DESIGN SPECIFICATIONS

1. DESIGN CODES:
   ASCE 7-22
   2023 FLORIDA BUILDING CODE - RESIDENTIAL

2. WIND ZONE INFORMATION
   BASIC WIND SPEED: 130 MPH
   BUILDING RISK CATEGORY: II
   WIND EXPOSURE CATEGORY: B
   INT. PRESSURE COEF: ±0.18

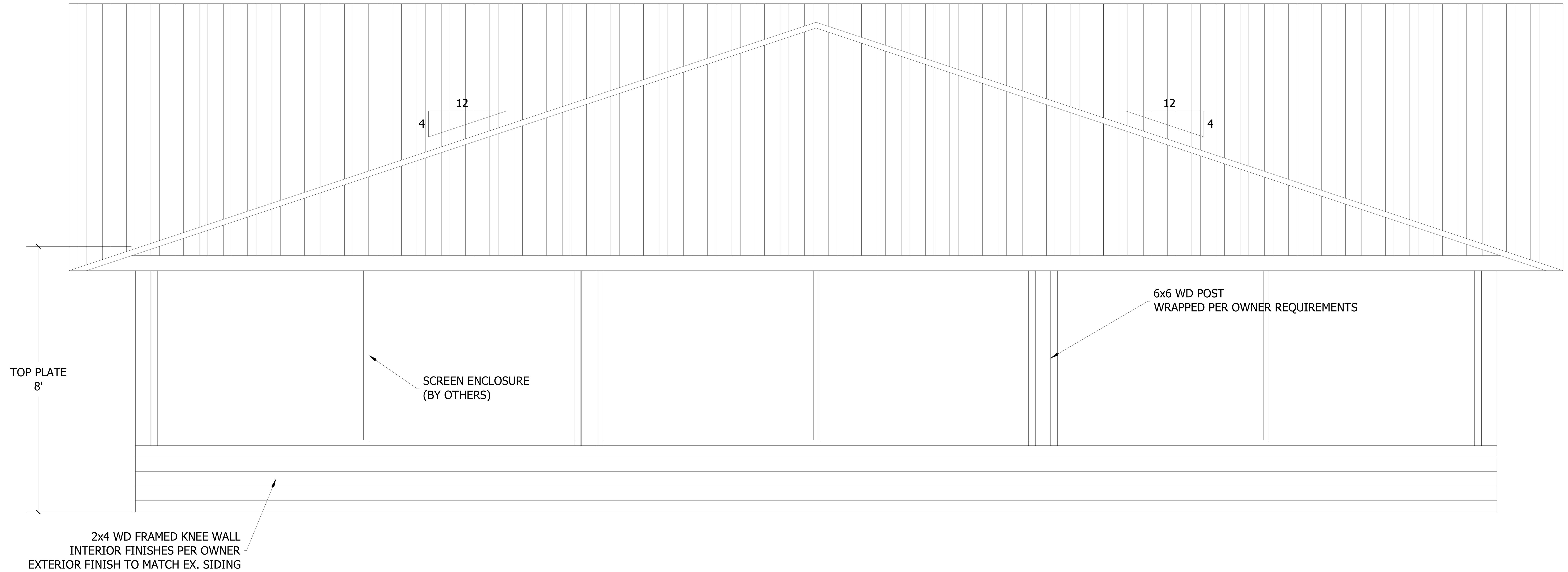
3. DESIGN LOADS
   ROOF LIVE LOAD: 20 PSF
   ROOF DEAD LOAD: 10 PSF

   FLOOR LIVE LOAD: 40 PSF
   FLOOR DEAD LOAD: 20 PSF

4. COMPONENTS & CLADDING
   ZONE 1: +11.12/-25.03
   ZONE 2: +11.12/-32.61
   ZONE 3: +11.12/-35.14
   ZONE 4: +14.92/-16.18
   ZONE 5: +14.92/-19.37

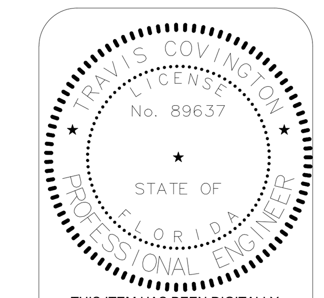
MATERIAL SPECIFICATIONS

HARDWARE AND ANCHORS:
ANCHOR BOLTS & THREADED ROD: SHALL BE IN ACCORDANCE WITH ASTM A307 OR ASTM F 1554 GRADE 36.
WASHERS: SHALL BE IN ACCORDANCE WITH ASTM A500 (GRADE B).
NUTS: SHALL BE IN ACCORDANCE WITH ASTM A 563 GRADE A HEX.
METAL CONNECTORS: ALL METAL CONNECTORS WHICH ARE EXPOSED TO EXTERIOR SHALL BE GALVANIZED.
RETROFIT REBAR/ROD INSTALLATION: EMBEDMENT OF RODS OR REBAR DOWELS SHALL BE 12 BAR DIAMETER MINIMUM, HOLES SHALL BE $\frac{1}{4}$" LARGER THAN REBAR SIX AND $\frac{1}{8}$" LARGER THAN THREADED ROD SIZE (U.O.N.)
ANCHORING ADHESIVE: SHALL BE ONE OF THE FOLLOWING PRODUCTS (DUAL CARTRIDGE INSTALLATION ONLY):
EPOXY: ITW RED HEAD A7
REINFORCING STEEL: SHALL BE ASTM A615, GRADE 60.
STRUCTURAL STEEL: SHALL BE ASTM A992, GRADE 50.
WELDED WIRE FABRIC (WWF): SHALL BE ASTM A185.
LAMINATED VENEER LUMBER (LVL): ALL LAMINATED VENEER LUMBER SHALL MEET OR EXCEED THE FOLLOWING DESIGN PARAMETERS - ELASTIC MODULUS (E)1,900ksi, BENDING STRESS (Fb) 2600psi



REAR ELEVATION
SCALE: NTS

SIDE ELEVATION (TYP.)
SCALE: NTS



THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY TRAVIS COVINGTON, P.E. ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

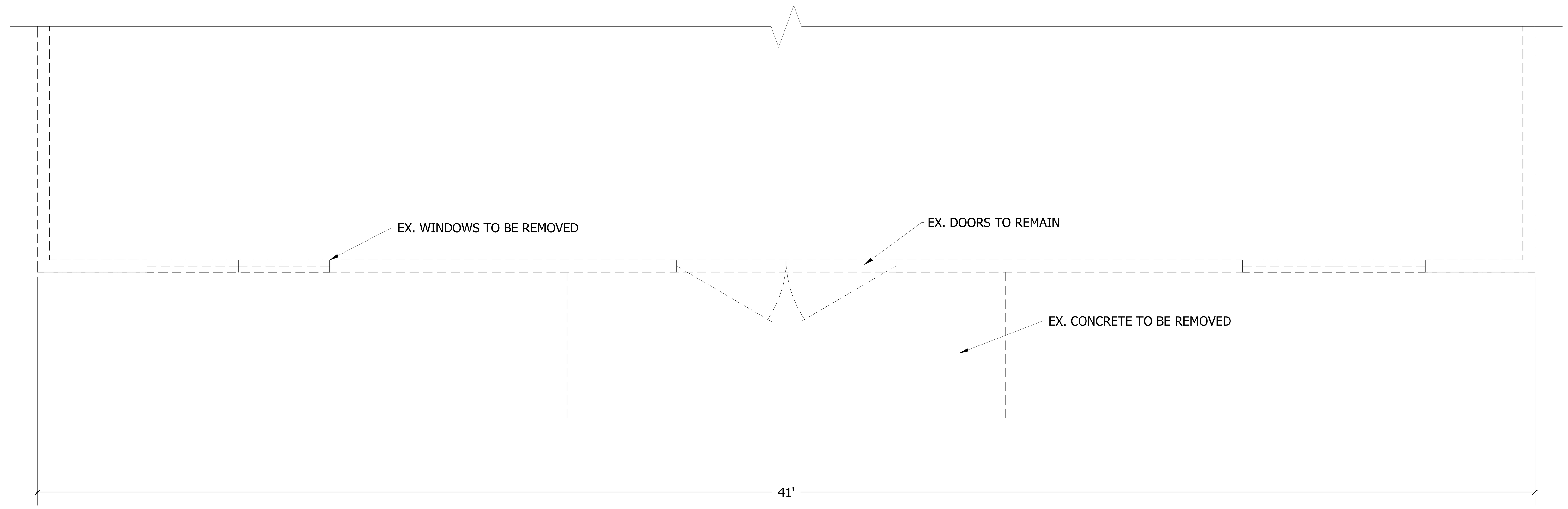
JARVIS SCREEN PORCH ADDITION
256 SE ELM LOOP, LAKE CITY, FL 32025

COVINGTON ENGINEERING SERVICES
272 NW COUNTRY LAKE DR, LAKE CITY, FL 32055
813.770.9470
TRAVIS@COVINGTONENG.COM

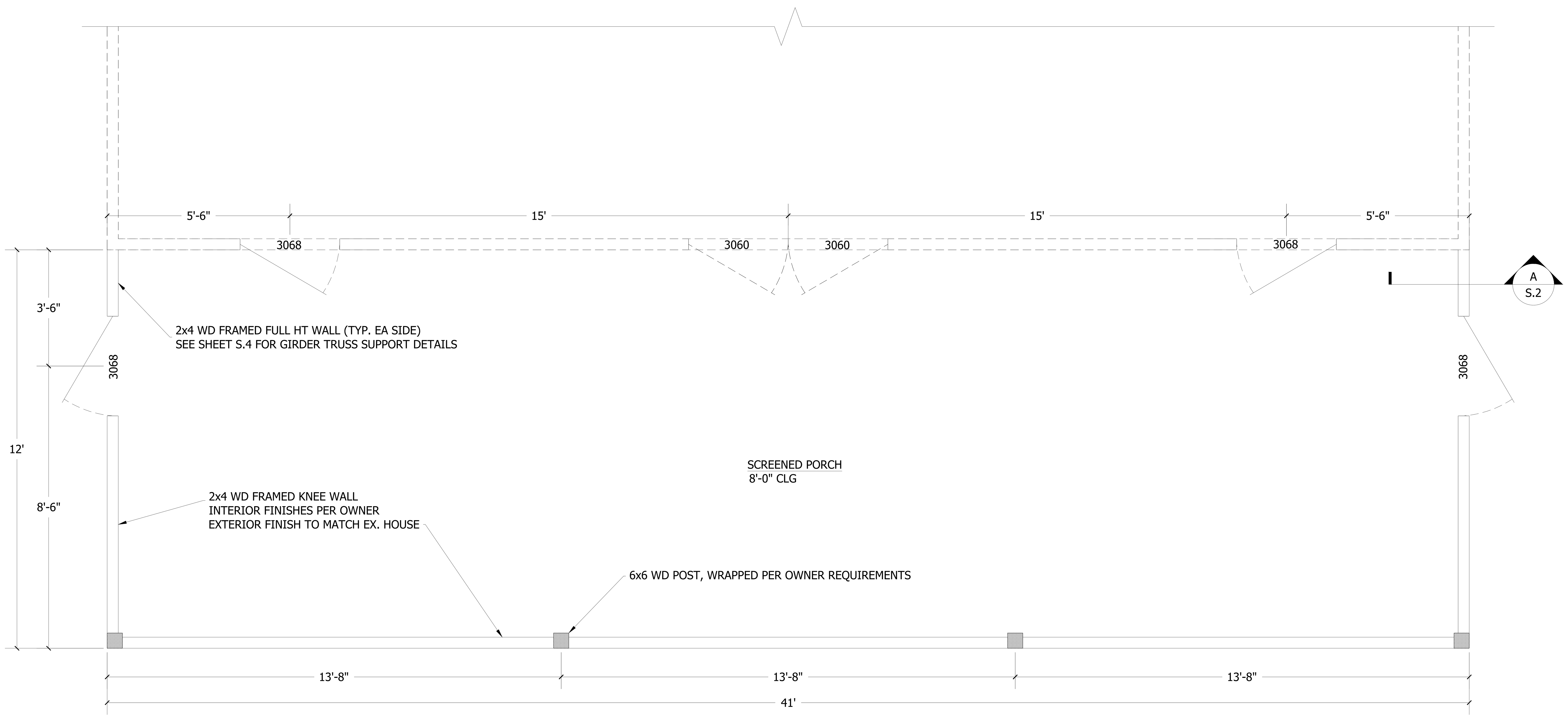
JOB NUMBER
STR010

ELEVATION VIEWS

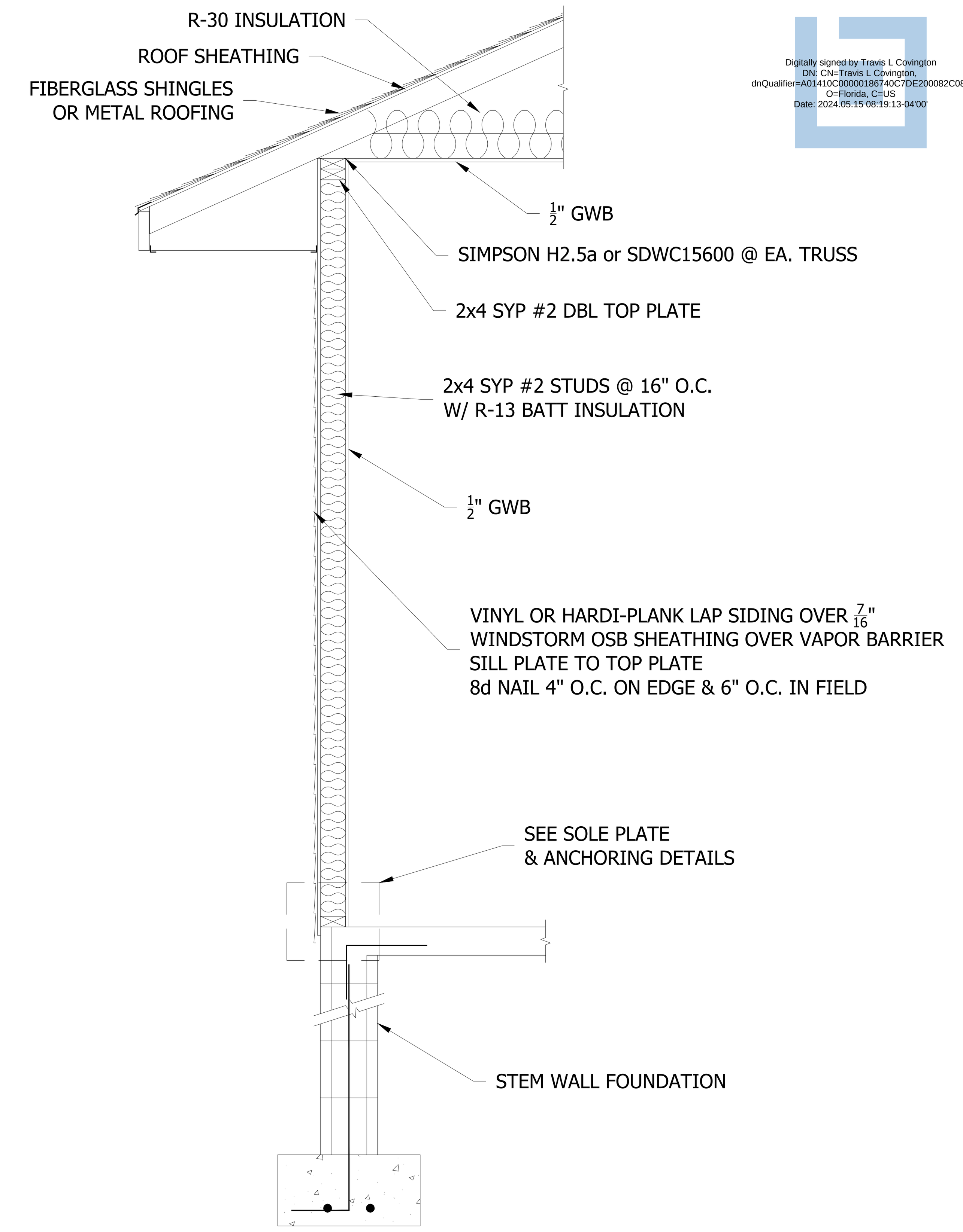
SHEET NUMBER
S.1
OF 4 SHEETS



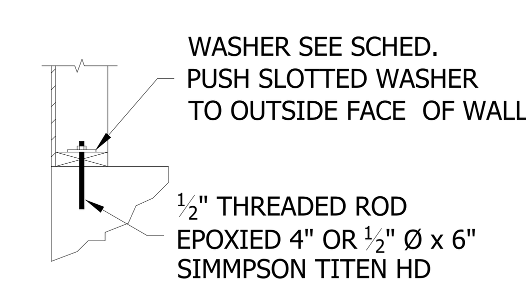
EXISTING FLOOR PLAN
SCALE: 1/2"=1'-0"



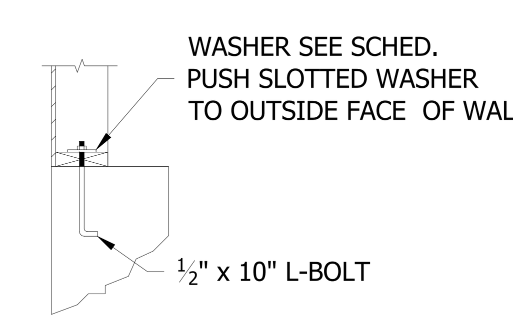
PROPOSED FLOOR PLAN
SCALE: 1/2"=1'-0"



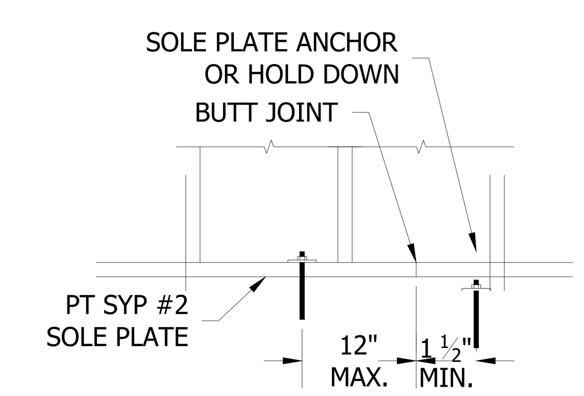
A / S.2 FULL HEIGHT WALL SECTION
SCALE: 3/4"=1'-0"



EXPOXY AND SCREW ANCHORS



J-BOLT EMBEDDED ANCHORS

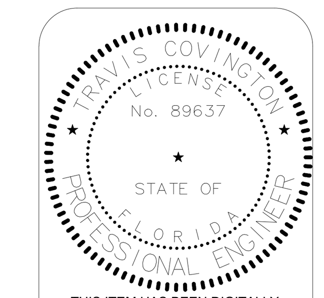


SOLE PLATE BREAK

SOLE PLATE ANCHOR SCHEDULE						
ANCHOR	EXT. WALL SPACING	SHEARWALL SPACING	WASHER SPEC		EMBEDDMENT DEPTH	MIN. EDGE DISTANCE
			2x4 WALL	2x6 WALL		
TITEN HD	42"	24"	2x2x⅛"	3x3x0.229"	4"	2"
EPOXY	42"	24"	2x2x⅛"	3x3x0.229"	4"	2"
J-BOLT	42"	24"	2x2x⅛"	3x3x0.229"	7"	2"

NOTES:
1. SOLE PLATE ANCHORS ARE REQUIRED AT ALL EXTERIOR WALLS AND ADJACENT TO CORNERS AND PLATE BREAKS.
2. 3x3 WASHERS SHALL BE SLOTTED.
3. AS AN ALTERNATE TO THE 3x3x¼" PLATE WASHER, A 3x3x⅛" W/ 1 ½"Ø ROUND STEEL WASHER MAY BE USED.

1 / S.2 SOLE PLATE ANCHOR DETAIL & SCHEDULE
SCALE: 3/4"=1'-0"



JARVIS SCREEN PORCH ADDITIION
256 SE ELM LOOP, LAKE CITY, FL 32025

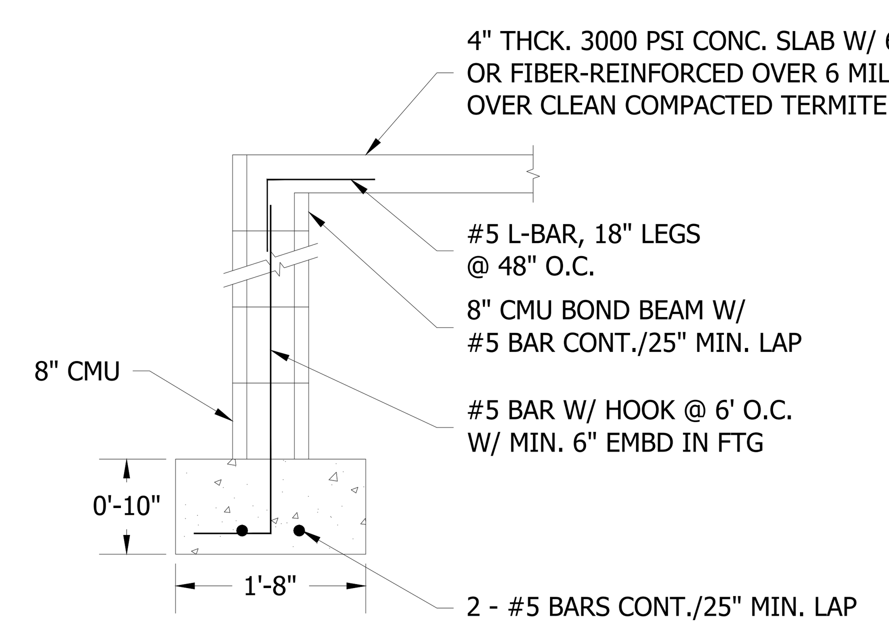
COVINGTON ENGINEERING SERVICES
272 NW COUNTRY LAKE DR, LAKE CITY, FL 32055
813.770.9470
TRAVIS@COVINGTONENG.COM

JOB NUMBER
STR010

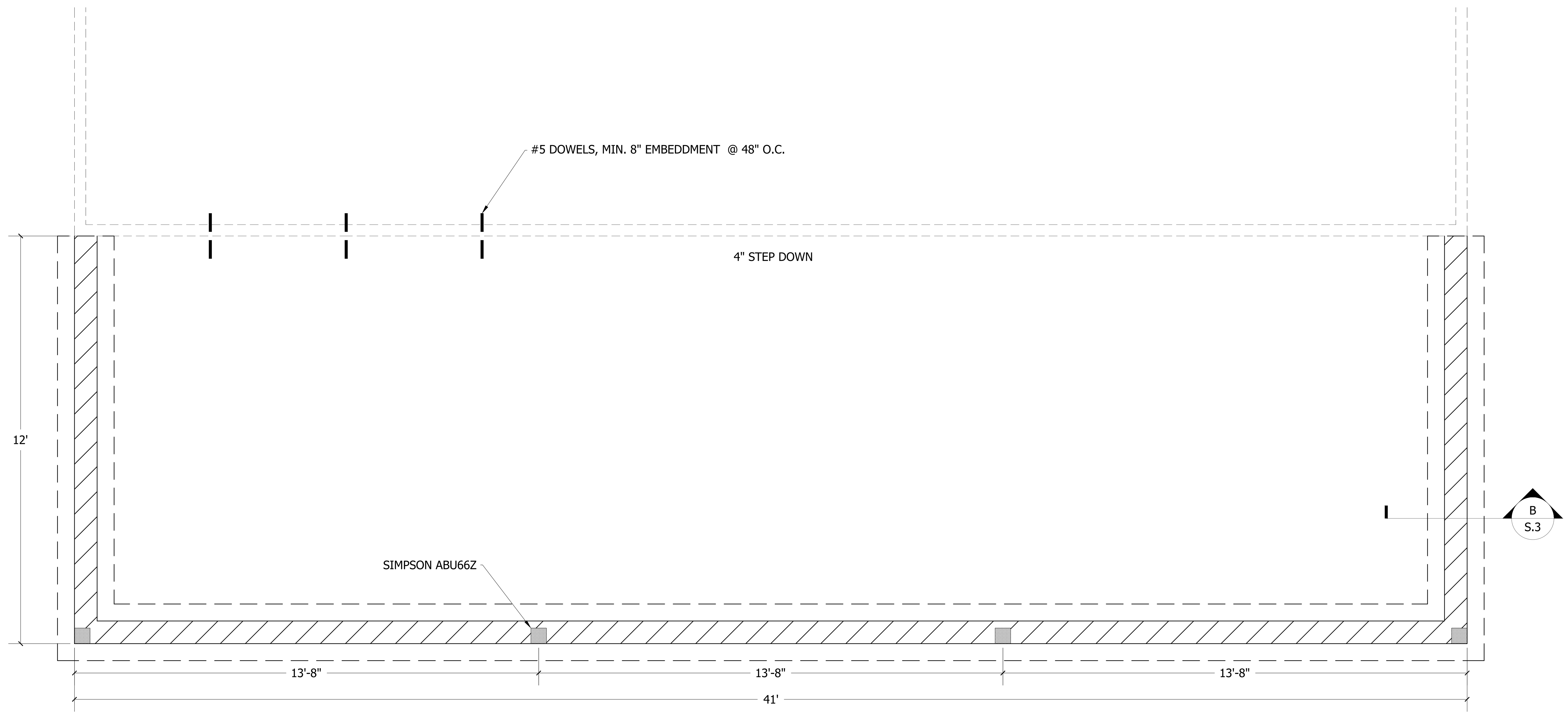
FLOOR PLAN

CONCRETE/MASONRY/METAL NOTES:

1. DESIGN SOIL BEARING PRESSURE: 2000 PSF
2. EXPANSIVE SOILS: WHERE DIRECTED BY THE SOILS ENGINEER, SOIL AUGMENTATION PER THE SOILS ENGINEER'S SPECIFICATIONS SHALL BE IMPLEMENTED PRIOR TO PLACING ANY FOUNDATIONS - TESTS AS SPECIFIED SHALL BE PERFORMED TO DETERMINE THE SUITABILITY OF THE SUB-GRADE TO SUPPORT THE DESIGN LOADS.
3. CLEAN SAND FILL OVER STRIPPED AND COMPACTED EXISTING GRADE SHALL BE PLACED IN 12" LIFTS. BOTH SUB-SOIL AND FILL COMPACTION SHALL BE NOT LESS THAN 98% AS MEASURED BY A MODIFIED PROCTOR TEST AT THE RATE OF ONE TEST FOR EACH 1500 SF OF BUILDING PAD AREA, OR FRACTION THEREOF, FOR EACH 12" LIFT.
4. REINFORCING STEEL SHALL BE GRADE 60 AND MEET THE REQUIREMENTS OF ASTM A615, ALL BENDS SHALL BE MADE COLD.
5. WELDED WIRE MESH SLAB REINFORCING SHALL MEET THE REQUIREMENTS OF ASTM A185 - MIN. YIELD STRESS - 85 KSI.
6. CONCRETE SHALL BE STANDARD MIX F'c = 3000 PSI FOR ALL FTGS, SLABS, COLUMNS, AND BEAMS OR SHALL BE STANDARD PUMP MIX F'c = 3000 PSI. STRENGTH SHALL BE ATTAINED WITHIN 28 DAYS OF PLACEMENT, MIXING, PLACING AND FINISHING SHALL BE AS PER ACI STANDARDS.
7. CONCRETE BLOCK SHALL BE AS PER MANUFACTURER'S PRODUCT GUIDE FOR ASTM C-90 REQUIREMENTS WITH MEDIUM SURFACE FINISH - F'm = 1500 PSI
8. MORTAR SHALL BE TYPE "M" OR "N" FOR ALL MASONRY UNITS.
9. STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 STANDARDS FOR STRENGTH, BOLTS SHALL BE ASTM A307 / GRADE 1 OR A325, AS PER PLAN REQUIREMENTS
10. WELDS SHALL BE AS PER "AMERICAN WELDING SOCIETY" STANDARDS FOR STRUCTURAL STEEL APPLICATIONS.



B S.3 STEM WALL FOUDNATION DETAIL
SCALE: 3/4"=1'-0"



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

Digitally signed by Travis L Covington
DN: CN=Travis L Covington, dnQualifier=A01410C00000186740C7DE200082C08, O=Florida, C=US
Date: 2024.05.15 08:19:30-04'00'

TRAVIS COVINGTON LICENSE No. 89637 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY TRAVIS COVINGTON, P.E. ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

JARVIS SCREEN PORCH ADDITIION
256 SE ELM LOOP, LAKE CITY, FL 32025

COVINGTON ENGINEERING SERVICES
272 NW COUNTRY LAKE DR, LAKE CITY, FL 32055
813.770.9470
TRAVIS@COVINGTONENG.COM

JOB NUMBER
STR010

FOUNDATION PLAN

SHEET NUMBER
S.3
OF 4 SHEETS

ENGINEERED TRUSSES

SHALL BEAR THE SEAL OF AN ENGINEER IN THE STATE WHERE PROJECT IS BEING BUILT AND SHALL COMPLY WITH NFPA, TPI, AND AITC 100. CONTRACTOR SHALL VERIFY THAT ADEQUATE TRUSS BEARING IS INSTALLED AT ALL TRUSSES AS INDICATED IN THE TRUSS SHOP DRAWINGS. ALL TRUSS-TO-TRUSS CONNECTIONS AND TRUSS PROFILES ARE THE RESPONSIBILITY OF THE DELEGATED TRUSS ENGINEER. ALL TRUSSES SHALL HAVE TEMPORARY BRACING PER "COMMENTARY" AND RECOMMENDATION FOR HANDLING, INSTALLING, & BRACING METAL PLATE CONNECTED WOOD TRUSSES, HIB-91." AT MULTIPLE STRAP CONNECTIONS, SPREAD STRAPS TO AVOID NAILING CONFLICTS THROUGH TRUSS. WHEN USING (2) STRAPS ON SINGLE PLY TRUSSES, PLACE DIAGONALLY ACROSS DBL. TOP PLATE FROM EA. OTHER.

ROOF COVERING SPECIFICATIONS

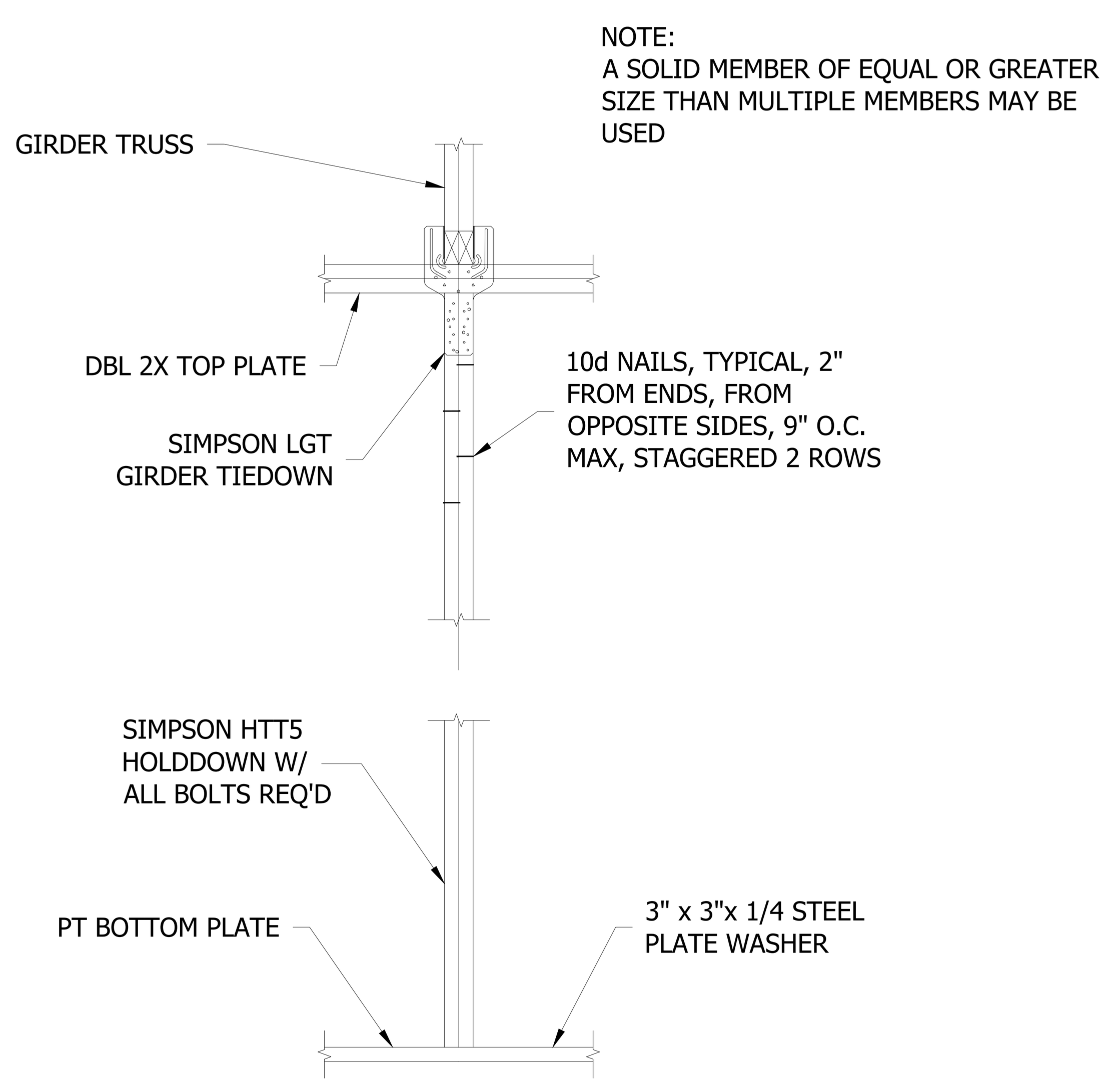
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF THE ROOF COVERING SYSTEM. ASPHALT SHINGLES SHALL COMPLY WITH ASTM D3161 AND BE INSTALLED ACCORDING TO THE MANUFACTURER'S REQUIREMENTS. CLAY AND TILE ROOFS SHALL BE INSTALLED PER THE "CONCRETE AND CLAY ROOF TILE INSTALLATION MANUAL." AND THE MANUFACTURERS REQUIREMENTS. STANDING SEAM METAL ROOFS SHALL COMPLY WITH ASTM E1514AND BE INSTALLED ACCORDING TO THE MANUFACTURERS REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL METAL FLASHING AND VALLEY MATERIALS.

ROOF SHEATHING SPECIFICATIONS

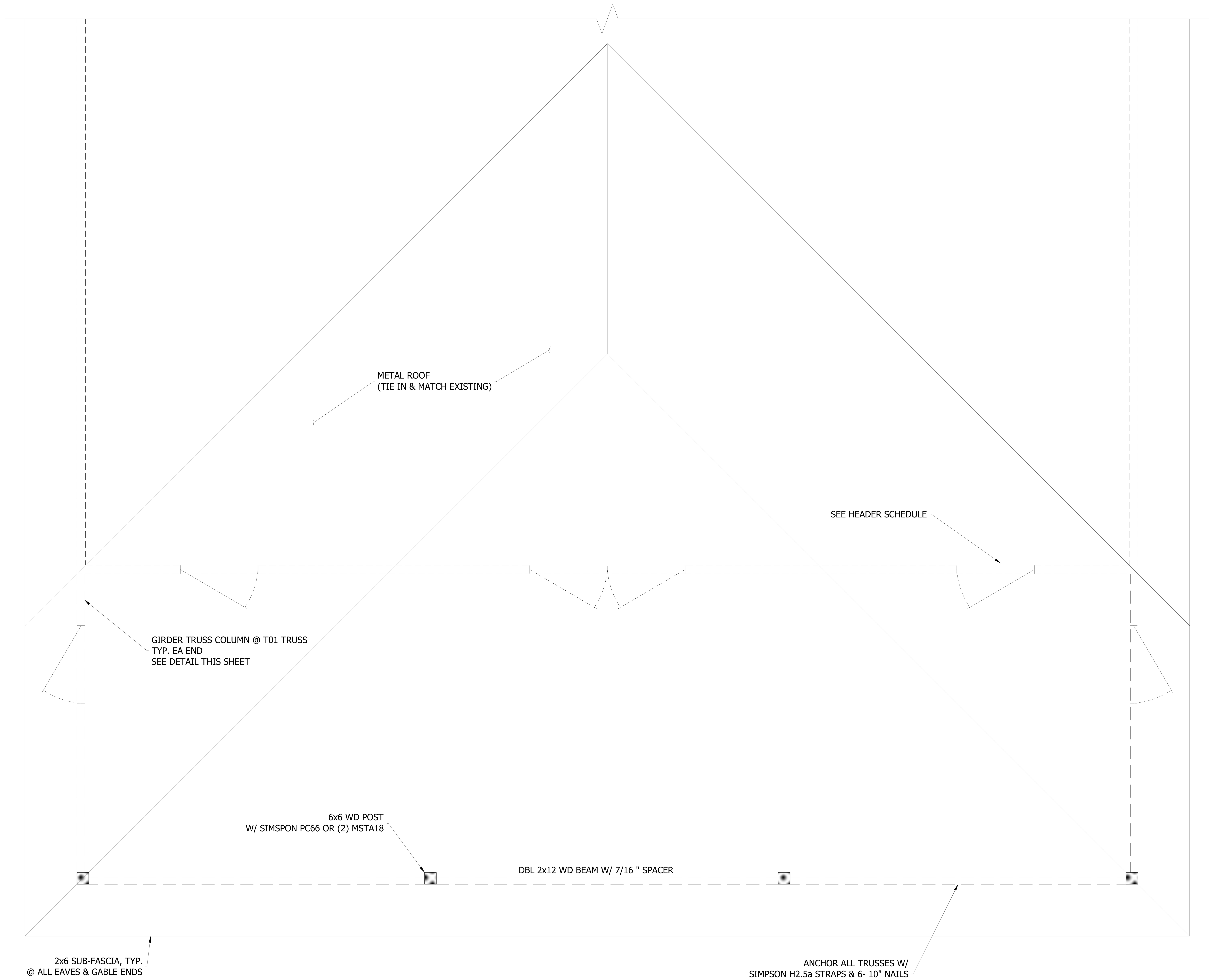
METAL:

MIN. $\frac{1}{2}$", 24/16 , APA RATED PLYWOOD SHEATHING, NAILED w/ 0.113x2" RING SHANK NAILS @ 6" O.C. EDGE & 6" O.C. FIELD (AT GABLE END DECREASE EDGE NAIL SPACING TO 4" O.C. WITHIN 4'-0" OF ROOF EDGE)

STANDARD HEADER SCHEDULE			
ROUGH OPENING	MATERIAL	FASTENING	STUD SPECS
0'-0" UP TO 6'-0"	DBL. 2x8 SYP #2 w/ OSB SOLID CONT. SPACER GLUED AND NAILED	10d x 0.128"x3" NAILS IN 2 ROWS @ 12" O.C. STAGGERED EA. SIDE	1 - HEADER STUD 1 - FULL HEIGHT STUD EA. SIDE
0'-6" UP TO 9'-0"	DBL. 2x12 SYP #2 w/ OSB SOLID CONT. SPACER GLUED AND NAILED	10d x 0.128"x3" NAILS IN 2 ROWS @ 12" O.C. STAGGERED EA. SIDE	1 - HEADER STUD 2 - FULL HEIGHT STUD EA. SIDE
0'-9" UP TO 16'-0"	DBL. 2x12 SYP #2 w/ OSB SOLID CONT. SPACER GLUED AND NAILED	10d x 0.128"x3" NAILS IN 2 ROWS @ 12" O.C. STAGGERED EA. SIDE	2 - HEADER STUD 3 - FULL HEIGHT STUD EA. SIDE



GIRDER TRUSS COLUMN DETAIL



ROOF FRAMING PLAN
SCALE: 1/2"=1'-0"

JARVIS SCREEN PORCH ADDITION
256 SE ELM LOOP, LAKE CITY, FL 32025

COVINGTON ENGINEERING SERVICES
272 NW COUNTRY LAKE DR, LAKE CITY, FL 32055
813.770.9470
TRAVIS@COVINGTONENG.COM

JOB NUMBER
STR010

ROOF PLAN