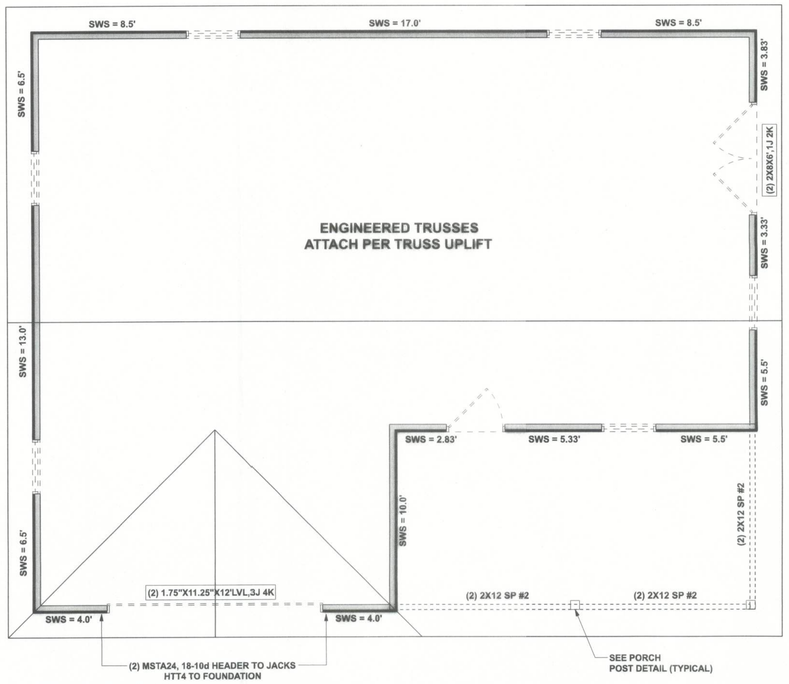


STRUCTURAL PLAN

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

STRUCTURAL PLAN NOTES

SN-1 DIMENSIONS ON STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL FLOOR PLAN FOR ACTUAL DIMENSIONS

SN-2 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

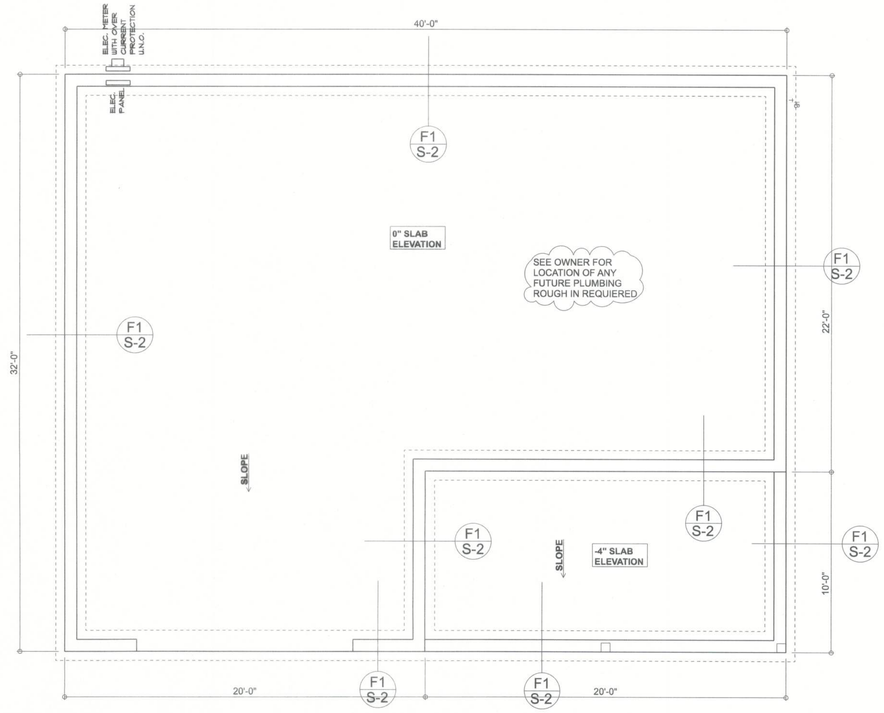
UNLESS NOTED OTHERWISE (MINIMUM REQUIERMENTS) ***SEE STRUCTURAL PLAN FOR ANY SPECIFIC CALL OUTS***	
BEAM / HEADERS (SIZE)	ALL LOAD BEARING FRAME WALL & PORCH HEADERS SHALL BE A MINIMUM OF (2) 2X6 SP #2 (UNO)
HEADERS (JACK & KING STUDS)	ALL LOAD BEARING FRAME WALL HEADERS SHALL HAVE (1) JACK STUD & (1) KING STUD EACH SIDE (UNO)
HEADERS (STRAPING)	ALL HEADERS w/ UPLIFT TO BE STRAPPED DOWN @ EACH SIDE WITH (1) LSTA24, 14-10d @ TOP & BOTTOM OF WALL WRAP UNDER BOTTOM PLATE & OVER TOP PLATE 1/2" X 10" ANCHOR BOLT w/ 3" X 3" X 1/4" WASHER MUST BE LOCATED WITHIN 6" OF KING STUD @ ALL DOOR LOCATIONS (U.N.O.)
JACK STUDS UNDER GIRDER TRUSS	USE ONE JACK STUD GIRDER SUPPORT PER 2000 LB LOAD

ACTUAL vs REQUIRED SHEARWALL

	TRANSVERSE	LONGITUDUNAL
ACTUAL	11678 LBF	13358 LBF
REQUIRED	10181 LBF	6518 LBF

HEADER LEGEND

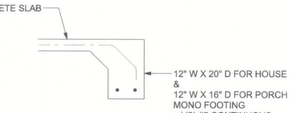
(2) 2X6X0', 1J 1K — HEADER/BEAM CALL-OUT (U.N.O.)
- NUMBER OF KING STUDS EACH SIDE OF OPENING (FULL LENGTH)
- NUMBER OF JACK STUDS EACH SIDE OF OPENING (UNDER HEADER)
- SPAN OF HEADER
- SIZE OF HEADER MATERIAL
- NUMBER OF PLIES IN HEADER



FOUNDATION PLAN

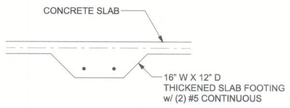
SCALE: 1/4" = 1'-0"

FOUNDATION NOTES	
FN - 1	DIMENSIONS ON FOUNDATION & STRUCTURAL SHEETS ARE NOT EXACT. REFER TO ARCHITECTURAL PLANS FOR ACTUAL DIMENSIONS, RECESSES IN SLAB, STEP DOWNS, ETC. DISOSWAY DESIGN GROUP OR MARK DISOSWAY, PE IS NOT RESPONSIBLE FOR DIMENSION ERRORS ON THIS PLAN.
FN - 2	CONTRACTOR SHALL VERIFY NEED FOR INTERIOR BEARING IN ALL AREAS BY REVIEWINGTHE ROOF TRUSS PLAN (BY THE SUPPLIER) BEFORE FINALIZING FOUNDATION PLAN.
FN - 3	THE SLAB SHALL BE: 4" CONCRETE SLAB REINFORCED w/ 6X6-1.4/1.4 WELDED WIRE MESH PLACED ON CHAIRS @ 1 1/2" DEPTH OR FIBER MESH CONCRETE, 6-MIL POLY VAPOR BARRIER w/ 6" LAPS SEALED w/ POLY TAPE OVER TERMITE-TREATED & COMPACTED FILL (ALSO, ANY OTHER CODE APPROVED TERMITE-TREATMENT METHOD CAN BE USED INSTEAD)



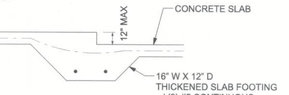
F1 S-2 OPTIONAL MONOLITHIC FOOTING

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



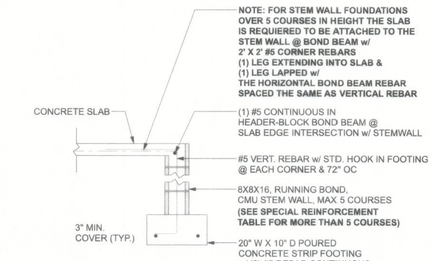
F2 S-2 INTERIOR BEARING FOOTING

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



F3 S-2 INTERIOR BEARING STEP FOOTING

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



F1 S-2 STEM WALL FOOTING

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

BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 12" BELOW UNDISTURBED SOIL OR ENGINEERED FILL

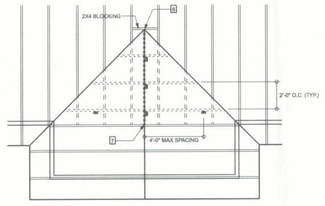
TALL STEM WALL TABLE:

The table assumes 40 ksi for #5 rebar and 60 ksi for #7 & #8 rebar 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.

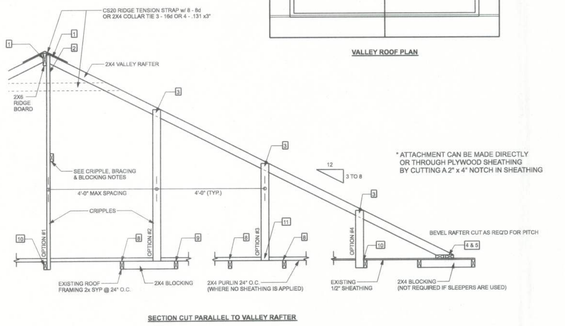
STEMWALL HEIGHT (FEET)	UNBALANCED BACKFILL HEIGHT	VERTICAL REINFORCEMENT FOR 8" CMU STEMWALL (INCHES O.C.)			VERTICAL REINFORCEMENT FOR 12" CMU STEMWALL (INCHES O.C.)		
		#5	#7	#8	#5	#7	#8
3.3	3.0	96	96	96	96	96	96
4.0	3.7	96	96	96	96	96	96
4.7	4.3	88	96	96	96	96	96
5.3	5.0	56	96	96	96	96	96
6.0	5.7	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

LUMBER SIZE & GRADE MINIMUM REQUIREMENTS

RIDGE BOARD	2X6 SYP #2
RAFTER SPANS 20'-0" OR LESS	2X4 SYP #2
PURLINS / LATERAL BRACING	2X4 SPF #2
SLEEPERS	2X (WIDTH OF RAFTER SEAT CUT) SPF #3 OR 2 PARALLEL 2X4 SPF #3
CRIPPLES & BLOCKING	2X4 SPF #2 OR BETTER
TRUSS BELOW	SEE TRUSS DESIGN - SOUTHEREN PINE MATERIAL



VALLEY ROOF PLAN



* ATTACHMENT CAN BE MADE DIRECTLY OR THROUGH PLYWOOD SHEATHING BY CUTTING A 2" x 4" NOTCH IN SHEATHING

SECTION CUT PARALLEL TO VALLEY RAFTER

ROOF OVER FRAMING & BRACING DETAIL

SCALE: N.T.S

VALLEY ROOF PLAN MEMBER LEGEND

- ═══ TRUSS
- = = = TRUSS UNDER VALLEY FRAMING
- ▷▷▷▷▷ VALLEY RAFTER OR RIDGE
- ⬌ CRIPPLE

CRIPPLES 4'-0" O.C. FOR 20 psf (T.L.) AND 10 psf (TC) (TYP. SHINGLE ROOF) MAX.

CONNECTION REQUIREMENT NOTES

1	2X4 RAFTERS TO RIDGE	3 -16d OR 6 - 131 x 3" TOE NAILS
2	CRIPPLE TO RIDGE	3 - 16d OR 6 - 131 x 3" FACE NAILS
3	CRIPPLE TO RAFTERS	3 - 16d OR 6 - 131 x 3" FACE NAILS
4	RAFTER TO SLEEPER OR BLOCKING	6 -16d OR 12 - 131 x 3" TOE NAILS
5	SLEEPER TO TRUSS	4 - 16d OR 8 - 131 x 3" FACE NAILS EACH TRUSS
6	RIDGE BOARD TO ROOF BLOCK	3 -16d OR 6 - 131 x 3" TOE NAILS
7	RIDGE BOARD TO TRUSS	3 -16d OR 6 - 131 x 3" TOE NAILS
8	PURLIN TO TRUSS (TYP.)	3 -16d OR 6 - 131 x 3" NAILS
8	PURLIN TO TRUSS (IF CRIPPLE IS ATTACHED TO PURLIN)	4 -16d OR 8 - 131 x 3" NAILS
9	TRUSS TO BLOCKING	3 -16d OR 6 - 131 x 3" END NAILS
10	CRIPPLE TO TRUSS	3 -16d OR 6 - 131 x 3" FACE NAILS
11	CRIPPLE TO PURLIN	3 -16d OR 6 - 131 x 3" FACE NAILS

GENERAL NOTES

MAXIMUM RAFTER SPANS
6'-0" FOR 2X4, 8'-0" FOR 2X6 SPF #2 OR SYP #2.
MAXIMUM ROOF AREA PER SUPPORT
- 1882 IN ZONES 2 & 3 , 2482 IN ZONE 1. (EXAMPLE: 4'-0" O.C. X 4'-0" SPAN = 1882 OR 2'-0" X 8'-0" SPAN = 1882)
- PURLINS SHOULD OVERLAP SHEATHING IF EXISTING SHEATHING IS REMOVED.
- PURLINS SHOULD OVERLAP SHEATHING ONE TRUSS SPACING MINIMUM.
- IN CASES THAT THIS IS IMPRACTICAL, OVERLAP SHEATHING A MINIMUM OF 8", AND NAIL UPWARDS THROUGH SHEATHING INTO PURLIN WITH A MINIMUM OF 8 - 8d COMMON WIRE NAILS.

THIS DRAWING APPLIES TO VALLEYS WITH THE FOLLOWING CONDITIONS:
- SPANS (DISTANCE BETWEEN HEELS) 40'-0" OR LESS
- MAXIMUM VALLEY HEIGHT: 14'-0" OR LESS
- MAXIMUM WIND SPEED: 130 MPH
- MAXIMUM ROOF SLOPE: 12 VERTICAL IN 12 FEET
- MAXIMUM TOTAL LOADING: 40 psf
- MEETS FBC / ASCE 7-16 WIND REQUIREMENTS
- EXPOSURE CATEGORY "C" (I = 1.0, Kzt = 1.0
- ENCLOSED BUILDING

CRIPPLE, BRACING, & BLOCKING NOTES

-2X4 CONTINUOUS LATERAL BRACE (CLB) MIN. IS REQUIRED FOR CRIPPLES 5'-0" TO **10'-0" LONG**
-NAILED w/ 2 - 10d NAILS OR 2X4 "T" OR SCAB BRACE NAILD TO FLAT EDGE OF CRIPPLE WITH 8d NAILS @ 8" O.C. "T" OR SCAB MUST BE 50% OF CRIPPLE LENGTH. CRIPPLES OVER 10'-0" LONG REQUIRE TWO CLB's OR BOTH FACES w/ "T" OR SCAB. USE STRESS GRADE LUMBER FOR "T" OR SCAB AND NAILS
- NARROW EDGE OF CRIPPLE CAN BE THROUGH NAILED TO RAFTER, AS LONG AS THE PROPER NUMBER OF NAILS ARE INSTALLED INTO RIDGE BOARD.
- INSTALL BLOCKING UNDER RAFTER IF SLEEPERS ARE NOT USED.
- INSTALL BLOCKING UNDER CRIPPLES IF CRIPPLES FALL BETWEEN LOWER TRUSS TOP CHORDS AND LATERAL BRACING IS NOT USED.
- APPLY ALL NAILING IN ACCORDANCE TO NDS-1997 SECTION 12. NAILS ARE COMMON WIRE NAILS UNLESS NOTED OTHERWISE.

MASONRY NOTE:

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 40, Fy = 40 ksi, Lap splices min 40 bar dia. (25" 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.

Bob Nichol Garage / Workshop

PROJECT ADDRESS:
217 SW Dragonfly Cir, Lake City, FL 32024

FL PE 53915

This item has been digitally signed and sealed by Mark Disosway PE on digital signature date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

5/5/2023

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 the 7th Edition Florida Building Code Residential (2020) to the best of my knowledge.

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

Mark Disosway P.E.
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Lake City, Florida 32025
386.754.5419
disoswaydesign@gmail.com

JOB NUMBER:
230385

S-2
OF 4 SHEETS