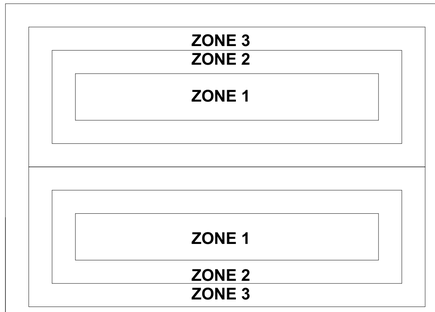

ZONE 1 +/- 19.74
ZONE 2 +/- 29.98
ZONE 3 +/- 41.75

WIND PRESSURE - COMPONENTS & CLADDING

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

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"

POST FOOTING SIZE	
F-1	**18" DIA. X 48" DEEP**
F-2	24" DIA. X 48" DEEP

LEAN POST HEIGHT (D-6) SIZE CIRCLED OR LESS				OTHER
10'	12'	14'	16'	

ROOF PITCH			
1/12	4/14	5/12	6/12

POST SPACING D-2 (FT)		
☐ 8	**X 10**	☐ 12

METAL ROOF	
26 GA	**29 GA**

POST SIZE		
☐ 6"X6"	☐ 8"X8"	☐ 12"X12"

T. BRENT WHITMAN LICENSE No.63178 STATE OF FLORIDA PROFESSIONAL ENGINEER

Tomas B. Whitman, PE
MADISON ENGINEERING
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TOMAS B WHITMAN
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DRAWN DVD
CHECKED TBW
APPROVED TBW
JOB NO.: 35225117
DATE: 10 FEBRUARY 2025

ALACHUA COUNTY

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Madison, Florida 32340
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POLE BARN - 24 X 40 LT
ABT TRUSSES

LARRY HICKS (24X40)
133 SW MARYNIK DR., HIGH SPRINGS, FL 32643

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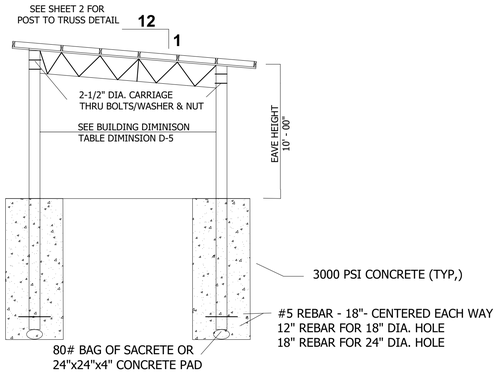
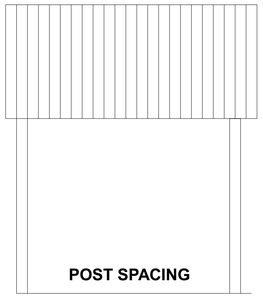
FL. P.E. REG. NO. 63178

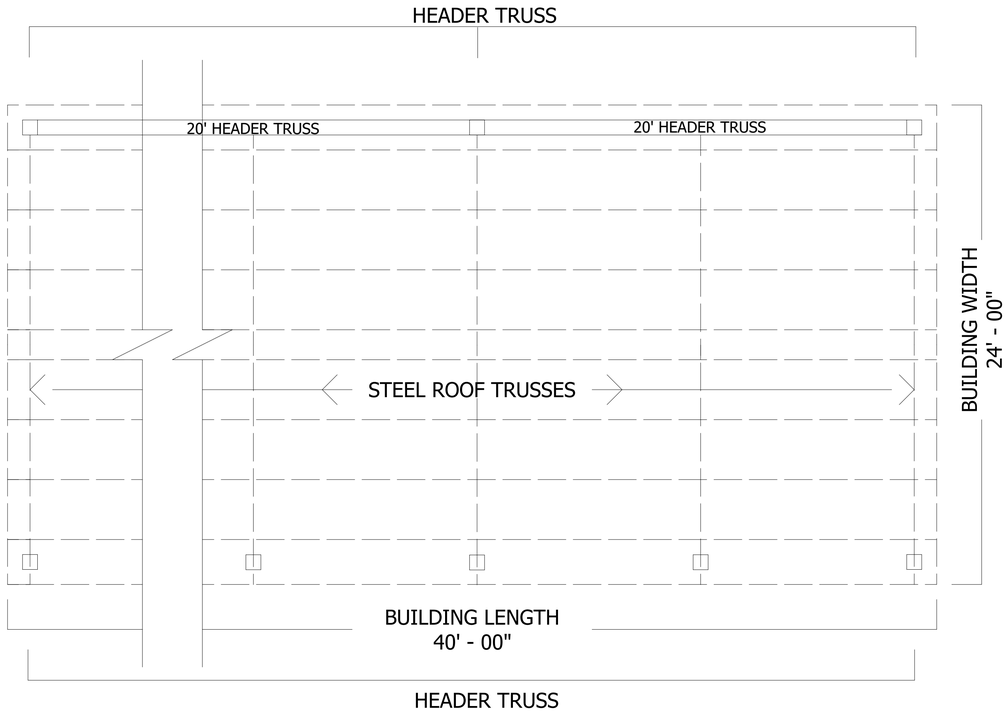
SHEET NO.
1



PROFILE VIEW
FOUNDATION DETAIL (TYP.)



PROFILE VIEW
SIDE ELEVATION (TYP.)
SEE POLE BARN SPECTIFICATIONS FOR DETAILS



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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TOMAS B WHITMAN
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DRAWN	DVD
CHECKED	TBW
APPROVED	TBW
JOB NO.: 35225117	
DATE: 10 FEBRUARY 2025	

ALACHUA COUNTY

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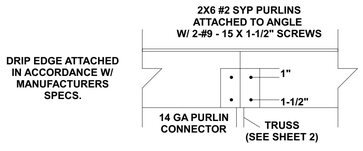
POLE BARN - 24 X 40 LT
ABT TRUSSES

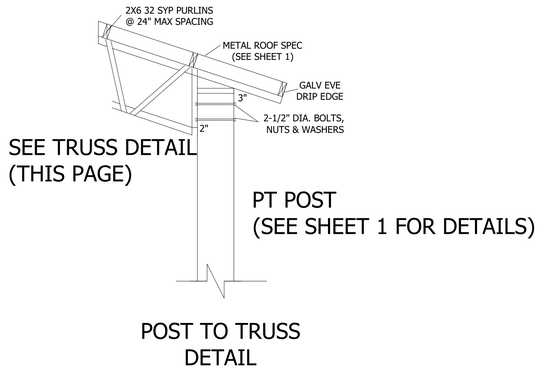
LARRY HICKS (24X40)
133 SW MARYNIK DR, HIGH SPRINGS, FL 32643

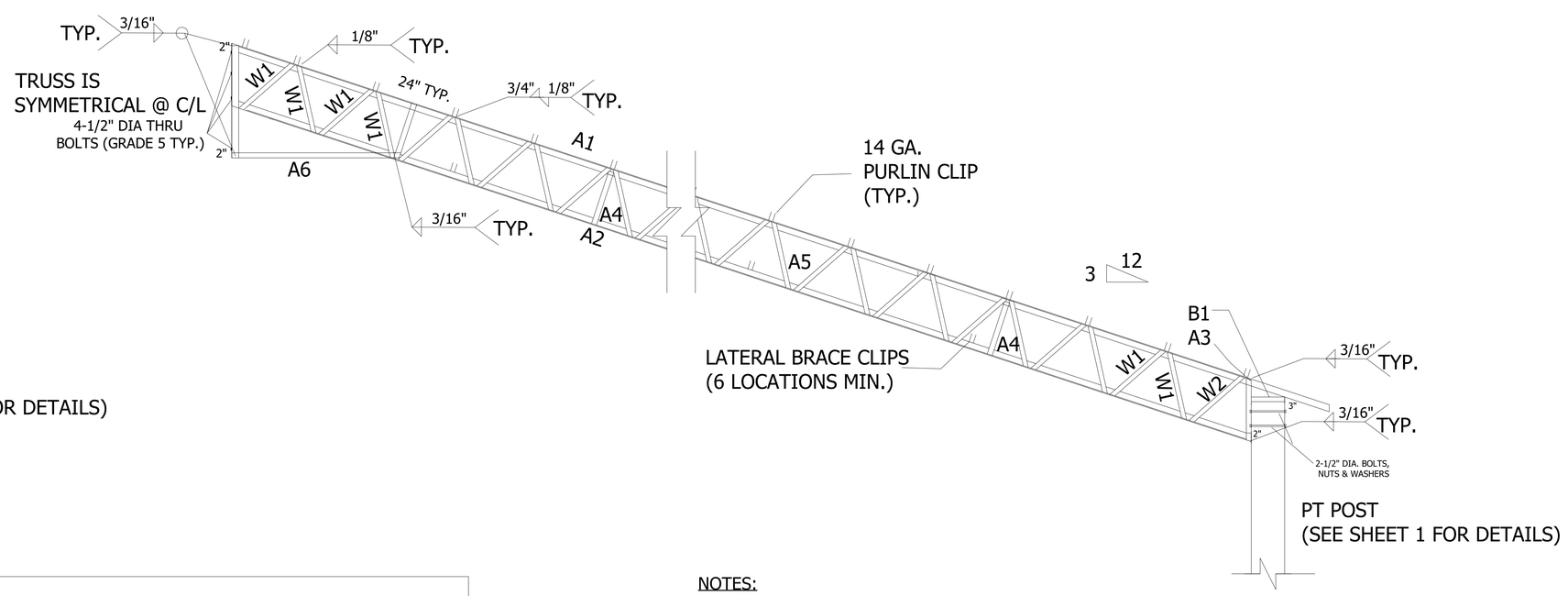
T. BRENT WHITMAN, P.E.
FL. P.E. REG. NO. 63178

SHEET NO.
2



PURLIN CONNECTION DETAILS





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.

BILL OF MATERIALS

ITEM NO.	DESCRIPTION		MATERIAL (50 KSI)
A1	TOP CHORD	LL 2 X 2 X 3/16*	ASTM 572
A2	BOTTOM CHORD	LL 2 X 2 X 3/16*	ASTM 572
A3	VERTICAL CHORD	LL 3 X 2 X 3/8*	ASTM 572
A4	VERTICAL CHORD	L 1 1/2 X 1 1/2 X 3/16	ASTM 572
A5	TIE	L 2 X 2 X 3/16	ASTM 572
A6	TIE	L 3 X 2 X 3/16	ASTM 572
W1	WEB	L 1-1/4 X 1-1/2 X 3/16	ASTM 572
W2	WEB	L 1-1/4 X 1-1/2 X 3/16	ASTM 572
B1	BASE	LL 2 X 2 X 3/16*	ASTM 572

NOTE: LL * DENOTES DOUBLE ANGELS

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.

Tomas B. Whitman, PE
MADISON ENGINEERING
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TOMAS B WHITMAN
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POLE BARN - 24 X 40 LT
ABT TRUSSES

LARRY HICKS (24X40)
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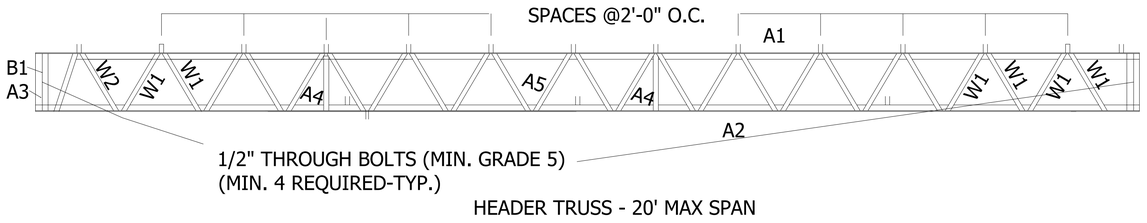
SHEET NO.
3



HEADER TRUSS - 20' MAX SPAN

BILL OF MATERIALS

ITEM NO.	DESCRIPTION		LENGTH	NUMBER REQUIRED	MATERIAL
A1	TOP CHORD	LL 2 X 2 X 3/16*	26'3 ½"	2	50 KSI
A2	BOTTOM CHORD	LL 2 X 2 X 3/16*	26'3 ½"	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:
1. PURLINS SHALL BE 2X6 #2 SYP (MAX SPACE @2'-0" O.C.)
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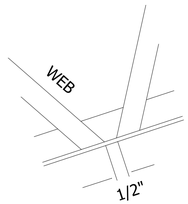

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JOB NO.: 35225117	
DATE: 10 FEBRUARY 2025	

ALACHUA COUNTY

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289 NE Ridge Loop
Madison, Florida 32340
Phone: 850.973.2864
COA No.: 27216 www.madisonengineer.com

MADISON ENGINEERING, LLC

LARRY HICKS (24X40)
133 SW MARYNIK DR, HIGH SPRINGS, FL 32643

POLE BARN - 24 X 40 LT
ABT TRUSS

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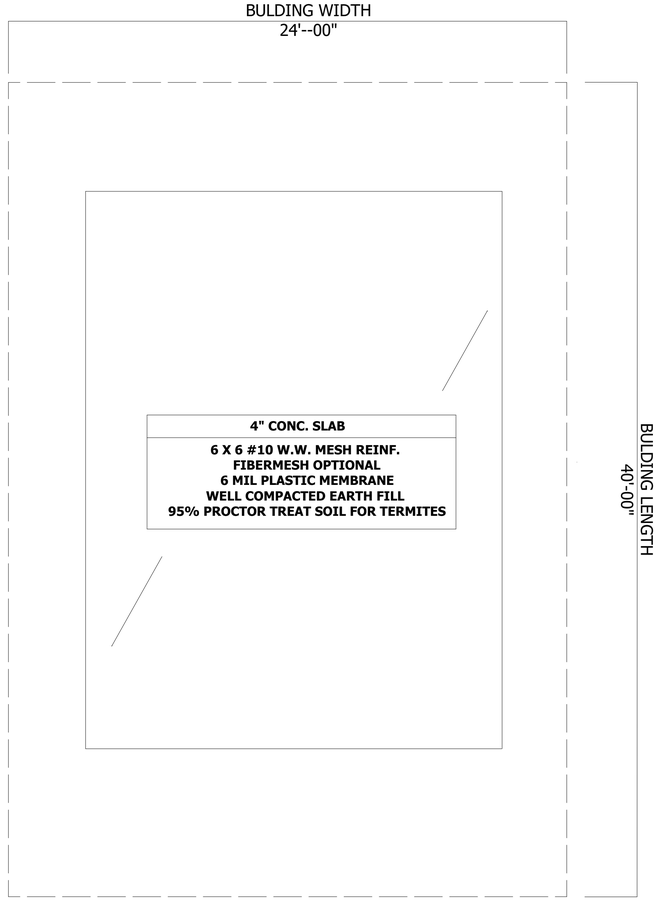
T. BRENT WHITMAN, P.E.
FL. P.E. REG. NO. 63178

SHEET NO.
4

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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FL. P.E. #63178 / GA. P.E. #031609

SHEET NO.
5