



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

CERTIFICATE NUMBER: P-1513

Client:

New Horizon Buildings and Concrete
3281 Sky Haven Rd
Randleman, NC 27317

Project:

24'x31'x9'
Chuck Dixon
59 Grambridge Ln
Fuquay-Varina, NC 27526

Job No:
1801-679

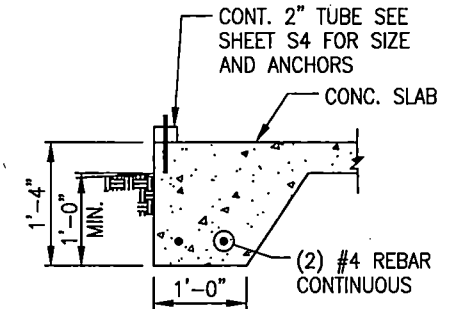
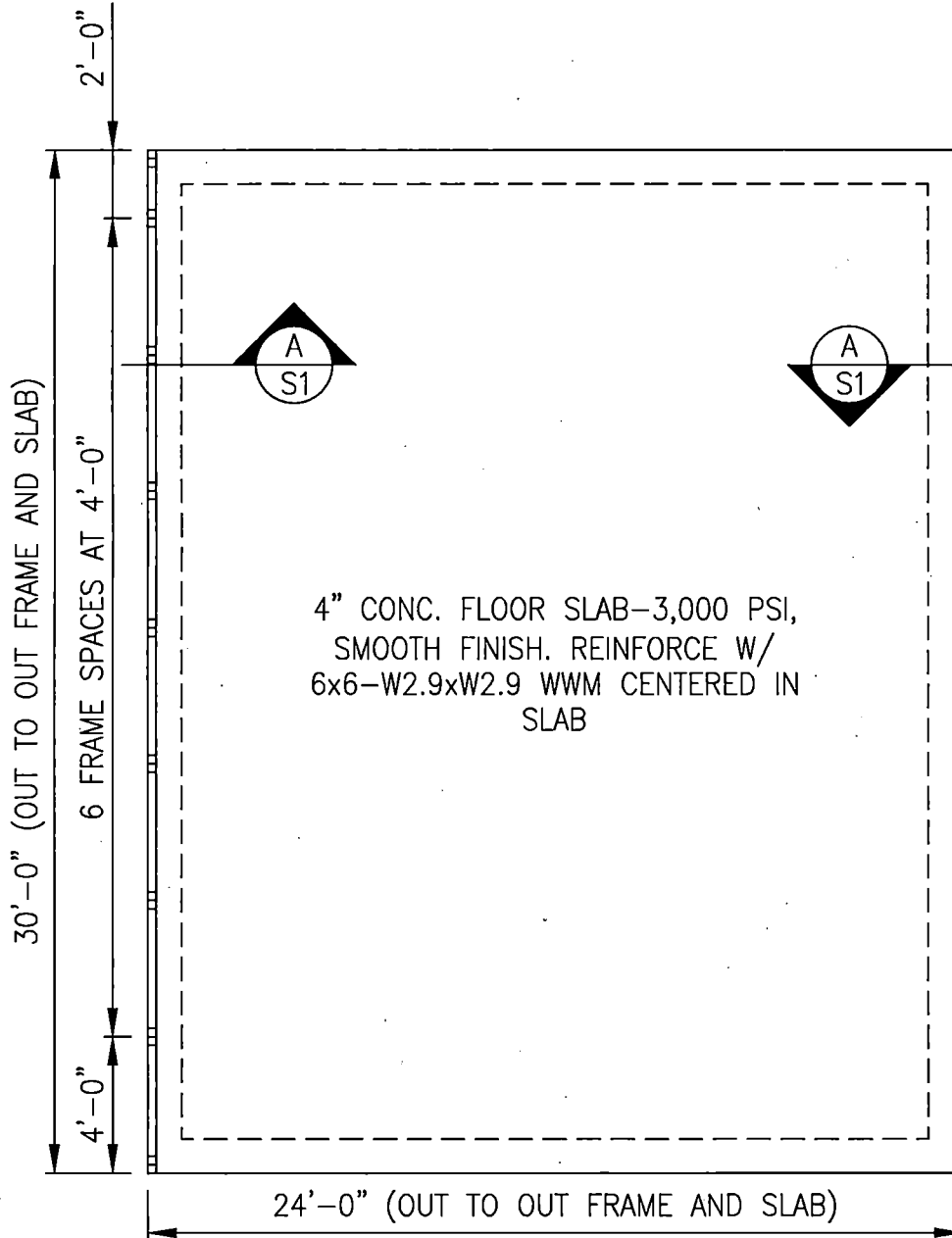
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07/06/18

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Approved

B Sutton 07/31/2018



(A) SLAB TURN DOWN
NOT TO SCALE

FOUNDATION PLAN
NOT TO SCALE

DRAINAGE NOTE:
OWNER TO PROVIDE POSITIVE
DRAINAGE AWAY FROM BLDG. PAD.





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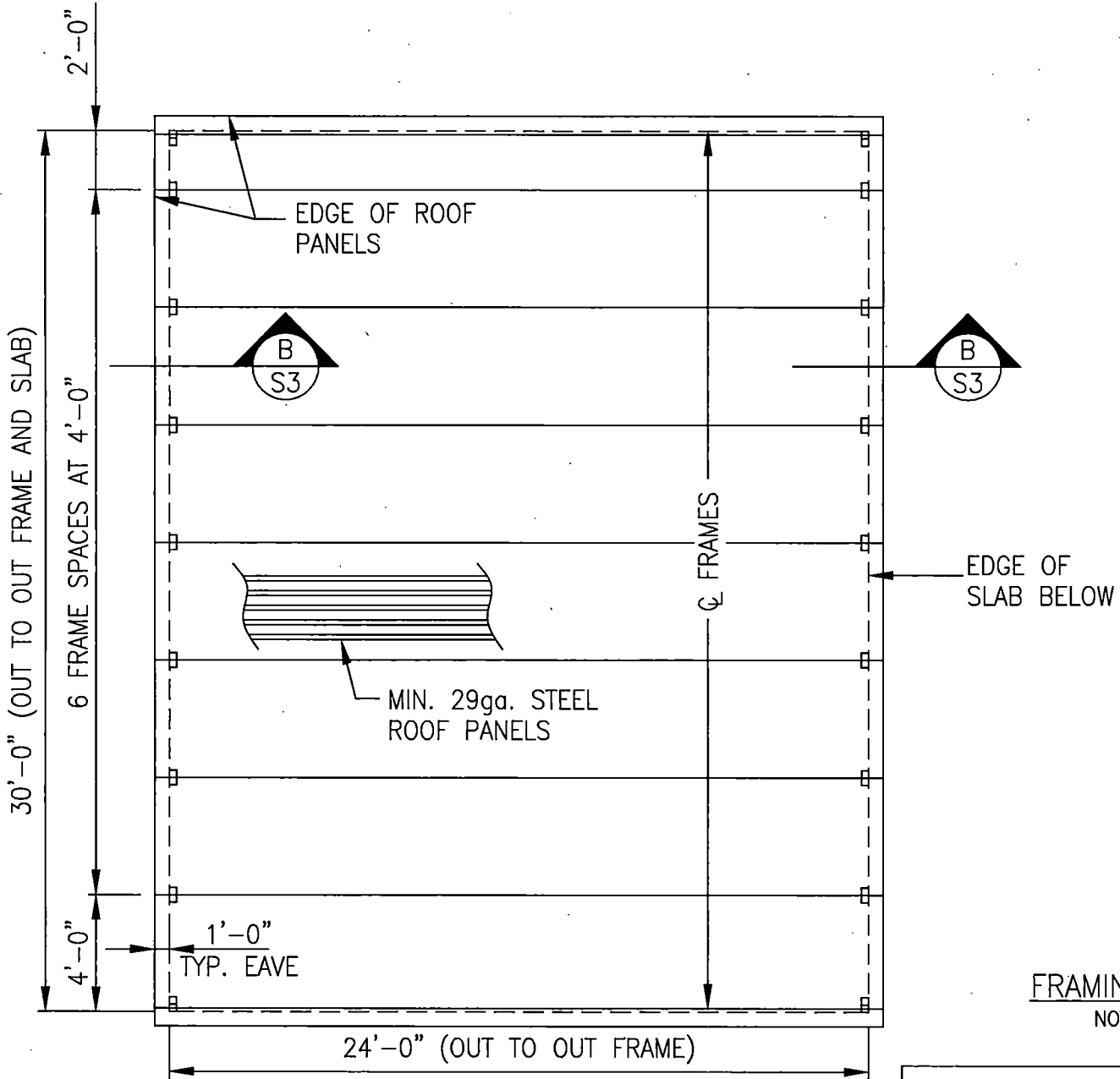
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FRAMING PLAN
NOT TO SCALE





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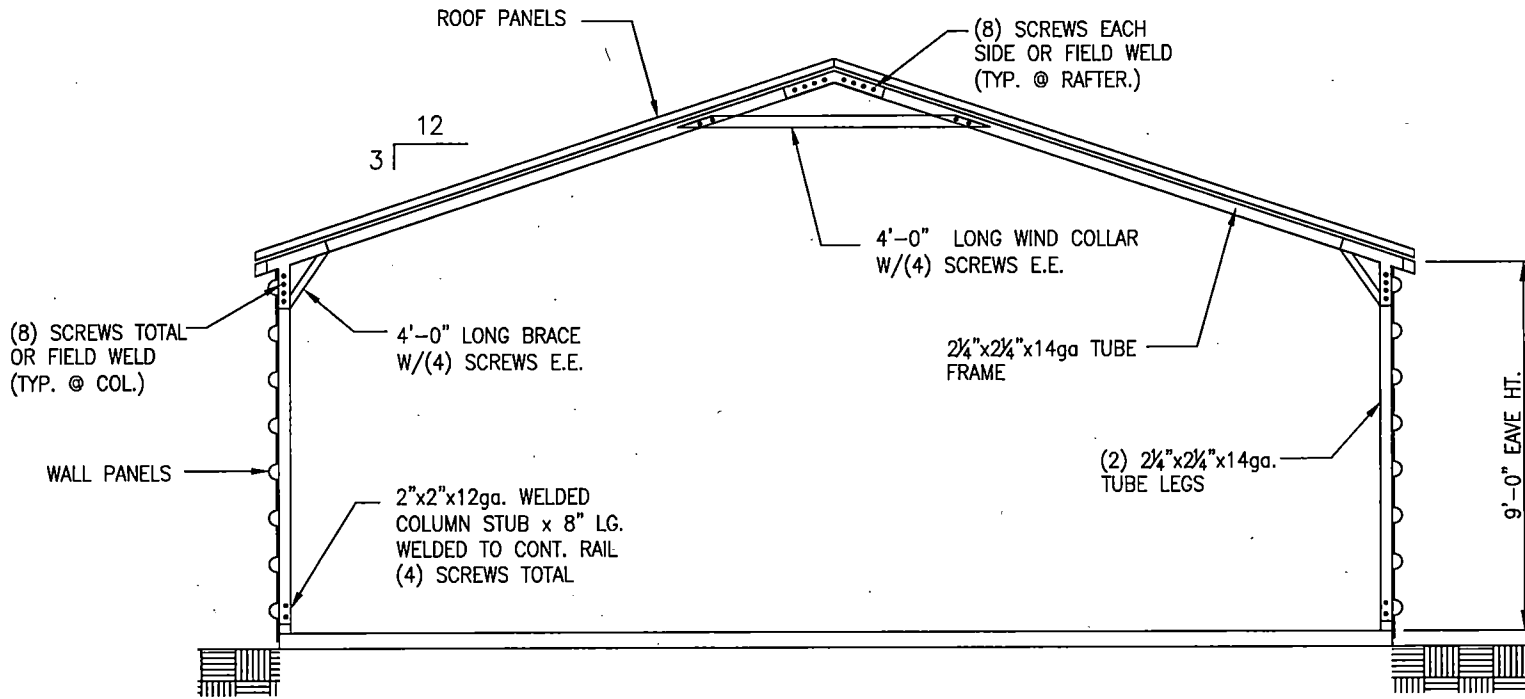
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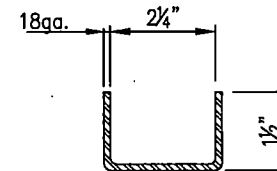
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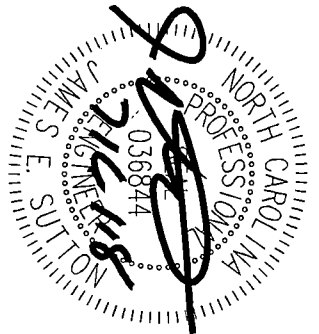


TYPICAL CROSS SECTION B-B
 NOT TO SCALE



TYP. WIND COLLAR/BRACE
 NOT TO SCALE

GABLE END WALL FRAMING
 GABLE END WALLS SHALL BE FRAMED 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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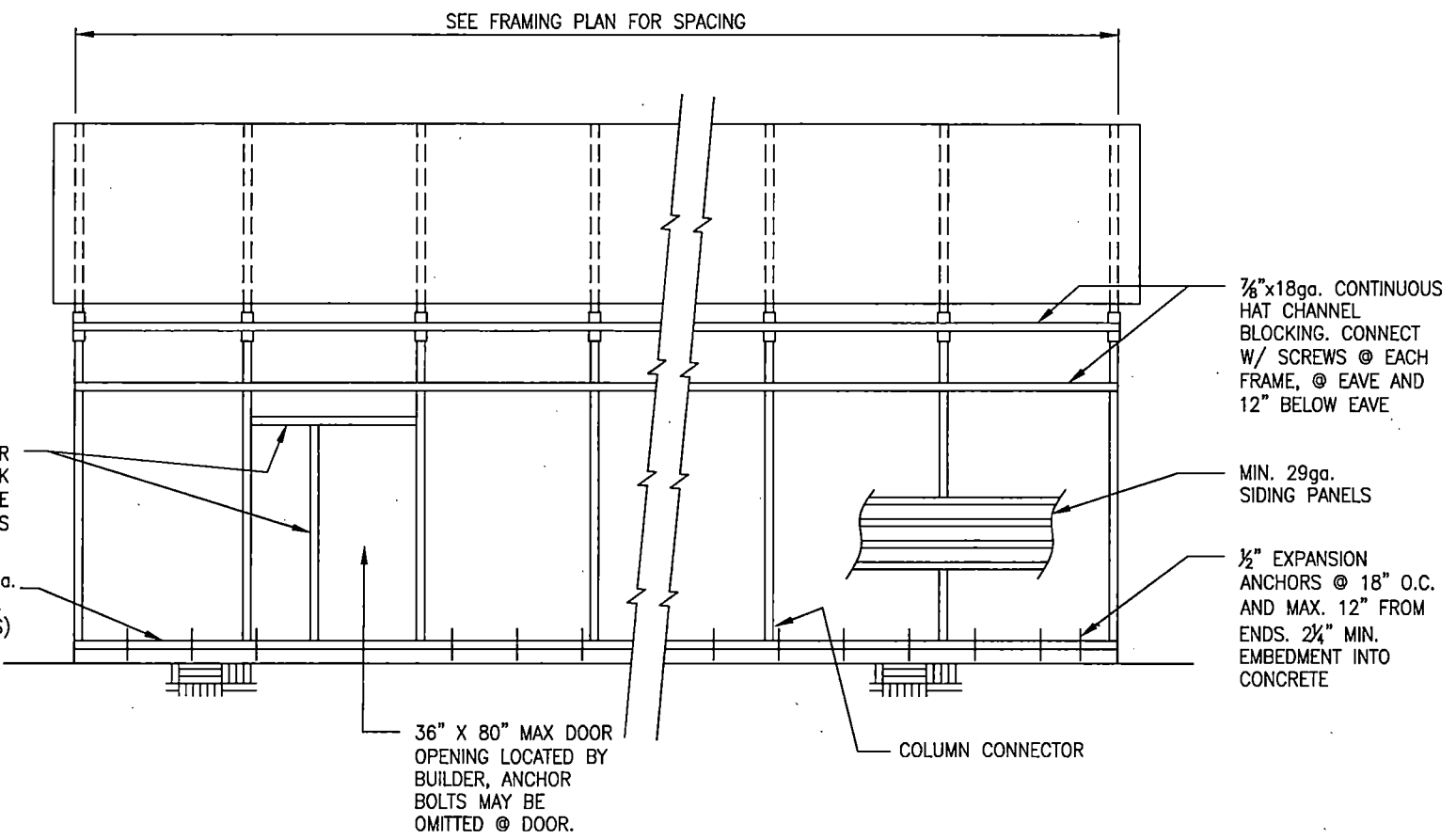
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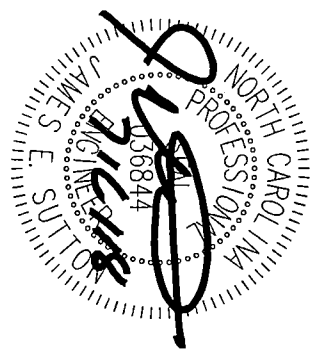
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 Sheet:
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SIDE ELEVATION
 NOT TO SCALE

DOOR OPENING NOTE:
 ROLL UP DOORS ONLY TO BE PLACED IN GABLE END WALLS. 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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S5

NOTES

DESIGN CRITERIA

1. BUILDING CODE.....2012 NORTH CAROLINA BUILDING CODE
2. IMPORTANCE FACTORS WIND (lw) 0.87
 SNOW (ls) 0.80
 SEISMIC (lw) 1.0
3. GROUND SNOW LOAD.....15 PSF
4. ROOF LL.....5 PSF (NO FOOT TRAFFIC)
5. WIND
 - A) BASIC WIND SPEED (ASCE 7-05)100 MPH
 - B) WIND HAZARD EXPOSURE CATEGORY.....B
 - C) WIND BASE SHEARS (for MWFRS) $V_x = 2.4 \text{ k}$ $V_y = 2.4 \text{ k}$ (PER FRAME)
6. SEISMIC
 - A) SEISMIC DESIGN CATEGORY A
COMPLIANCE WITH SECTION 1616.4 ONLY? YES NO
 - B) SEISMIC DESIGN CATEGORY B C D

SEISMIC USE GROUP 1
SPECTRAL RESPONSE ACCELERATION S_s 24.2 %g S_1 8.9 %g
SITE CLASSIFICATION D FIELD TEST 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
 MOMENT FRAME INVERTED PENDULUM
SEISMIC BASE SHEAR $V_x = 0.5 \text{ k}$ $V_y = 0.5 \text{ k}$ (PER FRAME)

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

OTHER NOTES

1. PRESUMPTIVE SOIL PRESSURE = 2,000 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. FIBER MESH MAY BE SUBSTITUTED FOR WWM PER MANUFACTURER'S RECOMMENDATIONS.
9. ALL FOOTING FOUNDATIONS SHALL BE PLACED ON COMPETENT SOIL.
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.

