BUILDER'S RESPONSIBILITY

THE BUILDER AND OWNER ARE RESPONSIBLE FOR THE FOLLOWING, WHICH ARE SPECIFICALLY NOT PART OF THE WIND LOAD ENGINEER'S SCOPE OF WORK.
CONFIRM SITE CONDITIONS, FOUNDATION BEARING CAPACITY, GRADE AND BACKFILL HEIGHT, WIND SPEED AND DEBRIS ZONE, AND FLOOD ZONE.
PROVIDE MATERIALS AND CONSTRUCTION TECHNIQUES, WHICH COMPLY WITH FBC 2001 REQUIREMENTS FOR THE STATED WIND VELOCITY AND DESIGN PRESSURES.
PROVIDE A CONTINUOUS LOAD PATH FROM TRUSSES TO FOUNDATION. IF YOU BELIEVE THE PLAN OMITS A CONTINUOUS LOAD PATH CONNECTION, CALL THE WIND LOAD ENGINEER IMMEDIATELY.
VERIFY THE TRUSS MANUFACTURER'S SEALED ENGINEERING INCLUDES TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS.

GRADE & SPECIES TABLE

		Fb (psi)	E (10^6 psi)
2x8	SYP #2	1200	1.6
2x10	SYP #2	1050	1.6
2x12	SYP #2	975	1.6
GLB	24F-V3 SP	2400	1.8
LSL	TIMBERSTRAND	1700	1.7
LVL	MICROLAM	2900	2.0
PSL	PARALAM	2900	2.0

GENERAL NOTES:

TRUSSES: TRUSSES SHALL BE DESIGNED BY A FLORIDA LICENSED ENGINEER IN ACCORDANCE WITH THE FBC 2001. TRUSS ENGINEERING SHALL INCLUDE TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS. TRUSS ENGINEERING IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURER AND SHALL BE SIGNED & SEALED BY THE MANUFACTURER'S DESIGN ENGINEER. IT IS THE BUILDER'S RESPONSIBILITY VERIFY THE TRUSS DESIGNER FULLY SATISFIED ALL THE ABOVE REQUIREMENTS AND TO SELECT UPLIFT CONNECTIONS BASED ON TRUSS ENGINEERING UPLIFT AND PROVIDE FOOTINGS FOR INTERIOR BEARING WALLS. BUILDER IS TO FURNISH TRUSS ENGINEERING TO WIND LOAD ENGINEER FOR REVIEW OF TRUSS REACTIONS ON THE BUILDING STRUCTURE. STRAP 2X6 RAFTERS WITH MIN UPLIFT CONNECTION 415LB EACH END; 2X8 RAFTERS 700 LB EACH END.

SITE PREPARATION: SITE ANALYSIS AND PREPARATION IS NOT PART OF THIS PLAN

FOUNDATION: CONFIRM THAT THE FOUNDATION DESIGN & SITE CONDITIONS MEET GRAVITY LOAD REQUIREMENTS (ASSUME 1000 PSF BEARING CAPACITY UNLESS VISUAL OBSERVATION OR SOILS TEST PROVES OTHERWISE

CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS, F'c = 3000 PSI.

WELDED WIRE REINFORCED SLAB: 6" x 6" W1.4 x W1.4, FB = 85KSI. WELDED WIRE REINFORCEMENT FABRIC (W.W.M.) CONFORMING TO ASTM A185; LOCATED IN MIDDLE OF THE SLAB; SUPPORTED WITH APPROVED MATERIALS OR SUPPORTS AT SPACINGS NOT TO EXCEED 3'.

FIBER CONCRETE SLAB: CONCRETE SLABS ON GROUND CONTAINING SYNTHETIC FIBER REINFORCEMENT. FIBER LENGTH 1/2 INCH TO 2 INCHES. DOSAGE AMOUNTS FROM 0.75 TO 1.5 POUNDS PER CUBIC YARD PER THE MANUFACTURER'S RECOMMENDATIONS. FIBERS TO COMPLY WITH ASTM C 1116. SUPPLIER TO PROVIDE ASTM C 1116 CERTIFICATION OF COMPLIANCE WHEN REQUESTED BY BUILDING OFFICIAL.

CONTROL JOINTS: WHERE SPECIFIED, SAWN CONTROL JOINTS IN SLAB-ON-GRADE SHALL BE CUT IN ACCORDANCE WITH ACI 302. JOINTS SHALL BE CUT WITHIN 12 HOURS OF SLAB PLACEMENT. THE LENGTH / WIDTH RATIOS OF SLAB AREAS SHALL NOT EXCEED 1.5 AND TYPICAL SPACING OF CUTS TO BE 12FT. DO NOT CUT WWM OR REINFORCING STEEL. (RECOMMENDED LOCATION OF CONTROL JOINTS IS SUBJECT TO OWNER AND CONTRACTOR'S APPROVAL. THE CONTROL JOINTS ARE NOT INTENDED TO PREVENT CRACKS BUT RATHER TO ENCOURAGE THE SLAB TO CRACK ON A GIVEN LINE.)

REBAR: ASTM A 615, GRADE 60, DEFORMED BARS, FY = 60 KSI. ALL LAP SPLICES 48 * DB (30" FOR #5 BARS); UNO. ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315-99, U.N.O.

GLULAM BEAMS: GLULAM BEAM, GLB, 24F-V3SP, Fb = 2.4ksi, E = 1800ksi; UNO. SUPPLIER MAY SUPPLY AN ALTERNATE BEAM WITH EQUAL PROPERTIES OR MAY SUBMIT THEIR OWN SIZING CALCS.

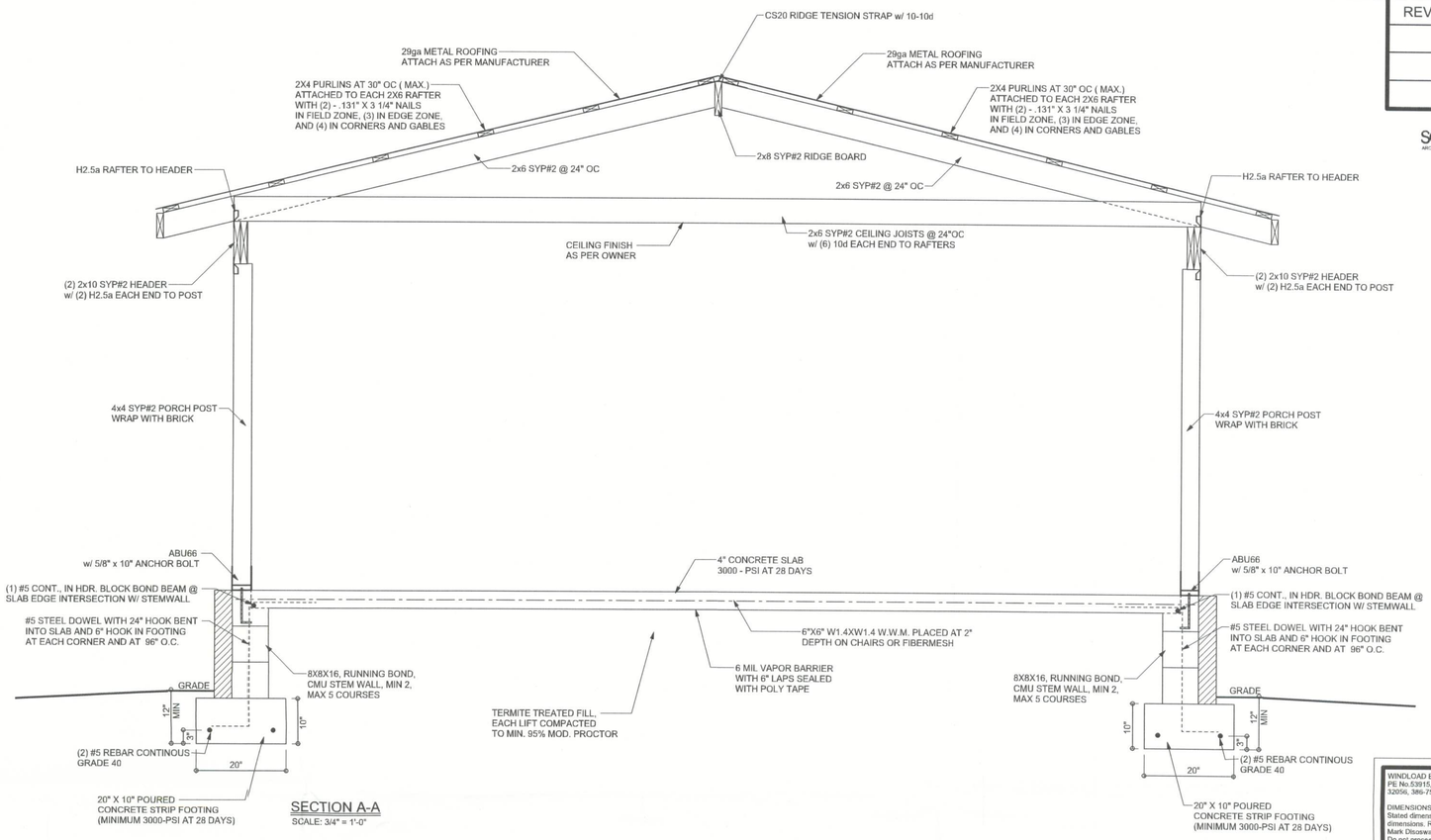
ROOF SHEATHING: ALL ROOFS ARE HORIZONTAL DIAPHRAGMS; 7/16" OSB SHEATHING, UNBLOCKED, APPLIED PERPENDICULAR TO FRAMING, OVER A MINIMUM OF 3 FRAMING MEMBERS, WITH PANEL EDGES STAGGERED, FASTENED WITH 8d COMMON NAILS (.131), 6"OC PANEL EDGES, 12"OC INTERMEDIATE MEMBERS, GABLE ENDS AND DIAPHRAGM BOUNDARY; 4"OC, UNO.

STRUCTURAL CONNECTORS: MANUFACTURERS AND PRODUCT NUMBER FOR CONNECTORS, ANCHORS, AND REINFORCEMENT ARE LISTED FOR EXAMPLE NOT ENDORSEMENT, AN EQUIVALENT DEVICE OF THE SAME OR OTHER MANUFACTURER CAN BE SUBSTITUTED FOR ANY DEVICES LISTED IN THE EXAMPLE TABLES AS LONG AS IT MEETS THE REQUIRED LOAD CAPACITIES. MANUFACTURER'S INSTALLATION INSTRUCTIONS MUST BE FOLLOWED TO ACHIEVE RATED LOADS.

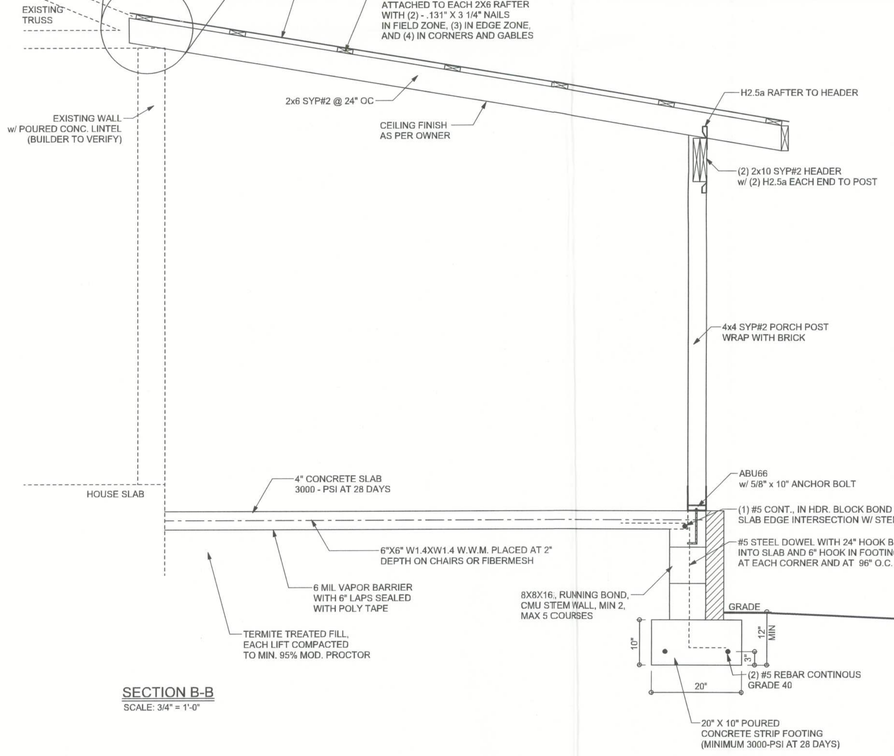
ANCHOR BOLTS: A-307 ANCHOR BOLTS WITH MINIMUM EMBEDMENT AS SPECIFIED IN DRAWINGS BUT NO LESS THAN 7" IN CONCRETE OR REINFORCED BOND BEAM OR 15" IN GROUTED CMU

WASHERS: WASHERS USED WITH 1/2" BOLTS TO BE 2" x 2" x 9/64"; WITH 5/8" BOLTS TO BE 3" x 3" x 9/64"; WITH 3/4" BOLTS TO BE 3" x 3" x 9/64"; WITH 7/8" BOLTS TO BE 3" x 3" x 5/16"; UNO.

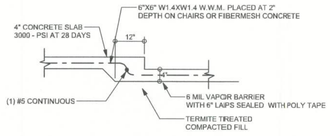
NAILS: ALL NAILS ARE COMMON NAILS UNLESS OTHERWISE SPECIFIED OR ACCEPTED BY FBC TEST REPORTS AS HAVING EQUAL STRUCTURAL VALUES.



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



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



SECTION C-C
SCALE: 1/2" = 1'-0"

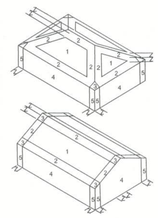
ANCHOR TABLE

OBTAIN UPLIFT REQUIREMENTS FROM TRUSS MANUFACTURER'S ENGINEERING

UPLIFT LBS. SYP	UPLIFT LBS. SPF	TRUSS CONNECTOR*	TO PLATES	TO RAFTER/TRUSS	TO STUDS
< 420	< 245	H5A	3-8d	3-8d	
< 455	< 265	H5	4-8d	4-8d	
< 360	< 235	H4	4-8d	4-8d	
< 455	< 320	H3	4-8d	4-8d	
< 415	< 365	H2.5	5-8d	5-8d	
< 600	< 535	H2.5A	5-8d	5-8d	
< 950	< 820	H6	8-8d	8-8d	
< 745	< 565	H8	5-10d, 1 1/2"	5-10d, 1 1/2"	
< 1465	< 1050	H14-1	13-8d	12-8d, 1 1/2"	
< 1465	< 1050	H14-2	15-8d	12-8d, 1 1/2"	
< 990	< 850	H10-1	8-8d, 1 1/2"	8-8d, 1 1/2"	
< 760	< 655	H10-2	6-10d	6-10d	
< 1470	< 1265	H16-1	10-10d, 1 1/2"	2-10d, 1 1/2"	
< 1470	< 1265	H16-2	10-10d, 1 1/2"	2-10d, 1 1/2"	
< 1000	< 860	MTS24C	7-10d 1 1/2"	7-10d 1 1/2"	
< 1450	< 1245	HTS24	12-10d 1 1/2"	12-10d 1 1/2"	
< 2900	< 2490	2 - HTS24			
< 2050	< 1785	LGT2	14 -16d	14 -16d	
		HEAVY GIRDER TIEDOWNS*			**TO FOUNDATION**
< 3965	< 3330	MGT		22 -10d	1-5/8" THREADED ROD 12" EMBEDMENT
< 10980	< 6485	HGT-2		16 -10d	2-5/8" THREADED ROD 12" EMBEDMENT
< 10530	< 9035	HGT-3		16 -10d	2-5/8" THREADED ROD 12" EMBEDMENT
< 9250	< 9250	HGT-4		16 -10d	2-5/8" THREADED ROD 12" EMBEDMENT
		STUD STRAP CONNECTOR*			**TO STUDS**
< 435	< 435	SSP DOUBLE TOP PLATE	3 -10d		4 -10d
< 455	< 420	SSP SINGLE SILL PLATE	1 -10d		4 -10d
< 825	< 825	DSP DOUBLE TOP PLATE	6 -10d		8 -10d
< 825	< 600	DSP SINGLE SILL PLATE	2 -10d		8 -10d
< 885	< 760	SP4			6-10d, 1 1/2"
< 1240	< 1065	SPH4			10-10d, 1 1/2"
< 885	< 760	SP6			6-10d, 1 1/2"
< 1240	< 1065	SPH6			10-10d, 1 1/2"
< 1235	< 1165	LSTA18	14-10d		
< 1235	< 1235	LSTA21	16-10d		
< 1030	< 1030	CS20	18-8d		
< 1705	< 1705	CS16	28-8d		
		STUD ANCHORS*	**TO STUDS**		**TO FOUNDATION**
< 1350	< 1305	LTT19	8-16d		1/2" AB
< 2310	< 2310	LTT31	18-10d, 1 1/2"		1/2" AB
< 2775	< 2570	HD2A	2-5/8" BOLTS		5/8" AB
< 4175	< 3695	HTT16	18 - 16d		5/8" AB
< 1400	< 1400	PAHD42	16-16d		
< 3335	< 3335	HPAHD22	16-16d		
< 2200	< 2200	ABU44	12-16d		1/2" AB
< 2300	< 2300	ABU66	12-16d		1/2" AB
< 2320	< 2320	ABU88	18 - 16d		2-5/8" AB

DESIGN DATA

WIND LOADS PER FLORIDA BUILDING CODE 2001, SECTION 1606.2
(ENCLOSED SIMPLE DIAPHRAGM BUILDINGS WITH FLAT, HIPPED, OR GABLE ROOFS; MEAN ROOF HEIGHT NOT EXCEEDING LEAST HORIZONTAL DIMENSION OR 60 FT; NOT ON UPPER HALF OF HILL OR ESCARPMENT 60FT IN EXP. B, 30FT IN EXP. C AND >10% SLOPE AND UNOBSTRUCTED UPWIND FOR 50x HEIGHT OR 1 MILE WHICHEVER IS LESS.)
BUILDING IS NOT IN THE HIGH VELOCITY HURRICANE ZONE
BUILDING IS NOT IN THE WIND-BORNE DEBRIS REGION
1.) BASIC WIND SPEED = 110 MPH
2.) WIND EXPOSURE = B
3.) WIND IMPORTANCE FACTOR = 1.0
4.) BUILDING CATEGORY = II
5.) ROOF ANGLE = 10-45 DEGREES
6.) MEAN ROOF HEIGHT = <30 FT
7.) INTERNAL PRESSURE COEFFICIENT = N/A (ENCLOSED BUILDING, 1606.2)
8.) COMPONENTS AND CLADDING DESIGN WIND PRESSURES (FBC TABLE 1606.2 B&C)



Zone	Effective Wind Area (ft2)			
	10		100	
1	19.9	-21.8	18.1	-18.1
2	19.9	-25.5	18.1	-21.8
2 O'hg		-40.6		-40.6
3	19.9	-25.5	18.1	-21.8
3 O'hg		-68.3		-42.4
4	21.8	-23.6	18.5	-20.4
5	21.8	-29.1	18.5	-22.6
Doors & Windows Worst Case (Zone 5, 10 ft2)		21.8	-29.1	
8x7 Garage Door		19.5	-22.9	
16x7 Garage Door		18.5	-21.0	

DESIGN LOADS	
FLOOR	40 PSF (ALL OTHER DWELLING ROOMS)
	30 PSF (SLEEPING ROOMS)
	30 PSF (ATTICS WITH STORAGE)
	10 PSF (ATTICS WITHOUT STORAGE, <3:12)
ROOF	20 PSF (FLAT OR <4:12)
	16 PSF (4:12 TO <12:12)
	12 PSF (12:12 AND GREATER)
STAIRS 40 PSF (ONE & TWO FAMILY DWELLINGS)	
SOIL BEARING CAPACITY 1000PSF	
NOT IN FLOOD ZONE (BUILDER TO VERIFY)	

REVISIONS	

SOFTPLAN ARCHITECTURAL DESIGN SOFTWARE

WINDLOAD ENGINEER: Mark Disosway, PE No.53915, POB 868, Lake City, FL 32056, 386-754-5419

DIMENSIONS: Stated dimensions supercede scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution. Do not proceed without clarification.

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CERTIFICATION: These plans and "Windload Engineering", Sheet S-1, attached, comply with Florida Building Code 2001, Section 1606 wind loads, to the best of my knowledge.

LIMITATION: This design is valid for one building at specified location. In case of conflict, structural requirements, scope of work, and builder responsibilities on sheet S-1 control.

MARK DISOSWAY P.E. 53915

SEAL

TROUT RIVER BUILDERS

BARBARA JERNIAN ADDITION

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PRINTED DATE: September 02, 2005

DRAWN BY: Evan Beamsley | CHECKED BY:

DESIGNED BY: Evan Beamsley

FINALES DATE: 02 / SEP / 05

JOB NUMBER: 508171

DRAWING NUMBER: S1

OF 2 SHEETS