



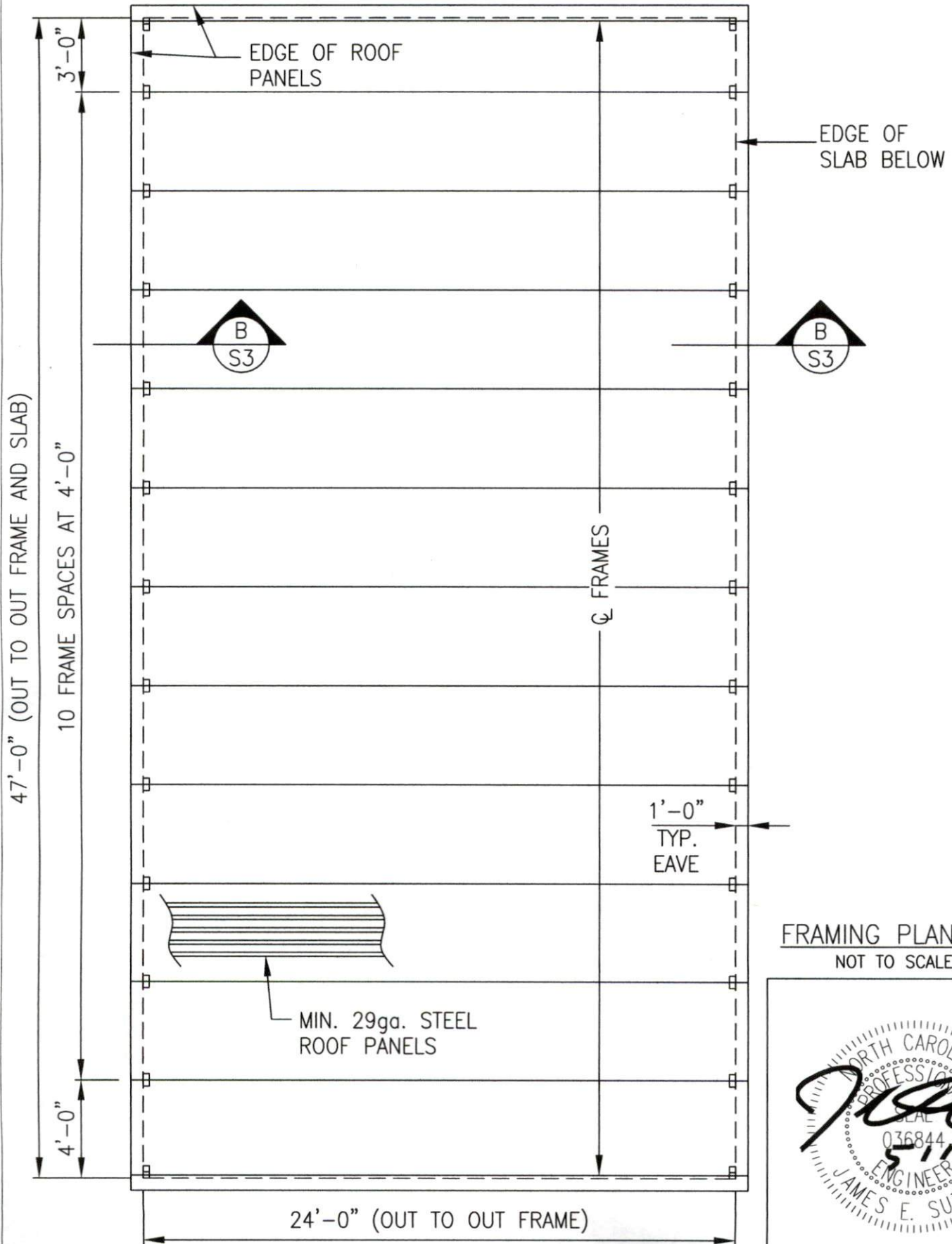

**JS CONSULTING & DESIGN**  
 STRUCTURAL ENGINEERING  
 11703 DURANT RD  
 RALEIGH, NC 27614  
 P (919) 675-1680  
 F (919) 324-3681

CERTIFICATE NUMBER: P-1513

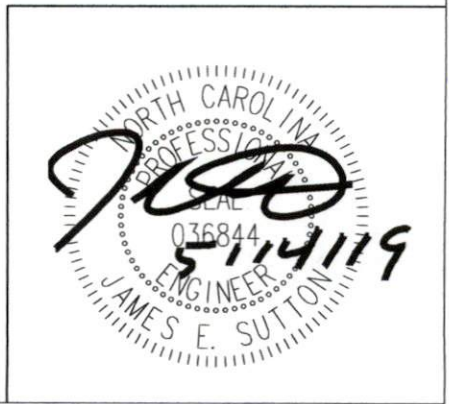
**Client:**  
 Luna Metal Buildings and Concrete  
 904 N Fayetteville St  
 Asheboro, NC 27203  
 (o) 336-628-0273

**Project:**  
 24'x48'x9'  
 Elise McAllister  
 3411 Oakridge River Rd  
 Fuquay-Varina, NC 27526

**Job No:**  
 1901-670  
**Date:**  
 05/14/19  
**Sheet:**  
 S2



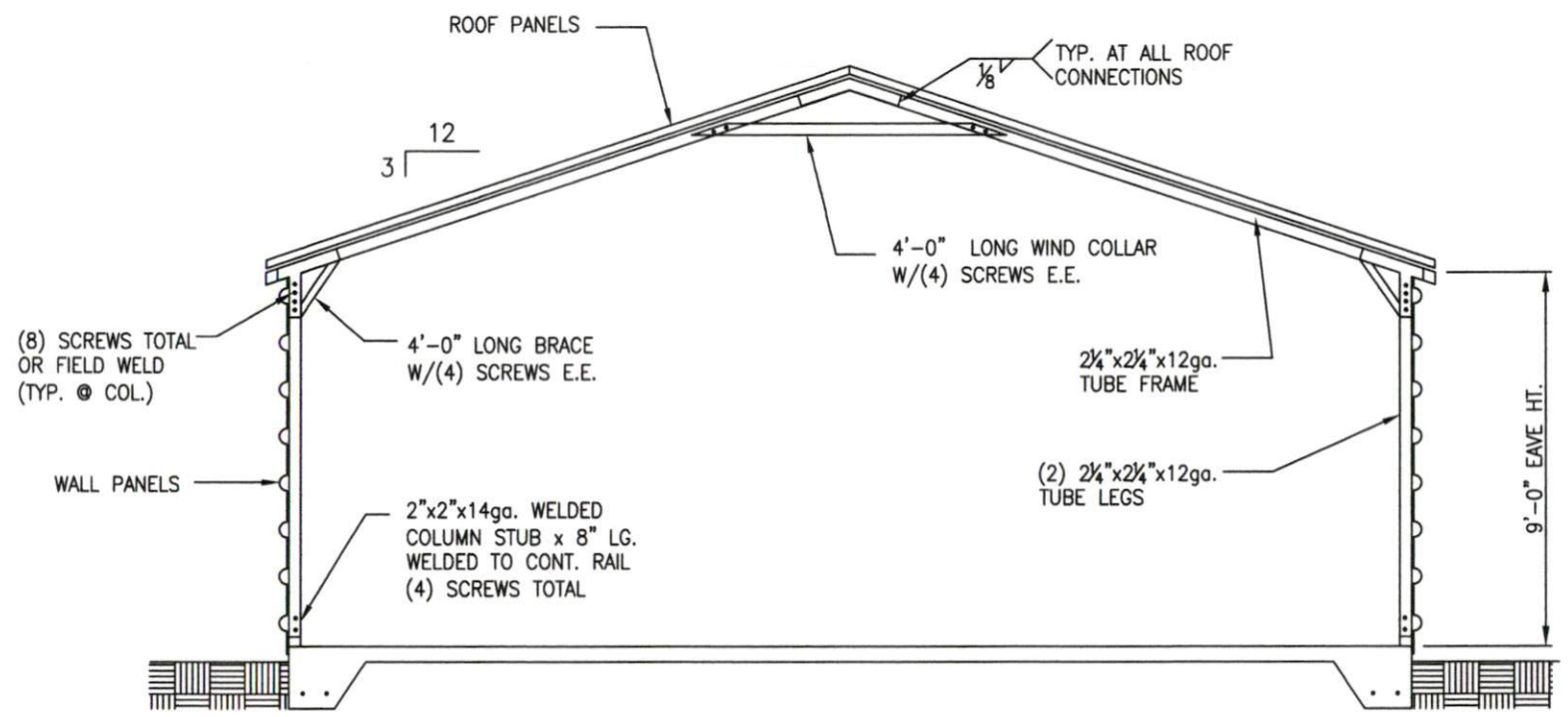
**FRAMING PLAN**  
 NOT TO SCALE



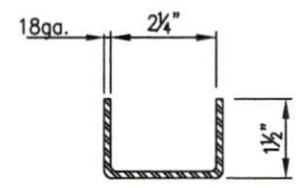
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 S3



TYPICAL CROSS SECTION B-B  
 NOT TO SCALE



TYP. WIND COLLAR/BRACE  
 NOT TO SCALE

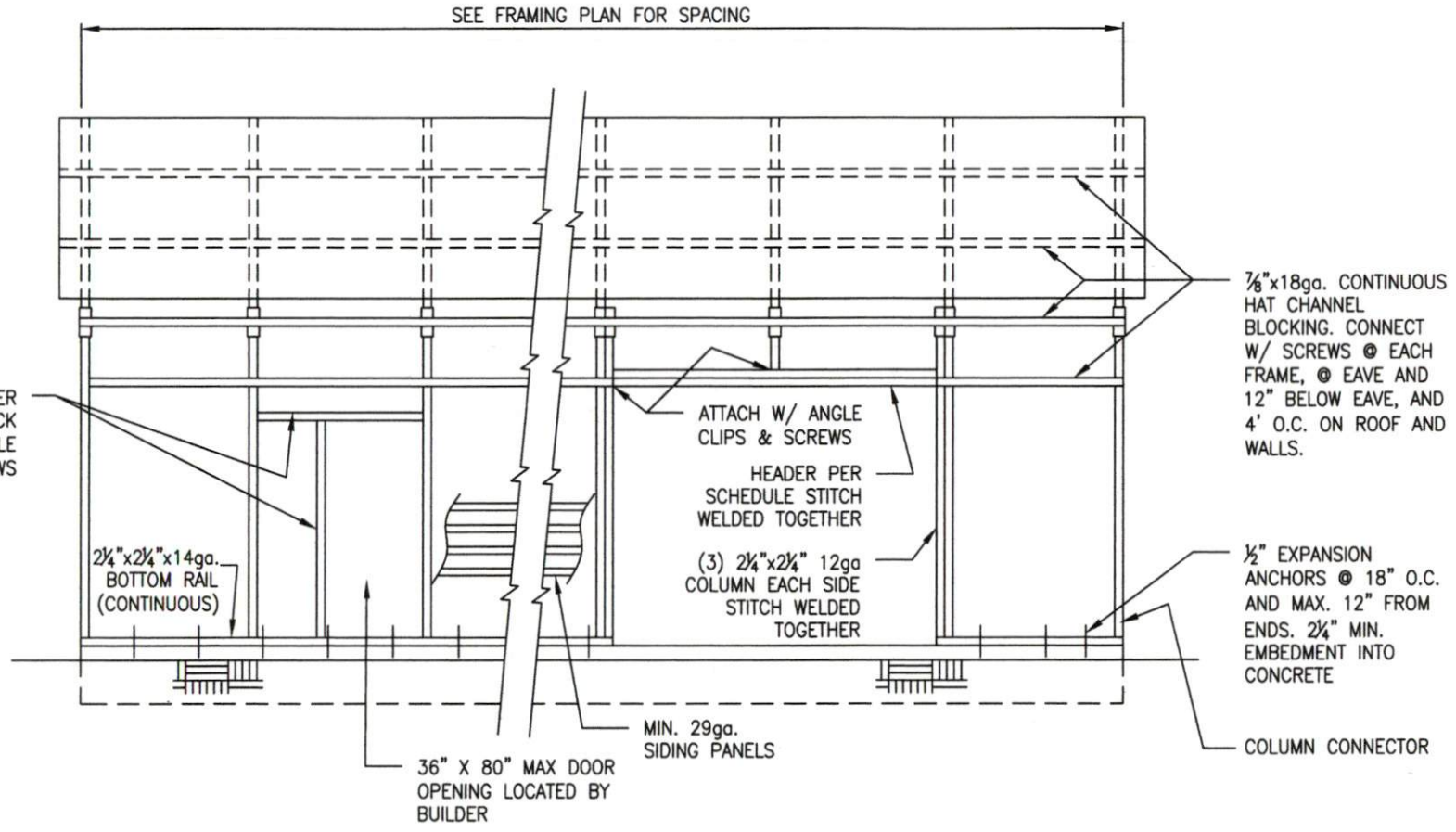
**GABLE END WALL FRAMING**  
 GABLE END WALLS SHALL BE FRAMED @ 4' O.C. USING 2-1/4" 14ga SQUARE TUBES TO THE BOTTOM RAIL AND RAFTERS W/ L-CLIPS AND (2) SCREWS IN EACH LEG OF THE CLIP. ANY STUDS OVER 13'-0" IN LENGTH SHALL BE (2) 2-1/4" 14ga AND ATTACHED W/ (2) L-CLIPS AND (2) SCREWS IN EACH LEG OF THE CLIP.



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**SIDE ELEVATION**  
 NOT TO SCALE

**DOOR HEADER SCHEDULE**  
 9'-0" X 8'-0": (3) 2 1/4" x 2 1/4" x 12ga

**DOOR OPENING NOTE:**  
 FOR DOORS PLACED IN GABLE END WALLS ONLY. EXACT LOCATION TO BE DETERMINED BY BUILDER. MINIMUM HEADER SIZE (2) 2-1/4" 14ga SQUARE TUBES ATTACHED TOGETHER W/ CLIPS AND SCREWS @ 1'-0" O.C. MINIMUM (1) 2-1/4" KING STUD EACH SIDE. ATTACH USING ANGLE CLIPS AND SCREWS



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### NOTES

#### DESIGN CRITERIA

1. BUILDING CODE.....2018 NORTH CAROLINA BUILDING CODE
2. IMPORTANCE FACTORS    SNOW (Is)    0.80  
   SEISMIC (Iw)    1.0
3. GROUND SNOW LOAD.....15 PSF
4. ROOF LL.....20 PSF
5. WIND
  - A) ULTIMATE WIND SPEED (IBC) .....115 MPH
  - B) NOMINAL WIND SPEED (ASCE 7-10) .....89 MPH
  - C) WIND HAZARD EXPOSURE CATEGORY.....B
  - D) WIND BASE SHEARS (for MWFRS)    Vx = 2.4 k    Vy = 2.4 k (PER FRAME)
6. SEISMIC
  - A) SEISMIC DESIGN CATEGORY A  
COMPLIANCE WITH SECTION 1616.4 ONLY?    YES    X NO
  - B) SEISMIC DESIGN CATEGORY    B    C    X D

SEISMIC USE GROUP    1  
 SPECTRAL RESPONSE ACCELERATION    Ss 19.6 %g    S1 7.3 %g  
 SITE CLASSIFICATION D    FIELD TEST    X PRESUMPTIVE    HISTORICAL DATA  
 BASIC STRUCTURAL SYSTEM (CHECK ONE)  
BEARING WALL    DUAL W/SPECIAL MOMENT FRAME  
BUILDING FRAME    DUAL W/INTERMEDIATE R/C OR SPECIAL STEEL  
X MOMENT FRAME    INVERTED PENDULUM  
 SEISMIC BASE SHEAR    Vx = 0.5 k    Vy = 0.5 k (PER FRAME)

ANALYSIS PROCEDURE X SIMPLIFIED    EQUIVALENT LATERAL FORCE    MODAL  
 ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED?    NO  
 LATERAL DESIGN CONTROL: EARTHQUAKE    WIND X

#### OTHER NOTES

1. PRESUMPTIVE SOIL PRESSURE = 1,500 PSF.
2. WHERE A DETAIL IS SHOWN ON STRUCTURAL DRAWINGS FOR ONE CONDITION, IT SHALL APPLY TO ALL SIMILAR OR LIKE CONDITIONS, UNLESS NOTED OR SHOWN OTHERWISE.
3. IF CONTRACTOR FINDS A DIFFERENCE BETWEEN THESE DRAWINGS AND EXISTING ELEVATIONS, OR OTHER CONDITIONS WHICH PROHIBIT EXECUTION OF THE WORK AS DIRECTED ON THESE DRAWINGS, CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
4. ALL ITEMS SHALL BE TIGHTLY ANCHORED OR ATTACHED SQUARE, PLUMB AND TRUE, OR IN OTHER PLANES OR SHAPES AS SHOWN ON THE DRAWINGS. JOINTS SHALL BE TIGHT, EVEN, AND FREE OF OFFSETS. NO FIELD ALTERING OF ANY MEMBERS WILL BE ALLOWED THAT WILL CAUSE THEM NOT TO BE IN ACCORDANCE WITH THE DRAWINGS AND THEM NOT TO BE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS, WITHOUT WRITTEN APPROVAL OF THE DESIGN ENGINEER.
5. GENERAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ADEQUATE SHORING, BRACING OR SUPPORT TO PREVENT MOVEMENT, SETTLEMENT, OR DAMAGE TO THE STRUCTURE DURING CONSTRUCTION PROCEDURES ASSOCIATED WITH THIS PROJECT.
6. CONCRETE: CONCRETE MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 3000 PSI.
7. CONCRETE WORK SHALL COMPLY WITH ACI "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDING (ACI 301) AND APPLICABLE PROVISIONS OF ACI 318. KEEP A COPY OF ACI FIELD REFERENCE MANUAL (ACI-SP-15) WHICH INCLUDES ACI 301 AND OTHER ACI AND ASTM REFERENCES ON THE JOB.
8. ALL FOOTING FOUNDATIONS SHALL BE PLACED ON COMPETENT SOIL.
9. FIBER MESH MAY BE SUBSTITUTED FOR WWM PER MANUFACTURER'S RECOMMENDATIONS.
10. REINFORCING STEEL: ASTM A615, GRADE 60. PROVIDE 3" CLEARANCE TO EARTH SURFACES. LAP BARS 30 DIAMETERS.
11. ALL GALVANIZING SHALL BE PERFORMED AFTER FABRICATION, AND IN ACCORDANCE WITH ASTM A123 AND/OR A153.
12. THE MINIMUM YIELD STRENGTH OF THE STEEL USED IN THE LIGHT GAUGE METAL FRAMES SHALL BE 55,000 PSI, FOR RAW OR GALVANIZED TUBES.
13. THE MINIMUM YIELD STRENGTH OF THE STEEL USED FOR THE LIGHT GAUGE METAL DECK SHALL BE 80,000 PSI, DECKING PANELS SHALL COVER THREE SPANS, MINIMUM.
14. THE LIGHT GAUGE METAL FRAMES AND DECK SHALL BE OF THE GAUGE INDICATED ON THE PLAN/DETAILS.
15. ALL SCREWS FOR ASSEMBLING FRAMES SHALL BE #12 SIZE.
16. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1.
17. ALL WELDS SHALL BE COATED WITH GALVANIZE PRIMER & PAINT AFTER WELDING.

