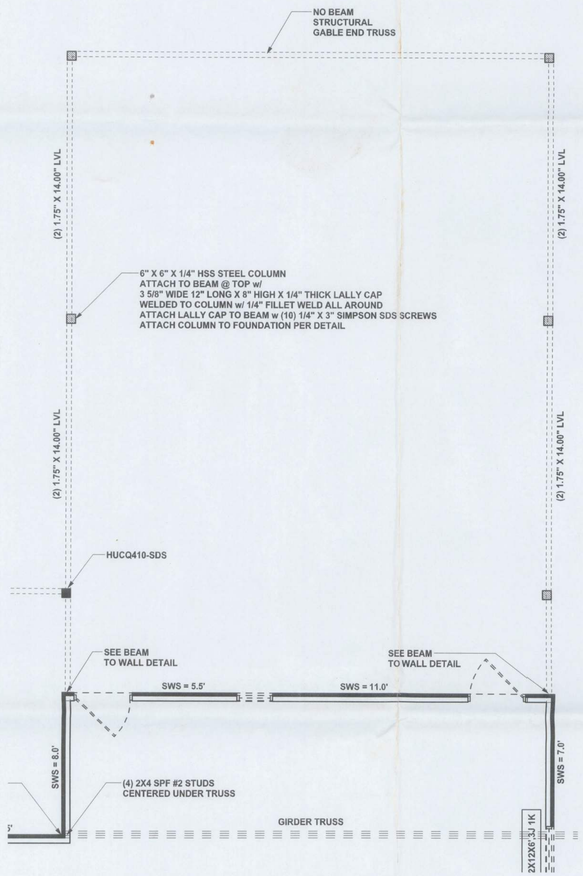
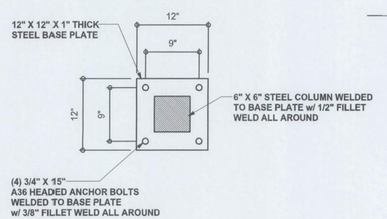




#31820

REVISIONS	

SOFTPLAN
ARCHITECTURAL DESIGN SOFTWARE

WINDLOAD ENGINEER: Mark Disosway, PE No.53915, PO$ 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.

CERTIFICATION: I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to wind engineering comply with section R301.2.1, 2010 Florida Building Code Residential to the best of my knowledge.

LIMITATION: This design is valid for one building, at specified location.

MARK DISOSWAY
P.E. 53915
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Monday, April 7, 2014

Farnell Residence

ADDRESS:
Seminole Terr, Lake City, FL

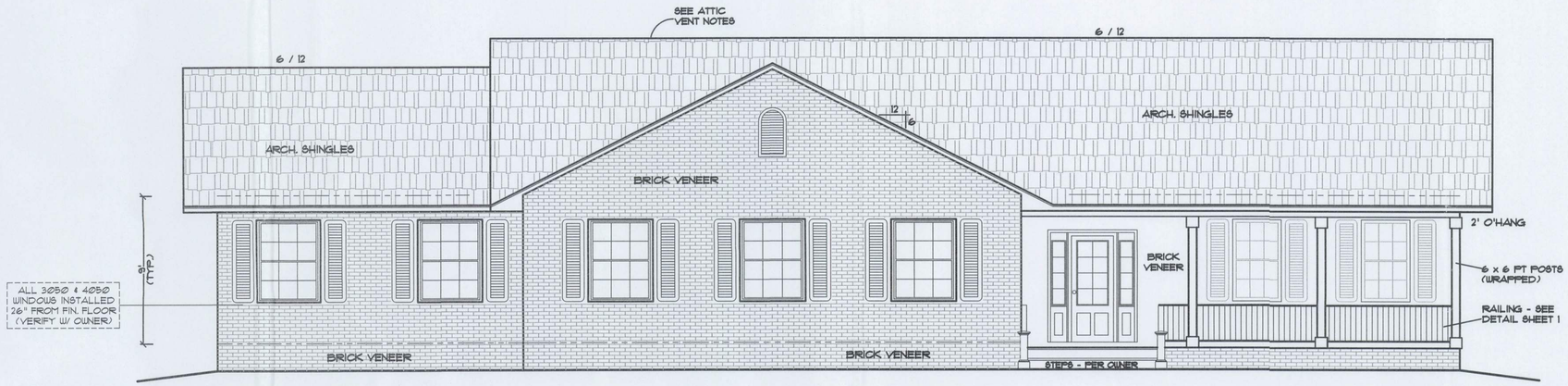
Mark Disosway P.E.
P.O. Box 868
Lake City, Florida 32056
Phone: (386) 754 - 5419
Fax: (386) 269 - 4871

PRINTED DATE:
Monday, April 7, 2014

DRAWN BY:	STRUCTURAL BY:
FINALS DATE: 7Apr14	

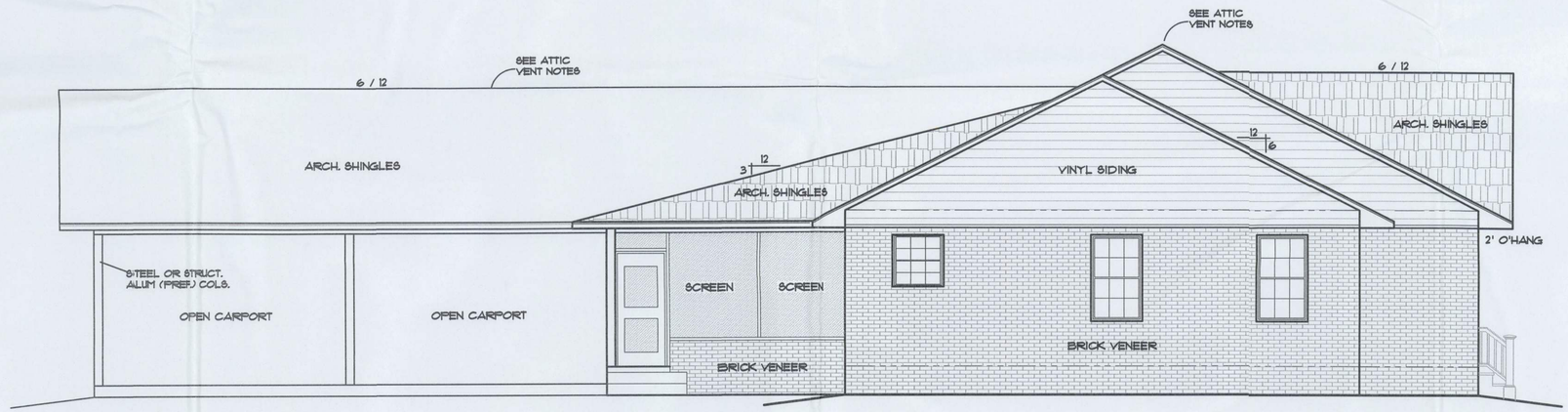
JOB NUMBER:
140236

DRAWING NUMBER
1
OF 1 SHEET



FRONT ELEVATION

SCALE: 1/4 IN. = 1 FT.



LEFT ELEVATION

SCALE: 1/4 IN. = 1 FT.

ATTIC VENTILATION

Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain. Ventilating openings shall be provided with corrosion-resistant wire mesh, wit h 1 / 8 inch (3.2 mm) minimum to ¼ inch (6.4 mm) maximum openings.

The total net free ventilating area shall not be less than 1 to 150 of the area of the space ventilated except that the total area is permitted to be reduced to 1 to 300, provided at least 50 percent and not more than 80 percent of the required ventilating area is provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914 mm) above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents.

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

CERTIFICATION: These plans and "Windload Engineering", Sheet S-1, attached, comply with Florida Building Code Residential 2010, Section R301.2.1 to the best of my knowledge.

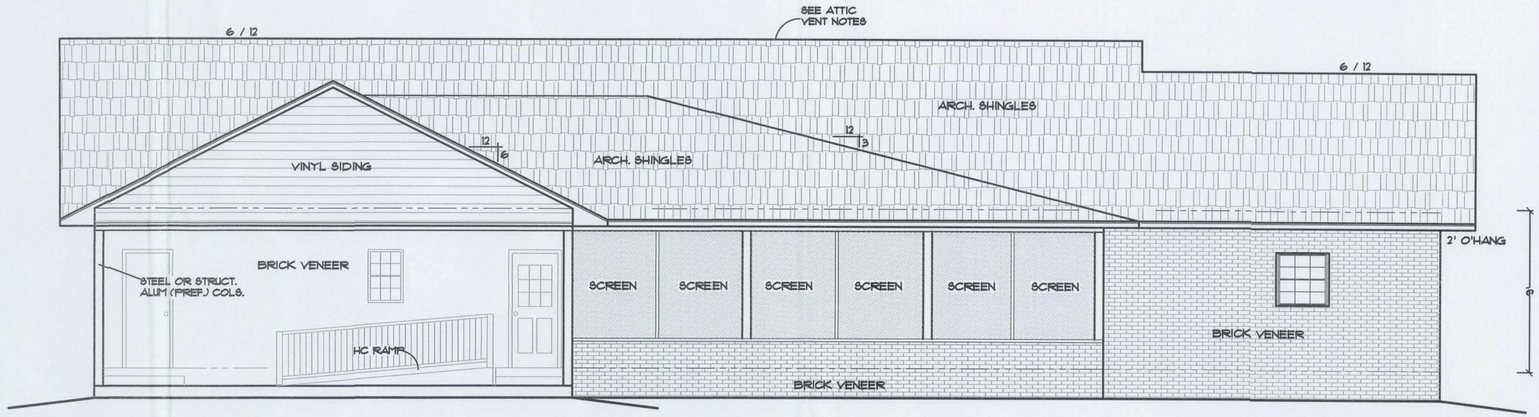
LIMITATION: This design is valid for one building, at specified location, permitted within 90 days of signature date. In case of conflict, structural requirements, scope of work, and builder responsibilities on sheet S-1 control.

Location: SEMINOLE TERR. LAKE CITY, FL Job No.: 1309038

MARK D. DISOSWAY III LICENSE NO. 53915 STATE OF FLORIDA PROFESSIONAL ENGINEER

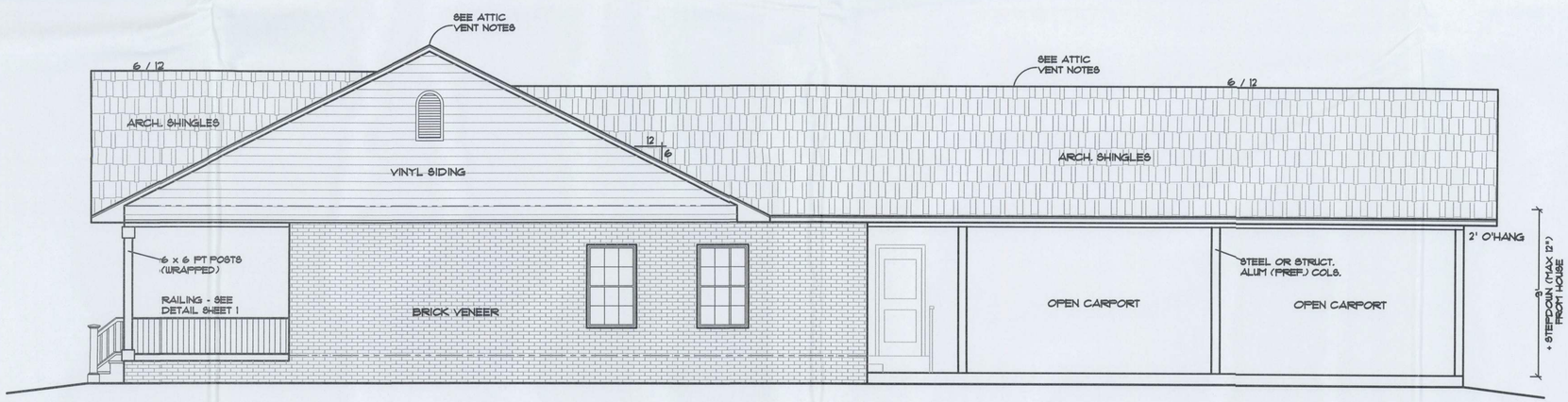
FILE: 13-008	FARNELL RESIDENCE	SHEET: 2 OF 5
DATE: 9-9-13		CAD FILE: 13-008
DRAWN: T A D	PREPARED BY: TIM DELBENE Drafting + Technical Services	REV:
CHECK: T A D	192 SW Sagewood Gln. Lake City, FL 32024 Phone (386) 755-5891	REV:

A-2



REAR ELEVATION

SCALE: 1/4 IN. = 1 FT.



RIGHT ELEVATION

SCALE: 1/4 IN. = 1 FT.

ATTIC VENTILATION

Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain. Ventilating openings shall be provided with corrosion-resistant wire mesh, wit h 1 / 8 inch (3.2 mm) minimum to ¼ inch (6.4 mm) maximum openings.

The total net free ventilating area shall not be less than 1 to 150 of the area of the space ventilated except that the total area is permitted to be reduced to 1 to 300, provided at least 50 percent and not more than 80 percent of the required ventilating area is provided by ventilators located in the upper portion of the space to be ventilated at least 3 feet (914 mm) above eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents.

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

CERTIFICATION: These plans and "Windload Engineering", Sheet S-1, attached, comply with Florida Building Code Residential 2010, Section R301.2.1 to the best of my knowledge.

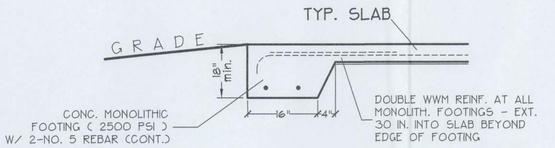
LIMITATION: This design is valid for one building, at specified location, permitted within 90 days of signature date. In case of conflict, structural requirements, scope of work, and builder responsibilities on sheet S-1 control.

Location: SEMINOLE TERR. LAKE CITY, FL Job No.: 1309030

MARK DISOSWAY LICENSED 53915 STATE OF FLORIDA PROFESSIONAL ENGINEER

A-3

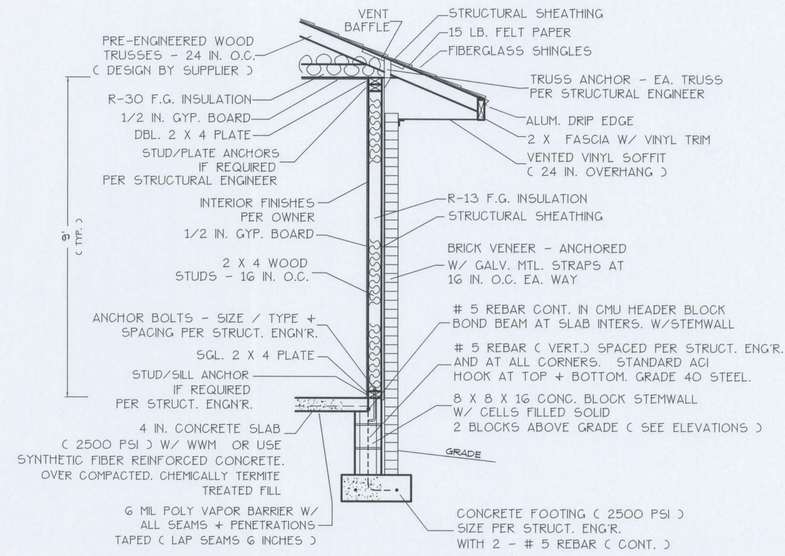
FILE: 13-008	FARNELL RESIDENCE	SHEET: 3 OF 5
DATE: 9-9-13		CAD FILE: 13-008
DRAWN: T A D	PREPARED BY: TIM DELBENE Drafting + Technical Services	REV:
CHECK: T A D	192 SW Sagewood Gln. Lake City, FL 32024 Phone (386) 755-5891	REV:



MONOLITHIC FOOTING DETAIL

SCALE: 3/4 IN. = 1 FT.

NOTE: ALL DATA SHOWN SUBJECT TO, AND SUPERCEDED BY, FINAL DATA PROVIDED BY STRUCTURAL ENGINEER



WALL SECTION NOTES:

- This Typical Wall Section is for Estimating purposes only.
- All data shown in this Wall Section shall be subject to review and final input by the Structural Engineer.

DESIGN WALL SECTION

NON-STRUCTURAL DATA

SCALE: 3/4 IN. = 1 FT.

FOUNDATION NOTES:

- CONTRACTOR SHALL EXAMINE ROOF TRUSS PLAN (BY SUPPLIER) TO DETERMINE ANY ADDITIONAL BEARING REQUIREMENTS BEFORE FINALIZING THE FOUNDATION PLAN.
- ALL CONCRETE IS 2500 PSI STRENGTH (MIN.)
- VERIFY DIMENSIONS WITH FLOOR PLAN
- SITE ANALYSIS AND PREPARATION DATA IS NOT A PART OF THIS PLAN AND IS THE RESPONSIBILITY OF THE CONTRACTOR / OWNER.

FOUNDATION PLAN

SCALE: 1/4 IN. = 1 FT.

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

CERTIFICATION: These plans and "Windload Engineering", Sheet S-1, attached, comply with Florida Building Code Residential 2010, Section R301.2.1 to the best of my knowledge.

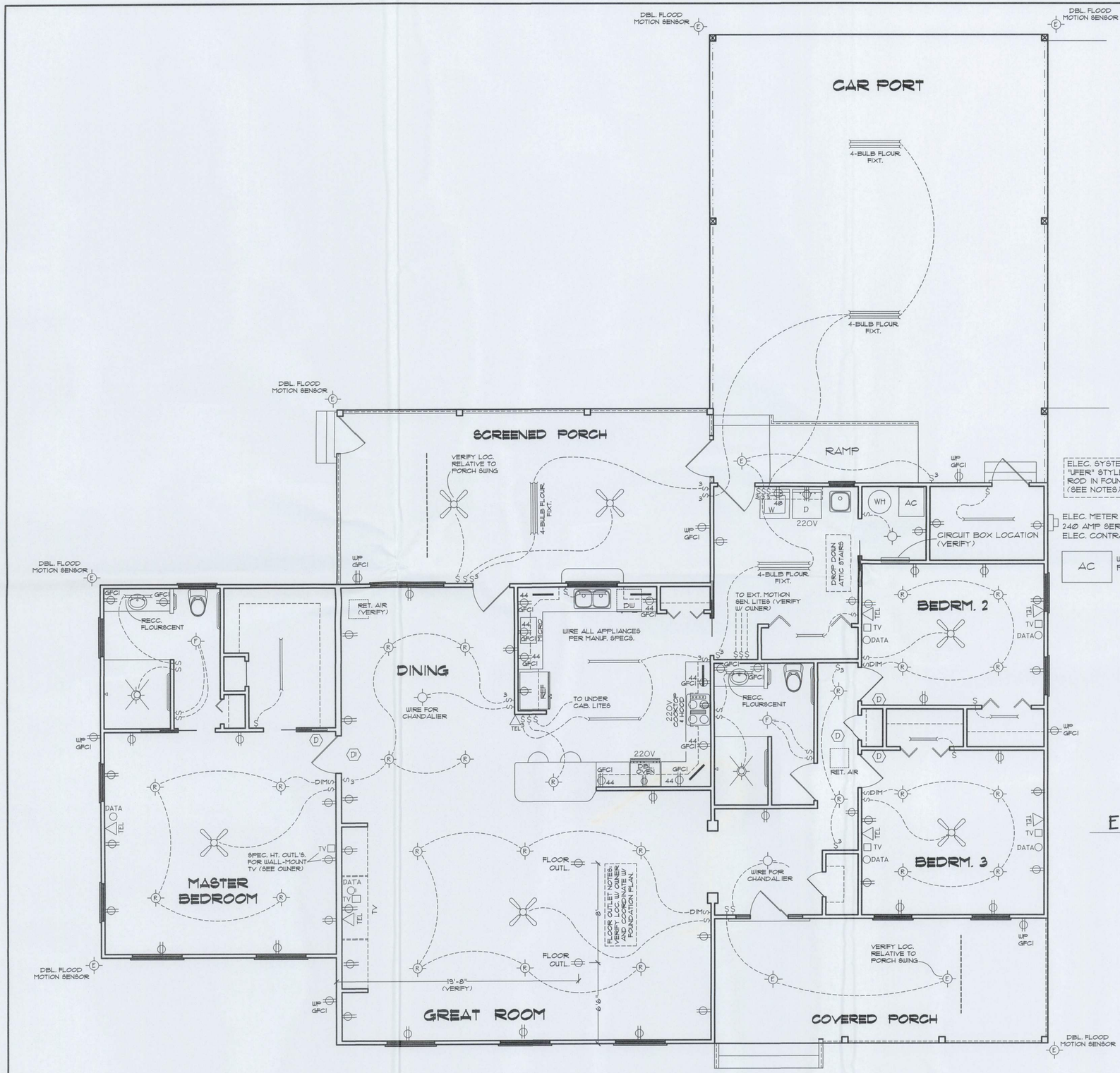
LIMITATION: This design is valid for one building, at specified location, permitted within 180 days of signature date. In case of conflict, structural requirements, scope of work, and builder responsibilities on sheet S-1 control.

Location: SEMINOLE TERR. LAKE CITY, FL Job No.: 13090

MARK DISOSWAY 53915 STATE OF FLORIDA PROFESSIONAL ENGINEER

A-4

FILE: 13-008	FARNELL RESIDENCE	SHEET: 4 OF 5
DATE: 9-9-13		CAD FILE: 13-008
DRAWN: T A D	PREPARED BY: TIM DELBENE Drafting + Technical Services	REV:
CHECK: T A D	192 SW Sagewood Gln. Lake City, FL 32024 Phone (386) 755-5891	REV:



ELECTRICAL SYMBOL LEGEND

- = 48" FLOURESCENT LIGHTING FIXTURE
- = KITCHEN UNDER-CAB. LIGHTING FIXTURE (VERIFY W/ OWNER)
- = STANDARD CEILING/WALL LIGHTING FIXTURE OR CHANDELIER
- (E) = EXTERIOR LIGHTING FIXTURE - WEATHERPROOF
- (R) = RECESSED (CAN) CEILING LIGHTING FIXTURE
- S = SGL. POLE LIGHT SWITCH.
- S_3 = THREE-WAY SWITCH.
- S_4 = FOUR-WAY SWITCH.
- S_{DIM} = DIMMER SWITCH
- (D) = SMOKE & CARBON MONOXIDE DETECTOR (SEE NOTES)
- AFCI = ARC FAULT CIRCUIT INTERRUPTER
- WP = WEATHER PROOF
- = 110V DUPLEX OUTLET AFCI, UNLESS NOTED
- 42 = 110V DUPLEX OUTLET AFCI, UNLESS NOTED (SPECIAL HEIGHT NOTED)
- GFCI = 110V DUPLEX OUTLET GROUND FAULT CIRCUIT INTERRUPTER TYPE
- 220V = 220 VOLT OUTLET (4 WIRE)
- = FAN LOCATION (CEILING)
- (F) = FAN LOCATION W/ LITE (EXHAUST)
- TEL = TELEPHONE JACK
- TV = TV JACK LOCATION
- DATA = DATA / COMPUTER NETWORK

ELECTRICAL PLAN NOTES

-ALL INSTALLATIONS ARE PER NAT'L. ELECTRIC CODE (NEC) 2008.

-ALL RECEPTACLES, UNLESS NOTED OTHERWISE, SHALL BE ARC FAULT CIRCUIT INTERRUPTER (AFCI) TYPE. ALSO, RECEPTACLES, UNLESS NOTED, SHALL BE TAMPER RESISTANT.

-GROUNDING OF ELECTRICAL SYSTEM SHALL BE BY "UFER" STYLE GROUNDING METHOD TO REINFORCING ROD IN CONCRETE FOUNDATION FOOTING (NEC 250.52 - GROUNDING ELECTRODES).

-WIRE ALL APPLIANCES, HVAC UNITS AND OTHER EQUIPMENT PER MANUF. SPECIFICATIONS.

-ELECTRICAL CONT'R SHALL BE RESPONSIBLE FOR THE DESIGN & SIZING OF ELECTRICAL SERVICE AND CIRCUITS.

-ENTRY OF SERVICE (UNDERGROUND OR OVERHEAD) TO BE DETERMINED BY POWER COMPANY.

-TELEPHONE, TELEVISION AND OTHER LOW VOLTAGE DEVICES OR OUTLETS SHALL BE AS PER THE OWNER'S DIRECTIONS, & IN ACCORDANCE W/ APPLICABLE SECTIONS OF NEC-LATEST EDITION 2008.

-CONSULT THE OWNER FOR THE NUMBER OF SEPERATE TELEPHONE LINES TO BE INSTALLED.

-LOW VOLTAGE ITEMS (TELEPHONE, CATV, DATA CABLING) IS SHOWN, IF REQUESTED BY OWNER / BUILDER. CONSULT OWNER FOR REQUIREMENTS IF NOT SHOWN ON ELECTRICAL PLAN.

-ALL SMOKE DETECTORS SHALL BE 120V W/ BATTERY BACKUP OF THE PHOTOELECTRIC TYPE, AND SHALL BE INTERLOCKED TOGETHER. INSTALL INSIDE AND NEAR ALL BEDROOMS. THEY SHALL ALSO PROVIDE CARBON MONOXIDE DETECTION.

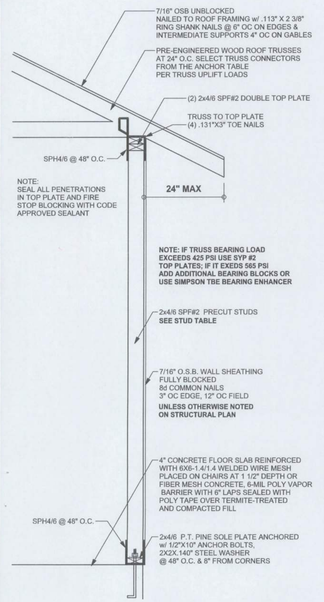
ELECTRICAL PLAN

NOT TO SCALE

SEMINOLE TERR.
LAKE CITY, FL

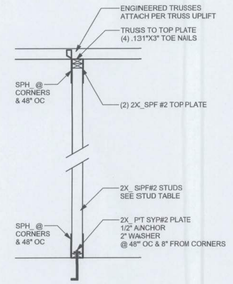
A-5

FILE: 13-008	FARNELL RESIDENCE	SHEET: 5 OF 5
DATE: 9-9-13		CAD FILE: 13-008
DRAWN: T A D	PREPARED BY: TIM DELBENE Drafting + Technical Services	REV:
CHECK: T A D	192 SW Sagewood Gln. Lake City, FL 32024 Phone (386) 755-5891	REV:



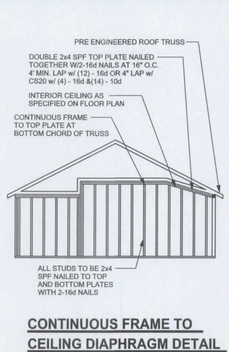
ONE STORY WALL SECTION

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



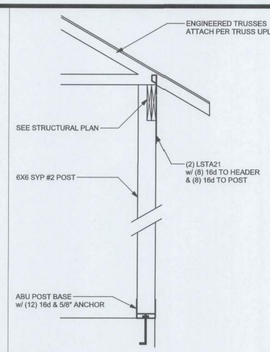
(TYP.) INTERIOR BEARING WALL

ONE STORY WOOD FRAME w/ STRAPS & ANCHORS



CONTINUOUS FRAME TO CEILING DIAPHRAGM DETAIL

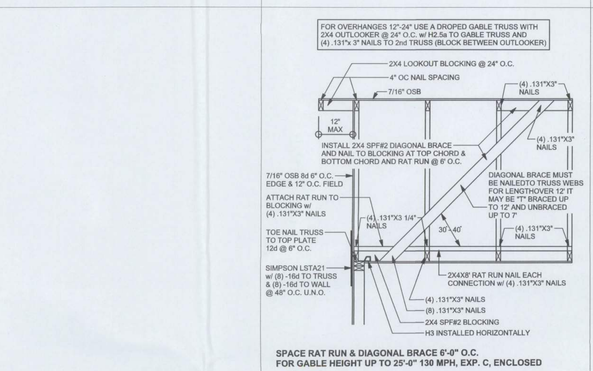
SCALE: N.T.S.



(TYP.) PORCH POST

ONE STORY WOOD

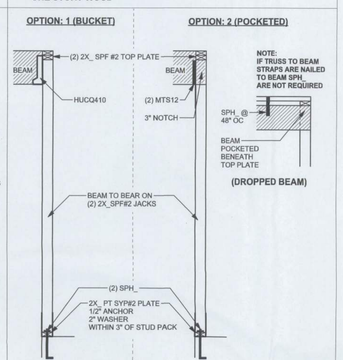
ALLOWABLE UPLIFT: 2200 LB



SPACE RAT RUN & DIAGONAL BRACE 6'-0" O.C.
FOR GABLE HEIGHT UP TO 25'-0" 130 MPH, EXP. C, ENCLOSED

(TYP.) GABLE BRACING DETAIL

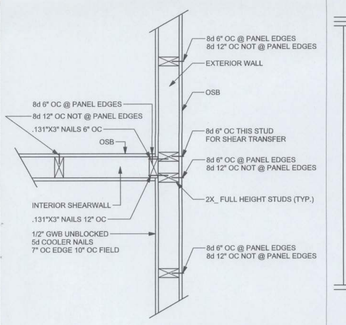
WOOD FRAME



(TYP.) BEAM TO WALL

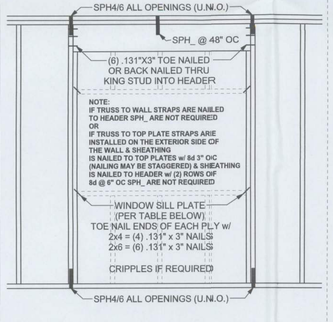
WOOD FRAME w/ STRAPS & ANCHORS

ALLOWABLE UPLIFT: 2000 LB



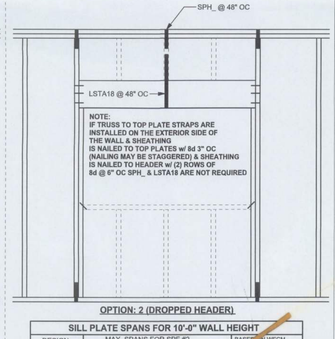
(TYP.) INTERSECTING WALL FRAMING

WOOD FRAME



TYPICAL HEADER STRAPING DETAIL

ONE STORY WOOD FRAME w/ STRAPS & ANCHORS



OPTION: 2 (DROPPED HEADER)

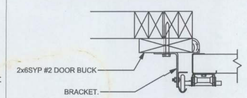
SILL PLATE SPANS FOR 10'-0" WALL HEIGHT

DESIGN WIND SPEED	MAX. SPANS FOR SPF #2 (1) 2x4	(2) 2x4	(1) 2x6	(2) 2x6	BASED ON WFCM TABLE A-3.23B
115-130 MPH	5'-3"	7'-9"	7'-8"	11'-4"	FOR OTHER WALL HEIGHTS (H) SILL SPAN SHALL BE DIVIDED BY (H/10)
140-150 MPH	4'-4"	6'-6"	6'-5"	9'-6"	
160 MPH	4'-0"	6'-0"	5'-11"	8'-9"	

2x6 SYP #2 GARAGE DOOR BUCK ATTACHMENT

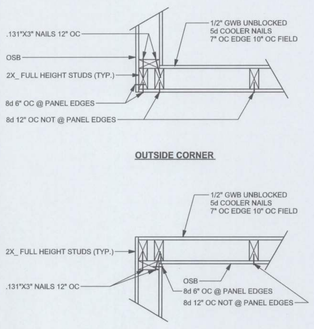
ATTACH GARAGE DOOR BUCK TO STUD PACK AT EACH SIDE OF DOOR OPENING WITH 3/8"x4" LAG SCREWS w/ 1" WASHER LAG SCREWS MAY BE COUNTERSUNK. HORIZONTAL JAMBS DO NOT TRANSFER LOAD. CENTER LAG SCREWS OR STAGGER 16d NAILS OR (2) ROWS OF .131 x 3 1/4" GN PER TABLE BELOW:

DOOR WIDTH	3/8" x 4" LAG	16d STAGGER	(2) ROWS OF .131 x 3 1/4" GN
8' - 10'	24" O.C.	5" O.C.	5" O.C.
11' - 15'	18" O.C.	4" O.C.	4" O.C.
16' - 18'	16" O.C.	3" O.C.	3" O.C.



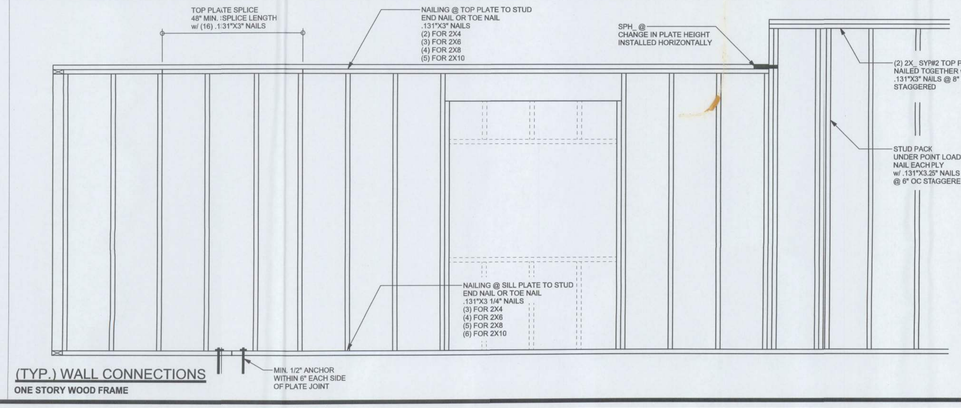
GARAGE DOOR BUCK INSTALLATION DETAIL

SCALE: N.T.S.



(TYP.) CORNER FRAMING

WOOD FRAME



(TYP.) WALL CONNECTIONS

ONE STORY WOOD FRAME

GENERAL NOTES:

TRUSSES: TRUSSES SHALL BE DESIGNED BY A FLORIDA LICENSED ENGINEER IN ACCORDANCE WITH THE 2010 FBCR. 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 TO 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 40 * DB (25" 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.

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 2010 FBCR 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.

MASONRY NOTES:

MASONRY CONSTRUCTION AND MATERIALS FOR THIS PROJECT SHALL CONFORM TO ALL REQUIREMENTS OF "SPECIFICATION FOR MASONRY STRUCTURES" (ACI 530.1/ASCE 6/TMS 602). THE CONTRACTOR AND MASON MUST IMMEDIATELY, BEFORE PROCEEDING, NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN ACI 530.1-02 AND THESE DESIGN DRAWINGS. ANY EXCEPTIONS TO ACI 530.1-02 MUST BE APPROVED BY THE ENGINEER IN WRITING.

	ACI530.1-02 Section	Specific Requirements
1.4A	Compressive strength	8" block bearing walls F'm = 1500 psi
2.1	Mortar	ASTM C 270, Type N, UNO
2.2	Grout	ASTM C 476, admixtures require approval
2.3	CMU standard	ASTM C 90-02, Normal weight, Hollow, medium surface finish, 8"x8"x16" running bond and 12"x12" or 16"x16" column block
2.3	Clay brick standard	ASTM C 216-02, Grade SW, Type FBS, 5.5"x2.75"x11.5"
2.4	Reinforcing bars, #3 - #11	ASTM 615, Grade 60, Fy = 60 ksi, Lap splices min 48 bar dia. (30" for #5)
2.4F	Coating for corrosion protection	Anchors, sheet metal ties completely embedded in mortar or grout, ASTM A525, Class G60, 0.60 oz/ft2 or 304SS
2.4F	Coating for corrosion protection	Joint reinforcement in walls exposed to moisture or wire ties, anchors, sheet metal ties not completely embedded in mortar or grout, ASTM A153, Class B2, 1.50 oz/ft2 or 304SS
3.3.E.2	Pipes, conduits, and accessories	Any not shown on the project drawings require engineering approval.
3.3.E.7	Movement joints	Contractor assumes responsibility for type and location of movement joints if not detailed on project drawings.

EXTERIOR WALL STUD TABLE FOR SPF #2 STUDS

(1) 2x4 @ 16" OC	TO 10'-1" STUD HEIGHT
(1) 2x4 @ 12" OC	TO 11'-2" STUD HEIGHT
(1) 2x6 @ 16" OC	TO 15'-7" STUD HEIGHT
(1) 2x6 @ 12" OC	TO 17'-3" STUD HEIGHT

THIS STUD HEIGHT TABLE IS PER 2012 WFCM, TABLE 3.20B4. EXTERIOR LOAD BEARING & NON LOAD BEARING STUD LENGTHS FOR WALLS WITH OSB EXTERIOR AND 1/2" GYP INTERIOR RESISTING INTERIOR ZONE WINDLOADS, 130 MPH, EXPOSURE C, STUD DEFLECTION LIMIT H/240 (NOT OK FOR SOME BRITTLE FINISH?). STUD SPACINGS SHALL BE MULTIPLIED BY 0.8 FOR FRAMING LOCATED WITHIN 4 FEET OF CORNERS FOR END ZONE LOADING. (END ZONE EXAMPLE 16" O.C. x 0.8 = 12.8" O.C.)

GRADE & SPECIES TABLE

		Fb (psi)	E (10^6 psi)
2x8	SYP #2	925	1.6
2x10	SYP #2	800	1.6
2x12	SYP #2	750	1.6
GLB	24F-V3 SP	2400	1.8
LSL	TIMBERSTRAND	1700	1.7
LVL	MICROLAM	1600	1.9
PSL	PARALAM	2900	2.0

ANCHOR TABLE

OBTAIN UPLIFT REQUIREMENTS FROM TRUSS MANUFACTURER'S ENGINEERING

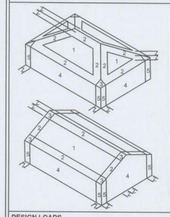
UPLIFT LBS. SYP	UPLIFT LBS. SPF	TRUSS CONNECTOR*	TO PLATES	TO RAFTER/TRUSS	TO STUDS
< 420	< 245	H5A	3-8d	3-8d	
< 455	< 265	H5	4-8d	4-8d	
< 360	< 235	H4	4-8d	4-8d	
< 455	< 320	H3	4-8d	4-8d	
< 415	< 365	H2.5	5-8d	5-8d	
< 600	< 535	H2.5A	5-8d	5-8d	
< 950	< 820	H6	8-8d	8-8d	
< 745	< 565	H8	5-10d, 1 1/2"	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
< 2329	< 2320	ABU88	18 - 16d		2-5/8" AB

ROOF SYSTEM DESIGN

THE SEAL ON THESE PLANS FOR COMPLIANCE WITH 2010 FBCR, SECTION R301.2.1 IS BASED ON REACTIONS, UPLIFTS, AND BEARING LOCATIONS IN TRUSS ENGINEERING SUBMITTED TO THE WIND LOAD ENGINEER. IT IS THE RESPONSIBILITY OF THE BUILDER TO CHECK ALL DETAILS OF THE COMPLETE ROOF SYSTEM DESIGN SUBMITTED BY THE TRUSS MANUFACTURER AND HAVE IT SIGNED, AND SEALED BY A DESIGN PROFESSIONAL FOR CORRECT APPLICATION OF 2010 FBCR REQUIRED LOADS AND ANY SPECIAL LOADS. THE BUILDER IS RESPONSIBLE TO REVIEW EACH INDIVIDUAL TRUSS MEMBER AND THE TRUSS ROOF SYSTEM AS A WHOLE AND TO PROVIDE RESTRAINT FOR ANY LATERAL BRACING. THE BUILDER SHOULD USE CARE CHECKING THE ROOF DESIGN BECAUSE THE WIND LOAD ENGINEER IS SPECIFICALLY NOT RESPONSIBLE FOR THE TRUSS LAYOUT WHICH WAS CREATED BY THE TRUSS MANUFACTURER AND THE TRUSS DESIGNER ALSO DENIES RESPONSIBILITY FOR THE LAYOUT PER NOTES ON THEIR SEALED TRUSS SHEETS.

DESIGN DATA

WIND LOADS PER 2010 FLORIDA BUILDING CODE RESIDENTIAL, SECTION R301.2.1
(ENCLOSED SIMPLE DIAPHRAGM BUILDINGS WITH FLAT, HIPPED, OR GABLE ROOFS; MEAN ROOF HEIGHT
BUILDING IS NOT IN THE HIGH VELOCITY HURRICANE ZONE
BUILDING IS NOT IN THE WIND-BORNE DEBRIS REGION
1.) BASIC WIND SPEED = 130 MPH, (3 SEC GUST, 33 FT, EXP. C)
2.) WIND EXPOSURE = C, BUILDER MUST FIELD VERIFY
3.) TOPOGRAPHIC FACTOR = 1.0, BUILDER MUST FIELD VERIFY
4.) RISK CATEGORY = II, (MRI = 700 YR)
5.) ROOF ANGLE = 7-45 DEGREES
6.) MEAN ROOF HEIGHT = <30 FT
7.) INTERNAL PRESSURE COEFFICIENT = N/A (ENCLOSED BUILDING)
8.) COMPONENTS AND CLADDING DESIGN WIND PRESSURES (TABLE R301.2(2))



Zone	Effective Wind Area (ft2)			
		10		
1	39	-43		
2	39	-68		
3	39	-100		
4	43	-46		
5	43	-57		

Garage Door 2010 FBCR, Table R301.2.(4)		
8x7 Garage Door	37	-42
16x7 Garage Door	36	-40

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, PO Box 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.

CERTIFICATION: I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to wind engineering comply with section R301.2.1, 2010 Florida Building Code Residential to the best of my knowledge.

LIMITATION: This design is valid for one building at specified location.

MARK DISOSWAY P.E. 53915
STATE OF FLORIDA PROFESSIONAL ENGINEER

October 04, 2013

Farnell Residence

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PRINTED DATE: October 04, 2013

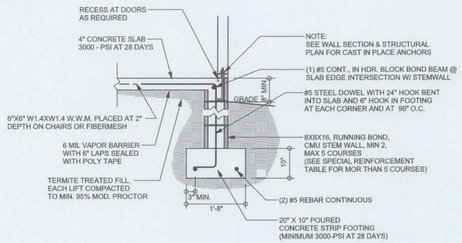
DRAWN BY: | STRUCTURAL BY:

FINALS DATE: 4Oct13

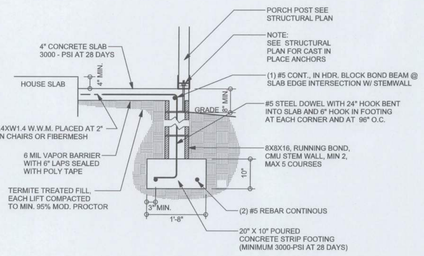
JOB NUMBER: 1309038

DRAWING NUMBER **S-1**

OF 6 SHEETS



F1 S-2 STEM WALL FOOTING
SCALE: 1/2" = 1'-0"

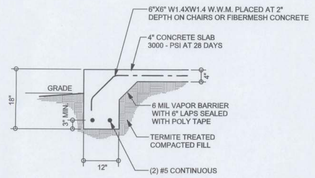


F2 S-2 STEM WALL PORCH FOOTING
SCALE: 1/2" = 1'-0"

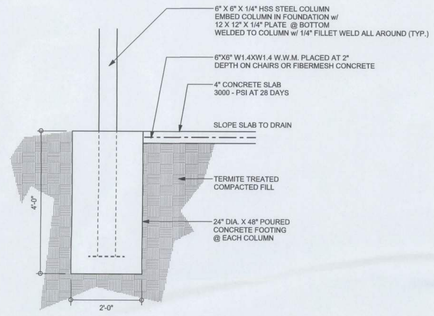
TALL STEM WALL TABLE

The table assumes 60 ksi reinforcing bars with 6" hook in the footing and bent 24" into the reinforced slab at the top. The vertical steel is to be placed toward the tension side of the CMU wall (away from the soil pressure, within 2" of the exterior side of the wall). If the wall is over 8' high, add Durowall ladder reinforcement at 16"OC vertically or a horizontal bond beam with 1#5 continuous at mid height. For higher parts of the wall 12" CMU may be used with reinforcement as shown in the table below.

STEMWALL HEIGHT (FEET)	UNBALANCED BACKFILL HEIGHT	VERTICAL REINFORCEMENT FOR 8" CMU STEMWALL (INCHES O.C.)			VERTICAL REINFORCEMENT FOR 12" CMU STEMWALL (INCHES O.C.)		
		#5	#7	#8	#5	#7	#8
3.3	3.0	96	96	96	96	96	96
4.0	3.7	96	96	96	96	96	96
4.7	4.3	88	96	96	96	96	96
5.3	5.0	56	96	96	96	96	96
6.0	5.7	40	80	96	80	96	96
6.7	6.3	32	56	80	56	96	96
7.3	7.0	24	40	56	40	80	96
8.0	7.7	16	32	48	32	64	80
8.7	8.3	8	24	32	24	48	64
9.3	9.0	8	16	24	16	40	48



F3 S-2 MONOLITHIC FOOTING
SCALE: 1/2" = 1'-0"



F4 S-2 CARPORT COLUMN FOUNDATION
SCALE: 1/2" = 1'-0"

FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

DIMENSIONS ON STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS

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.

CERTIFICATION: I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to wind engineering comply with section R301.2.1, 2010 Florida Building Code Residential to the best of my knowledge.

LIMITATION: This design is valid for one building, at specified location.

MARK DISOSWAY P.E. 53915 STATE OF FLORIDA PROFESSIONAL ENGINEER

October 04, 2013

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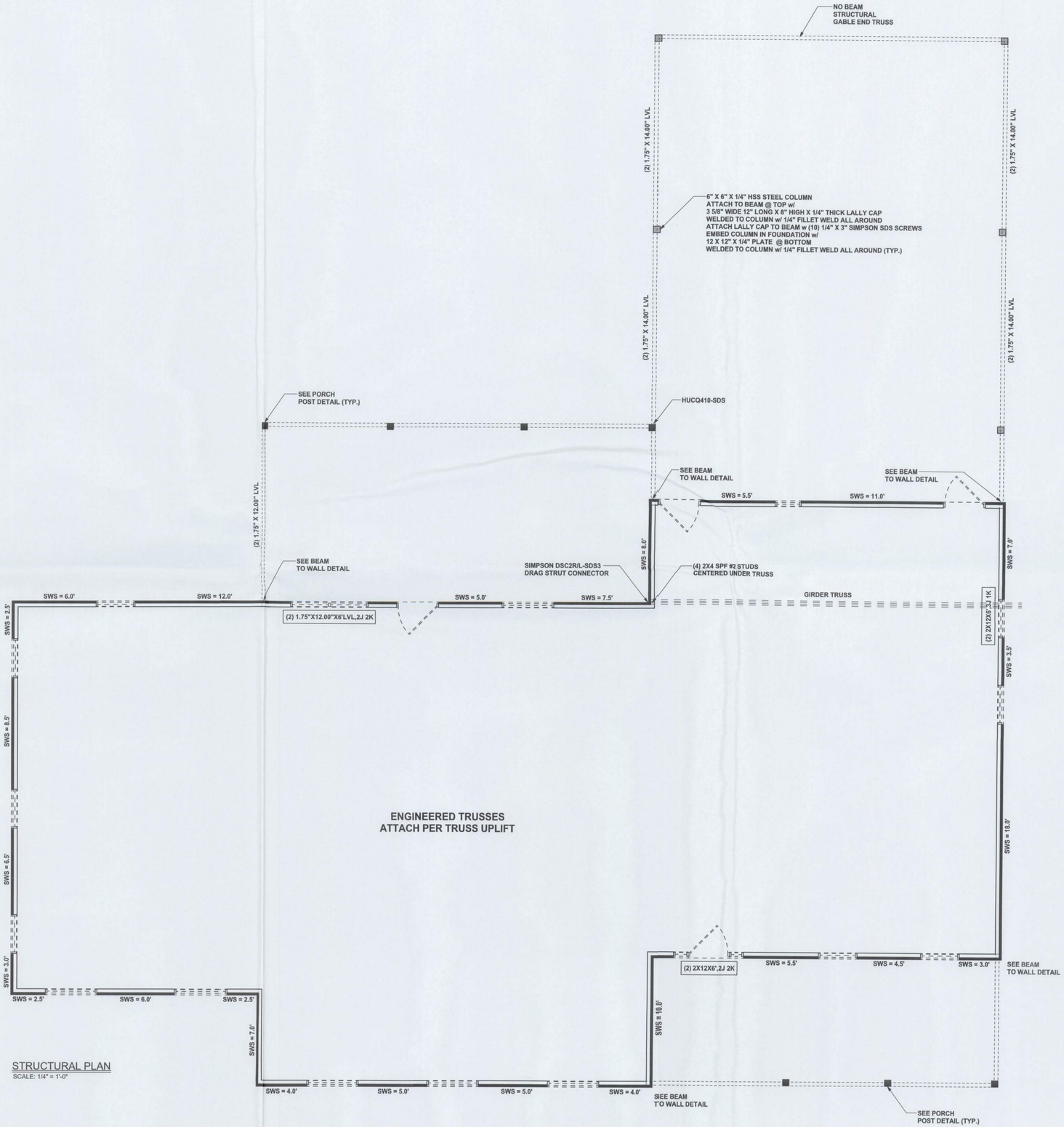

STRUCTURAL PLAN
SCALE: 1/4" = 1'-0"

STRUCTURAL PLAN NOTES

SN-1 ALL LOAD BEARING FRAME WALL & PORCH HEADERS SHALL BE A MINIMUM OF (2) 2X12 SP #2 U.N.O.

SN-2 ALL LOAD BEARING FRAME WALL HEADERS SHALL HAVE (1) JACK STUD & (1) KING STUD EACH SIDE (U.N.O.)

SN-3 DIMENSIONS ON STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS

SN-4 PERMANENT TRUSS BRACING IS TO BE INSTALLED AT LOCATIONS AS SHOWN ON THE SEALED TRUSS DRAWINGS. LATERAL BRACING IS TO BE RESTRAINED PER BCSI1-03, BCSI-B1, BCSI-B2, & BCSI-B3. BCSI-B1, BCSI-B2, & BCSI-B3 ARE FURNISHED BY THE TRUSS SUPPLIER, WITH THE SEALED TRUSS PACKAGE

WALL LEGEND

	EXTERIOR WALL
	INTERIOR NON-LOAD BEARING WALL
	INTERIOR LOAD BEARING WALL w/ NO UPLIFT
	INTERIOR LOAD BEARING WALL w/ UPLIFT

HEADER LEGEND

(2) 2X12X0',1J 1K
- HEADER/BEAM CALL-OUT (U.N.O.)
- NUMBER OF KING STUDS (FULL LENGTH)
- NUMBER OF JACK STUDS (UNDER HEADER)
- SPAN OF HEADER
- SIZE OF HEADER MATERIAL
- NUMBER OF PLIES IN HEADER

TOTAL SHEAR WALL SEGMENTS

INDICATES SHEAR WALL SEGMENTS

	REQUIRED	ACTUAL
TRANSVERSE	42.0'	74.0'
LONGITUDINAL	38.5'	89.0'

REVISIONS

SOFTPLAN ARCHITECTURAL DESIGN SOFTWARE

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

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MARK DISOSWAY P.E. 53915 STATE OF FLORIDA PROFESSIONAL ENGINEER
October 06, 2013

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OF 6 SHEETS