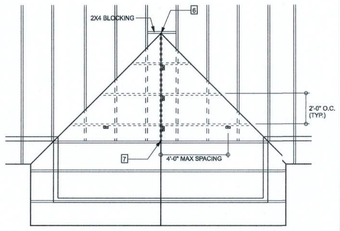
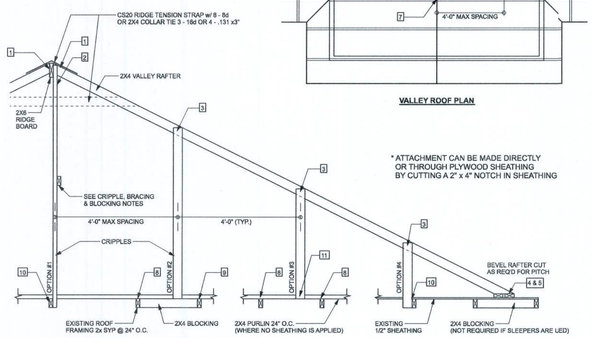
LUMBER SIZE & GRADE MINUMUM REQUIREMENTS

RIDGE BOARD	2X8 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

VALLEY ROOF PLAN MEMBER LEGEND

TRUSS
: = = : TRUSS UNDER VALLEY FRAMING
VALLEY RAFTER OR RIDGE
CRIPPLE
CRIPPLES 4'-0" O.C. FOR 20 psf (TL) AND 10 psf (TD) (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

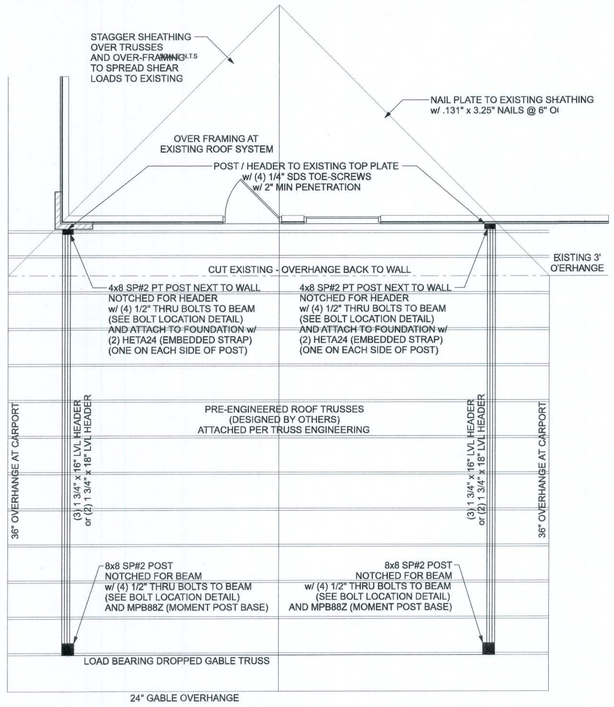
GENERAL NOTES

MAXIMUM RAFTER SPANS
6'-0" FOR 2X4, 8'-0" FOR 2X6 SPF #2 OR SYP #2.
MAXIMUM ROOF AREA PER SUPPORT
1852 IN ZONES 2 & 3 ; 2482 IN ZONE 1. (EXAMPLE: 4'-0" O.C. X 4'-0" SPAN = 16ft2) OR 2'-0" X 8'-0" SPAN = 16ft2)
PURLINS REQUIRED 2'-0" O.C. IF EXISTING SHEATHING IS REMOVED. PURLINS SHOULD OVERLAP SHEATHING ONE TRUSS SPACING MINIMUM. IN CASES THAT THIS IS IMPRACTICAL, OVERLAP SHEATHING A MINIMUM OF 6", 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:
- MAXIMUM RAFTER SPANS (BETWEEN HEELS) 40'-0" OR LESS
- MAXIMUM VALLEY ANGLE 14'-0" OR LESS
-MAXIMUM WIND SPEED: 130 MPH
- MAXIMUM MEAN ROOF HEIGHT: 30 FEET
- MAXIMUM TOTAL LOADING: 40 psf
- MEETS FBC 2014/ASCE 7-10 WIND REQUIREMENTS
- EXPOSURE CATEGORY "C", I = 1.0, Kzt = 1.0
- ENCLOSED BUILDING

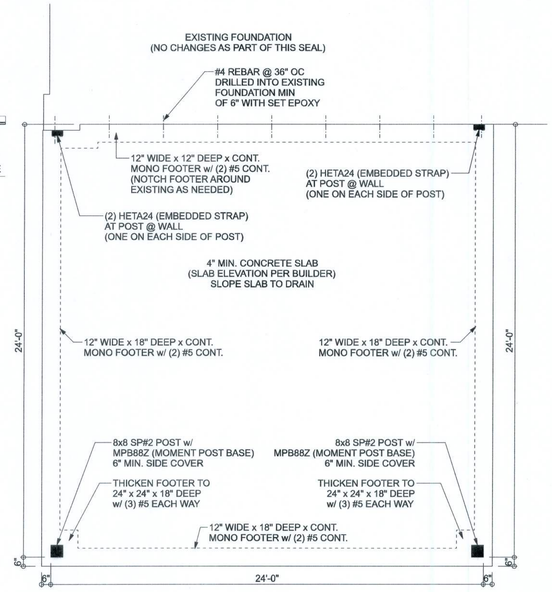
CRIPPLE, BRACING, & BLOCKING NOTES

-2X4 CONTINUOUS LATERAL BRACE (CLB) MIN. IS REQUIRED FOR CRIPPLES 5'-6" T 10'-0" LONG NAILED w/ 2 - 10d NAILS OR 2X4 "T" OR SCAB BRACE NAILD TO FLAT EDGE OF CIPPLE WITH 8d NAILS @ 8" O.C. "T" OR SCAB MUST BE 80% OF CRIPPLE LENGTH. CRIPPLS OVER 10'-0" LONG REQURE TWO CLB's OR BOTH FACES w/ "T" OR SCAB. USE STRSS GRADED LUMBER A BOX OR COMMON NAILS.
- NARROW EDGE OF CRIPPLE CAN FACE RIDGE OR 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 COMMN WIRE NAILS UNLESS NOTED OTHERWISE.

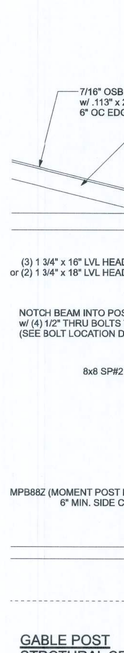
ROOF OVER FRAMING & BRACING DETAIL



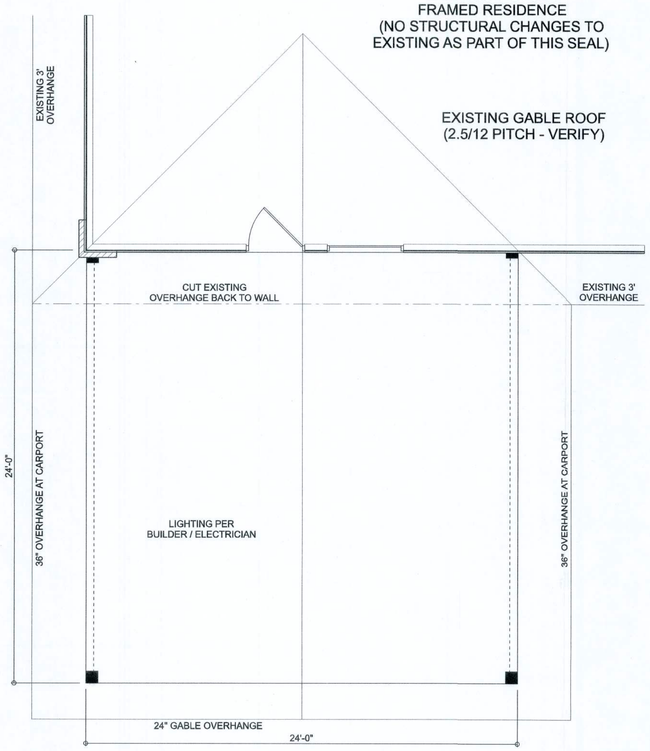
STRUCTURAL PLAN
SCALE: 1/4" = 1'-0"



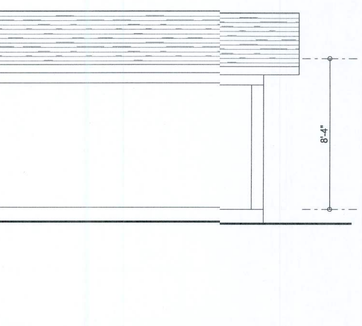
FOUNDATION PLAN
SCALE: 1/4" = 1'-0"



GABLE POST STRCTURAL SECTION
SCALE: 1/2" = 1'-0"



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



GENERAL NOTES:

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 1500 PSF BEARING CAPACITY UNLESS VISUAL OBSERVATION OR SOILS TEST PROVES OTHERWISE)

CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS, F'c = 2500 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 12'-T. 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 40, DEFORMED BARS, FY = 40 KSI. ALL LAP SPLICES 40 * DB (25" FOR #5 BARS); UNO. ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315-98, U.N.O.

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.

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.

GRADE & SPECIES TABLE

		Fb	E
2x8	SP #2	925	1.4
2x10	SP #2	800	1.4
2x12	SP #2	750	1.4
GLB	24F-V3 SP	2600	1.9
LSL	TIMBERSTRAND	1700	1.7
LVL	MICROLAM	2950	2.0
PSL	PARALAM	2900	2.0

CONNECTOR TABLE

Uplift SP	Uplift SPF	Truss Connector	To Plate	To Truss/Rafter
615	485	SDWC15600	-	-
415	290	H3	4-8dx1 1/2"	4-8dx1 1/2"
575	495	H2.5A	5-8dx1 1/2"	5-8dx1 1/2"
1340	1015	H10A	9-10d1 1/2"	9-10d1 1/2"
720	620	LTS12-20	6-10d1 1/2"	6-10d1 1/2"
1000	860	MTS12-30	7-10d1 1/2"	7-10d1 1/2"
1450	1245	HTS20-30	12-10d1 1/2"	12-10d1 1/2"
Uplift SP	**Uplift SPF**	**Strap Ties**	**To One Member**	**To Other Member**
1235	1235	LSTA21	8-10d	8-10d
1640	1455	MSTA24	9-10d	9-10d
1030	1030	CS20	7-10d	7-10d
Uplift SP	**Uplift SPF**	**Stud Plate Ties**	**To Stud**	**To Plate**
585	535	SP1	6-10d	4-10d
1065	605	SP2	6-10d	6-10d
771	771	LSTA24	10-10d	wrap under or over plate
1235	1235	LSTA24	14-10d	wrap under or over plate
Uplift SP	**Uplift SPF**	**Holdowns @ Stemwall**	**To Stud / Post**	**Anchor**
1825	1800	DTT2Z	8-SDS 1/4"x1 1/2"	1/2"x12" Titen HD
4235	3640	HTT4	18-16dx2 1/2"	1/2"x12" Titen HD
Uplift SP	**Uplift SPF**	**Holdowns @ Mono**	**To Stud / Post**	**Anchor**
1825	1800	DTT2Z	8-SDS 1/4"x1 1/2"	1/2"x6" Titen HD
4235	3640	HTT4	18-16dx2 1/2"	1/2"x12" Titen HD
Uplift SP	**Uplift SPF**	**Post Bases @ Stemwall**	**To Post**	**Anchor**
2200		ABU44	12-16d	5/8"x12" Drill & Epoxy
2300		ABU66	12-16d	5/8"x12" Drill & Epoxy
Uplift SP	**Uplift SPF**	**Post Bases @ Mono**	**To Post**	**Anchor**
2200		ABU44	12-16d	5/8"x7" Drill & Epoxy
2300		ABU66	12-16d	5/8"x7" Drill & Epoxy

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 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.

ROOF SYSTEM DESIGN:

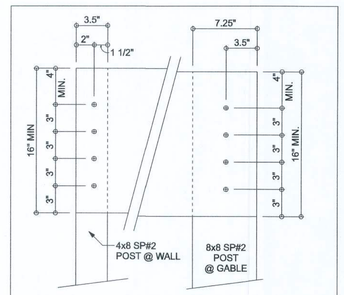
THE SEAL ON THESE PLANS FOR COMPLIANCE WITH FBCR, IS BASED ON REACTIONS, UPLIFTS, AND BEARING LOCATIONS IN TRUSS ENGINEERING SUBMITTED TO THE WIND LOAD ENGINEER. IT IS THE RESPONSIBILITY OF THE BUILDER TO CHECK ALL DETAILS OF THE COMPLETE ROOF SYSTEM DESIGN SUBMITTED BY THE TRUSS MANUFACTURER AND HAVE IT SIGNED, AND SEALED BY A DESIGN PROFESSIONAL FOR CORRECT APPLICATION OF 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 CRITERIA & LOADS:

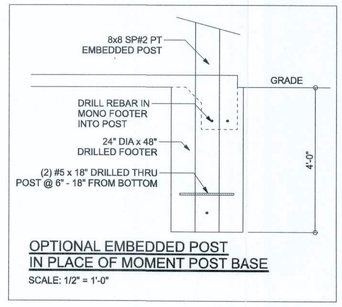
BUILDING CODE	6TH EDITION FLORIDA BUILDING CODE RESIDENTIAL (2017)
CODE FOR DESIGN LOADS	ASCE 7-10
WINDLOADS	
BASIC WIND SPEED (ASCE 7-10, 33 GUST)	130 MPH
WIND EXPOSURE (BUILDER MUST FIELD VERIFY)	C
TOPOGRAPHIC FACTOR (BUILDER MUST FIELD VERIFY)	I
RISK CATEGORY	II
ENCLOSURE CLASSIFICATION	ENCLOSED
INTERNAL PRESSURE COEFFICIENT	0.18
ROOF ANGLE	7-45 DEGREES
MEAN ROOF HEIGHT	30 FT
C&C DESIGN PRESSURES	SEE TABLE
FLOOR LOADING	
ROOMS OTHER THAN SLEEPING ROOM	40 PSF LIVE LOAD
SLEEPING ROOMS	30 PSF LIVE LOAD
ROOF LOADING	
FLAT OR < 4:12	20 PSF LIVE LOAD
4:12 TO < 12:12	16 PSF LIVE LOAD
12:12 & GREATER	12 PSF LIVE LOAD
SOIL BEARING CAPACITY	1500 PSF
FLOOD ZONE	THIS BUILDING IS NOT IN THE FLOOD ZONE

COMPONENT & CLADING DESIGN PRESSURES 130 MPH (EXP C)

EFFECTIVE WIND AREA (FT2)	ZONE 4 INTERIOR		ZONE 5 END 4' FROM ALL OUTSIDE CORNER	
0 - 20	+25.6(Vasd)	-27.8(Vasd)	+25.6(Vasd)	-34.2(Vasd)
0 - 20	+42.6(Vult)	-46.2(Vult)	+42.6(Vult)	-57(Vult)



BOLT LOCATION DETAIL
SCALE: N.T.S.



OPTIONAL EMBEDDED POST IN PLACE OF MOMENT POST BASE
SCALE: 1/2" = 1'-0"

Erkinger Construction Group

Audrey Bullard LLC

PROJECT ADDRESS:
Parcel# 18-4S-17-08463-000
182 Crystal Glen, Lake City, Fl. 32025

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

CERTIFICATION I hereby certify that I have examined this plin, and that the applicable portions of the plin, relating to wind engineering comply with the 6th Edition Florida Building Code, Bilding (2017) chapter 16 to the best of myknowledge.

LIMITATION: This seal is for structural only as based as delegated by design professional of record. This deslen is valid for one building, at specified locabn.

Design professioal of record:
Jason D Cytacki AIA, Architect, FL# AR96141

COLUMBIA COUNTY BUILDING DEPT. APPROVED FOR CODE COMPLIANCE BUILDING OFFICIAL PLANS EXAMINER

MARK DISOSWAY P.E. 53915

STATE OF FLORIDA PROFESSIONAL ENGINEER MARK D. DISOSWAY LICENSE No. 53915

Tuesday, December 24, 2019

Mark Disosway P.E.
163 SW Midtown Place
Suite 103
Lake City, Florida 32025
386.754.5419
disoswayesign@gmail.com

SCANNED

JOB NUMBER:
91356

S-1
OF 1 SHEET