERING, LLC CONSULTING CIVIL & ENVIRONMENTAL ENGINEERING					
269 NE Ridge Loop Madison, Florida 32340 Phone: 904.680.1544 Fax: 904.680.1545 www.madisonengineer.com COA No. 27216					
POLE BARN - 24' X 40' LT APT TRUSSES					
LARRY HICKS (24X40)					
133 SW MARYK DR. HIGH SPRINGS, FL 32643					
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BILL OF MATERIALS

ITEM NO.	DESCRIPTION		LENGTH	NUMBER REQUIRED	MATERIAL
A1	TOP CHORD	LL 2 X 2 X 3/16*	26'3 1/2"	2	50 KSI
A2	BOTTOM CHORD	LL 2 X 2 X 3/16*	26'3 1/2"	2	50 KSI
A3	VERTICAL CHORD	LL 2 X 2 X 3/16*	1'- 6"	4	50 KSI
A4	VERTICAL CHORD	L 1 1/2 X 1 1/2 X 3/16	1'- 6"	4	50 KSI
A5	TIE	L 1-1/2 X 1-1/2 X 3/16	4'-8"	2	A36
A6	TIE	L 1-1/2 X 1-1/2 X 3/16	25'-6"	1	A36
W1	WEB	L 1-1/4 X 1-1/4 X 3/16	1'-8"	48	A36
W2	WEB	L 1-1/4 X 1-1/4 X 3/16	1'-9 1/8"	2	A36
B1	BASE	LL 2 X 2 X 3/16*	5 1/2"	2	50 KSI

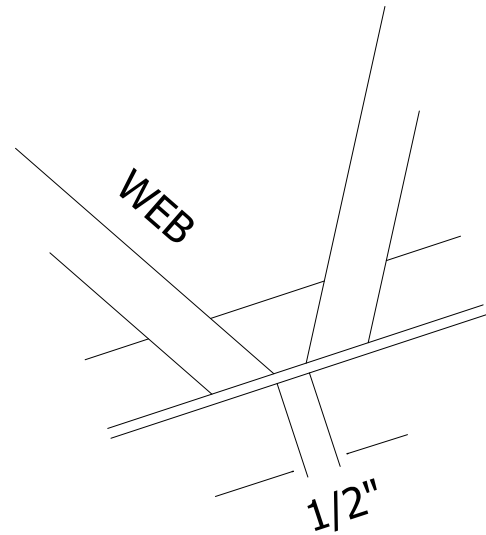
NOTE: LL * DENOTES DOUBLE ANGELS

DESIGN CRITERIA:

FLORIDA BUILDING CODE 7TH EDITION
DESIGN LOADS PER ASCW 7-16
ROOF LIVE LOAD - 20 PSF
DEAD LOAD
TRUSS SPACING @ 12' - DL = 6 PSF
TRUSS SPACING @ 10' - DL = 9 PSF
TRUSS SPACING @ 8' - DL = 12 PSF
DESIGN SPEED - 170 MPH
WIND RISK CATEGORY - I
EXPOSURE CATEGORY - D
IMPORTANCE FACTOR - 1.0

NOTES:

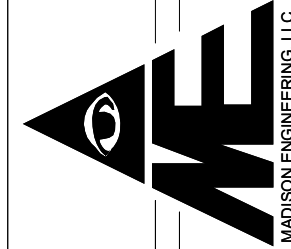
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- ALL FASTNERS SHALL BE INSTALLED PER MANUFACTURES SPECIFICATIONS.



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COA No.: 27216 www.madisonengineer.com

POLE BARN - 24 X 40 LT
ABT TRUSS

LARRY HICKS (24X40)

133 SW WARYNIK DR, HIGH SPRINGS, FL 32643

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DATE: 10 FEBRUARY 2025

ALACHUA COUNTY

GENERAL NOTES:

CONCRETE:

1. CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
2. ALL OPEN AREAS OF CONCRETE OUTSIDE OF THE PROPOSED STRUCTURE SHALL BE DESIGNED TO SLOPE AWAY FROM THE STRUCTURE.
3. WHERE CONCRETE SPECIFICATIONS ARE REQUIRED, BY ONE OR MORE REGULATORY AGENCY, THE FOLLOWING SPECIFICATIONS ARE APPLICABLE:
 - A. CONCRETE SHALL CONFORM TO ASTM C94 FOR THE FOLLOWING COMPONENTS:

I. PORTLAND CEMENT TYPE 1 - ASTM C 150

II AGGREGATES - LARGE AGGREGATE 3/4 MAX. - ASTM C 33

III. AIR ENTRAINING +/- 1 % - ASTM C 260

IV. WATER REDUCING AGENT - ASTM C 494

V. CLEAN POTABLE WATER

VI. OTHER ADMIXTURES NOT PERMITTED

B. CONCRETE SLUMP AT DISCHARGE CHUTE NOT LESS THAN 3" OR MORE THAN 5". WATER ADDED AFTER BATCHING IS NOT PERMITTED.

C. PREPARE & PLACE CONCRETE PER AMERICAN CONCRETE INSTITUTE MANUAL OF STANDARD PRACTICE, PART 1, 2, & 3 INCLUDING HOT WEATHER RECOMMENDATIONS.

D. MOIST CURE OR POLYETHYLENE CURING PERMITTED.

E. PRIOR TO PLACING CONCRETE, TREAT THE ENTIRE SUBSURFACE AREA FOR TERMITES IN COMPLIANCE WITH THE BUILDING CODE (FOR RISK CATEGORY II, III, & IV STRUCTURES ONLY).

F. CONCRETE SLAB SHALL BE PLACED OVER A POLYETHYLENE VAPOR BARRIER (SLAB ONLY).

REINFORCING STEEL:

1. THE REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. THE SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC MEETING ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT.

2. REINFORCEMENT MAY BE BENT IN THE FIELD OR SHOP AS LONG AS:

A. IT IS BENT COLD;

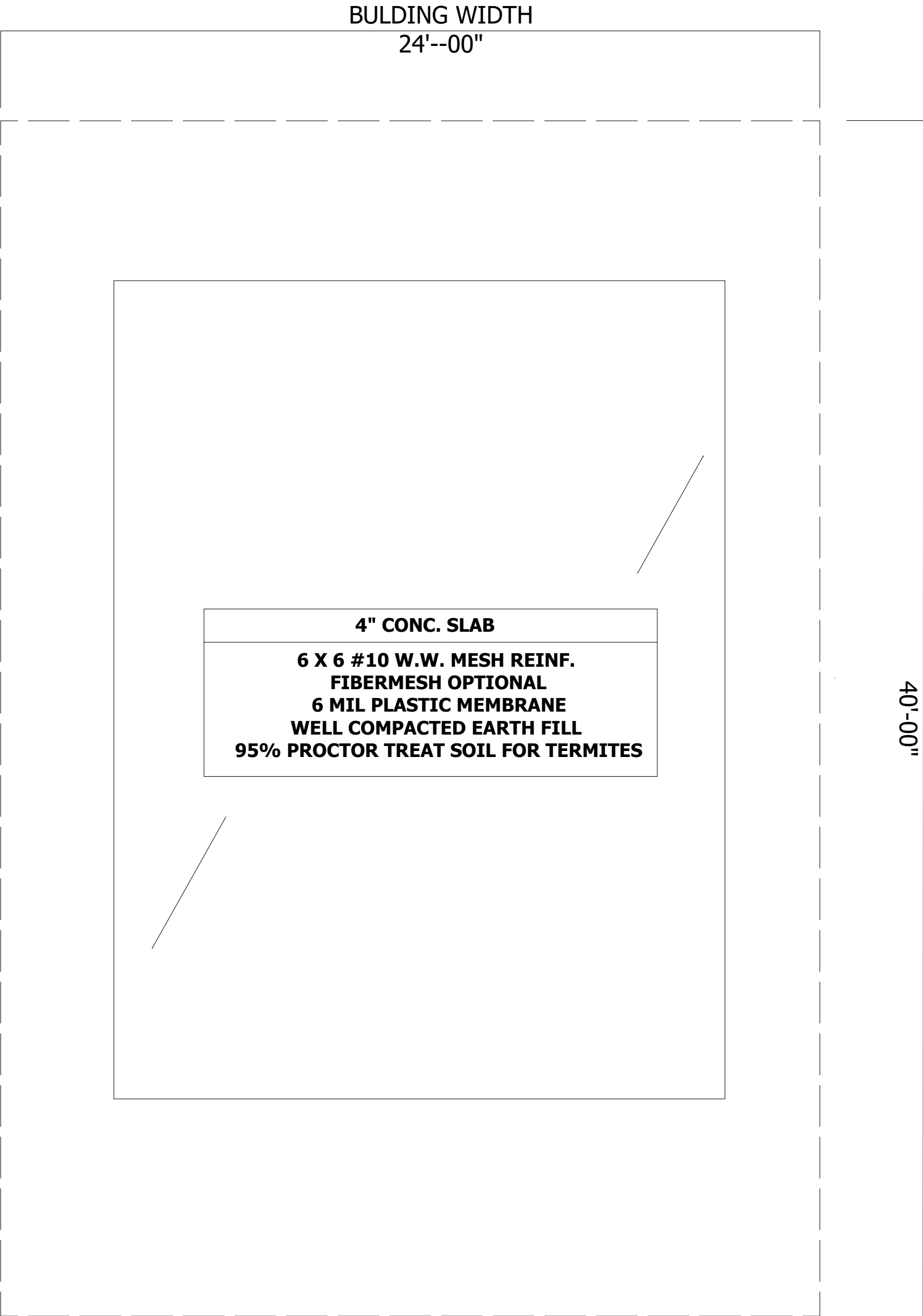
B. REINFRCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT;

C. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN SIX-BAR DIAMETERS.

3. FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE PER ACI-318: 3 INCHES WHERE THE CONCRETE IS POURED AGAINST AND TEMPORARY IN CONTACT WITH THE EARTH OR UNPROTECTED FROM THE EARTH OR WEATHER, OTHERWISE 1-1/2 INCHES.

FROST PROTECTION:

1. FOUNDATION SHALL BE PROTECTED AGAINST FROST USING RIGID FOAM INSULATION (EPS OR EQUIVALENT). FOR NO FROST PROTECTION OPTION, COORDINATE WITH LOCAL BUILDING CODE AND/OR BUILDING OFFICIAL REGARDING REQUIRED FOOTING DEPTH BASED ON FROST LINE DEPTH.



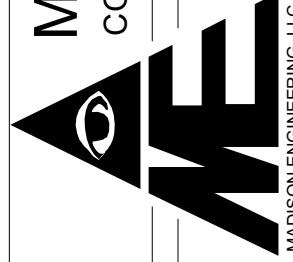
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DATE: 20 FEBRUARY 2025

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