

CONTRACTOR: TIMBERLAKE ALUMINUM CONSTRUCTION
DESIGN CRITERIA:

- Applicable Codes, Regulations, and Standards**
1. The 2010 Florida Building Code specifically Chapter 16 Structural Design, Chapter 20 Aluminum, and Chapter 23 Wood.
 2. AA ASM 35 and Specifications for Aluminum Structures, Part 1-A of the Aluminum Design Manual prepared by The Aluminum Association, Inc. Washington, D.C., 2005 Edition
 3. ASCE 7-10.

- Wind Loads**
1. Building Occupancy Category, Paragraph 1604.5 and Table 1604.5: Risk Category I.
 2. Basic Wind Speed, Table 1609C, State of Florida Debris Region & Basic Wind Speed, Paragraph 1609.3.1 and Table 1609.3.1 Equivalent Basic Wind Speed: **130 MPH**.
 3. Exposure Category, Paragraph 1609.4.3: **B**.
 - Screen roof enclosure, Table 2002.4

Foundation Design

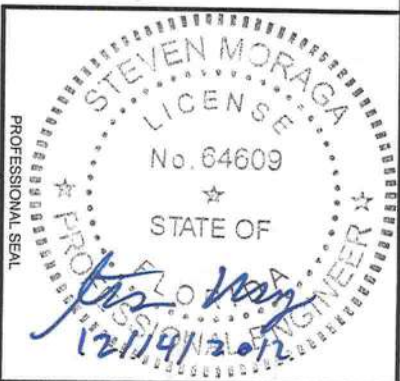
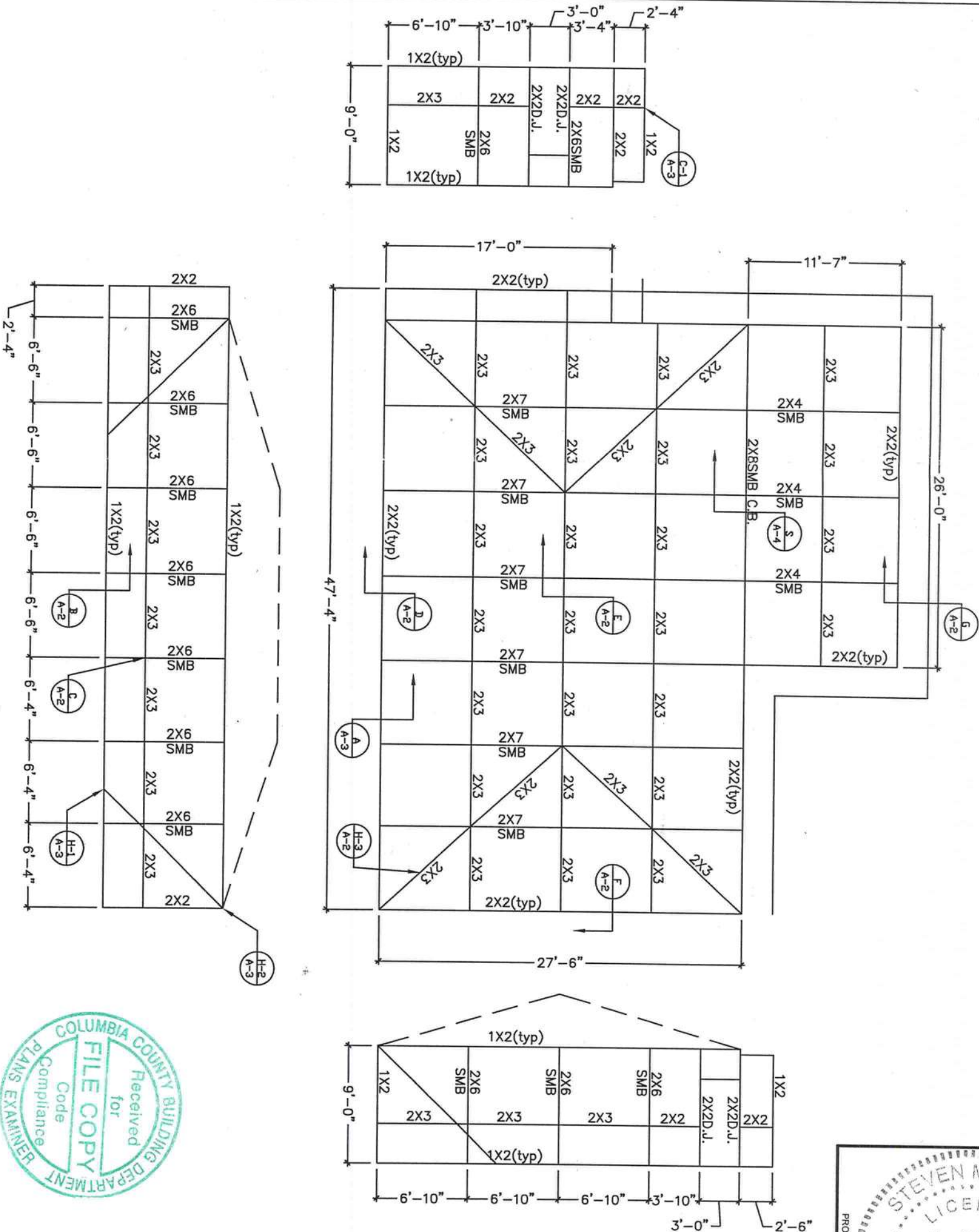
Footings Size and Reinforcing: Existing concrete. No additional concrete footing is required to resist the loads imposed by the proposed construction if the existing footing is a minimum 8" x 8" and in sound condition, free from structural cracking, spalling, or other deterioration. New 4" conc. slab w/ fiber mesh filled w/ 2,500 PSI concrete. The foundations are based on a minimum soil bearing pressure of 1,500 psf.

Specifications

The following specifications are applicable to this project:

1. Where concrete specifications are required, whether in the screen enclosure scope or not, by one or more regulatory agency, the following specifications are applicable:
 - a. Concrete shall conform to ASTM C94 for the following components:
 - i. Portland Cement Type I, -ASTM C 150
 - ii. Aggregates - Large Aggregate 3/4" max - ASTM C 33
 - iii. Air entraining +/- 1% - ASTM C 260
 - iv. Water reducing agent - ASTM C 494
 - v. Clean Potable water
 - vi. Other admixtures not permitted
 - b. Metal accessories shall conform to:
 - i. Reinforcing Bars - ASTM A615, grade 60
 - ii. Welded wire fabric - ASTM A185
 - c. Concrete slump at discharge chute not less than 3" or more than 5". Water added after batching is not permitted.
 - d. Prepare and place concrete per American Concrete Institute Manual of Standard Practice, Parts 1, 2, and 3 including hot weather recommendations.
 - e. Moist cure or polyethylene curing permitted.
 - f. Prior to placing concrete, treat the entire subsurface area for termites in compliance with the FBC.
 - g. Concrete shall be placed over a polyethylene vapor barrier.
 - h. All aluminum components embedded within concrete shall be coated with a bituminous paint or epoxy.
2. Aluminum extrusions shall be 6005 T5 Alloy.
3. Fasteners are required to be SAE Grade 2 or better zinc plated.
4. All Self Mating Beam Sections are to be stitched with either #14 screws 6" from ends and 24" center to center or #12 screws 6" from ends and 12" center to center.
5. The minimum nominal thickness of protector panels (kickplates) shall be an industry standard of 0.024 inches.
6. Screened enclosures containing swimming pools shall comply with the applicable requirements of FBC R4101.17 Residential Swimming Barrier requirements.
7. Screen material shall be 18/14 screen unless approved by Suncoast Architecture & Engineering, LLC.
8. Door location shall be determined by contractor in the field.
9. When installing pavers over concrete slab or footing which are supporting aluminum members, such as continuous screen tracks or upright, the pavers must be bonded to the concrete with an epoxy, thinset, or 3,000 PSI grout to ensure full positive contact with concrete.
10. Design shall be based upon "RIGID" upright analysis unless approved by Suncoast Architecture & Engineering.

Roof Type: **HIPPED GABLE**



PROFESSIONAL ENGINEER
STEVEN MORAGA, P.E.
FLORIDA LICENSE: 64609

SUNCOAST ARCHITECTURE
& ENGINEERING, LLC
13630 58TH STREET NORTH SUITE 101
CLEARWATER FL 33760
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FLORIDA LICENSES: AA26001769 & CA #28841

PROJECT ADDRESS:
ELLIOTT
636 NW. COUNTRY LAKE DR.
LAKE CITY, FL 32058

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A-1

ALUMINUM MEMBERS DIMENSIONS

HOLLOW SECTIONS

2 x 2: 2" x 2" x 0.044"
2 x 3: 2" x 3" x 0.050"
2 x 4: 2" x 4" x 0.050"
2 x 5: 2" x 5" x 0.050"
3 x 3: 3" x 3" x 0.093"
4 x 4: 4" x 4" x 0.125"

OPEN BACK SECTIONS

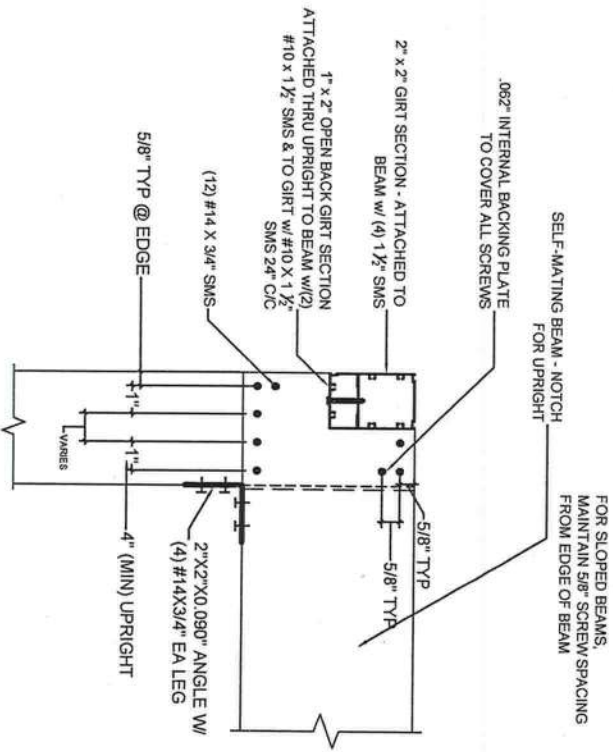
1 x 2: 1" x 2" x 0.040"
1 x 3: 1" x 3" x 0.045"

SNAP SECTIONS

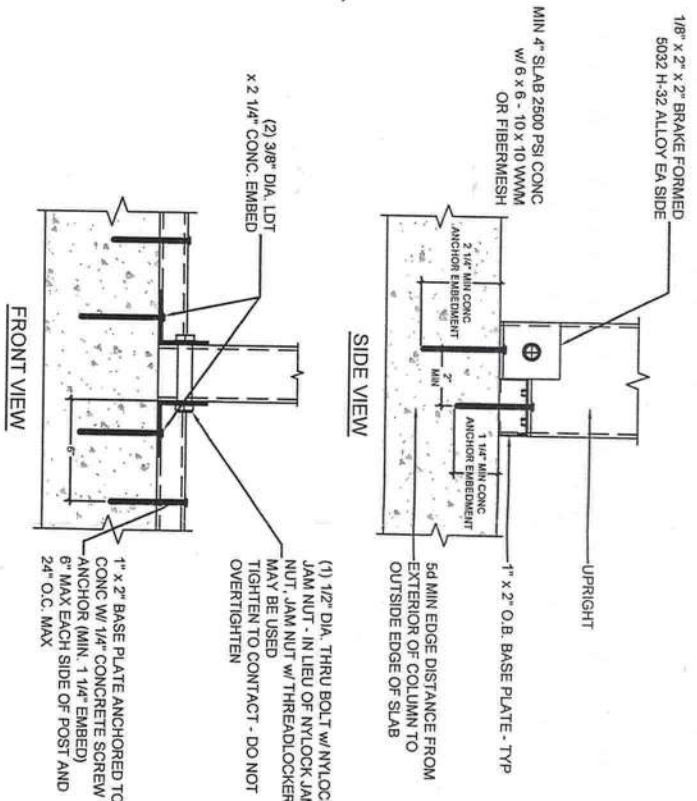
2 x 2 Snap: 2" x 2" x 0.045"
2 x 3 Snap: 2" x 3" x 0.050"
2 x 4 Snap: 2" x 4" x 0.045"

SELF-MATING (SMB)

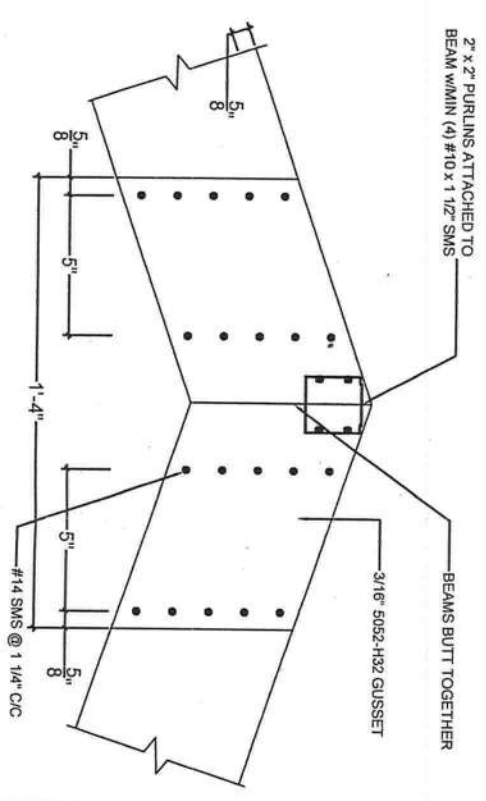
2 x 4 SMB: 2" x 4" x 0.044" x 0.100"
2 x 5 SMB: 2" x 5" x 0.050" x 0.100"
2 x 6 SMB: 2" x 6" x 0.050" x 0.120"
2 x 7 SMB: 2" x 7" x 0.057" x 0.120"
2 x 8 SMB: 2" x 8" x 0.072" x 0.124"
2 x 9 SMB: 2" x 9" x 0.072" x 0.124"
2 x 10 SMB: 2" x 10" x 0.092" x 0.398"



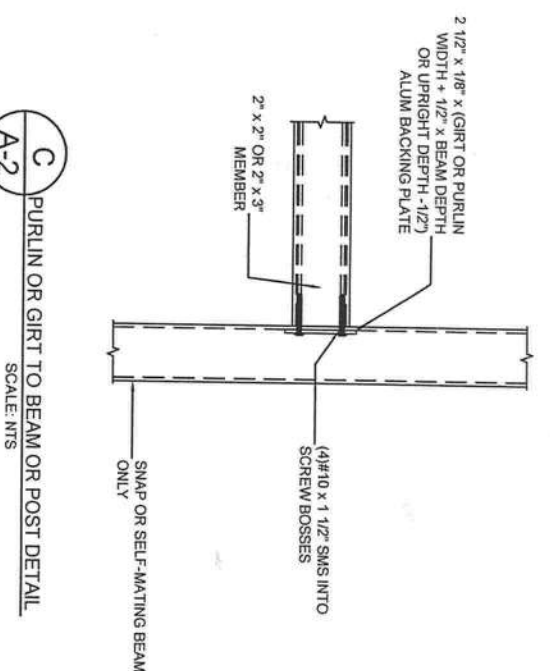
D UPRIGHT TO BEAM CONNECTION
SCALE: NTS



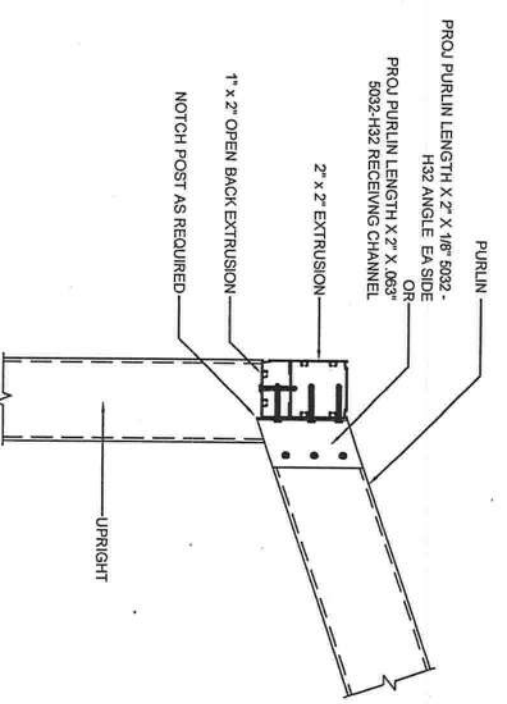
B 2" x 4" OR LARGER UPRIGHT TO DECK DETAILS
SCALE: NTS



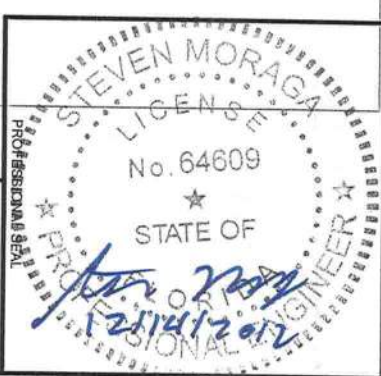
E TYPICAL INTERNAL OR EXTERNAL GUSSET DETAIL - RIGID MEDIUM
SCALE: NTS



C PURLIN OR GIRT TO BEAM OR POST DETAIL
SCALE: NTS



F SLOPED PURLIN CONNECTION DETAIL
SCALE: NTS



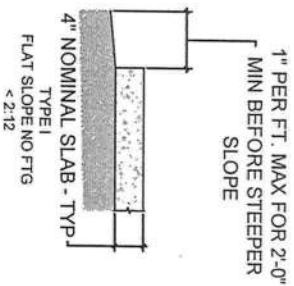
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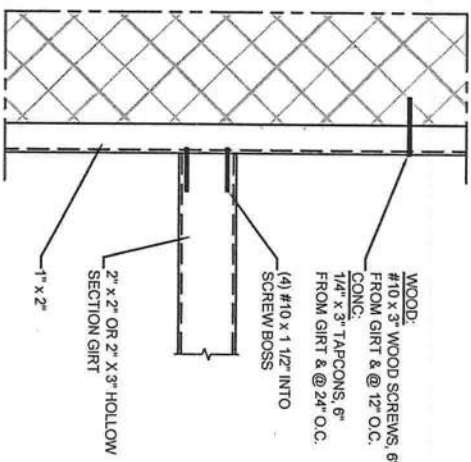
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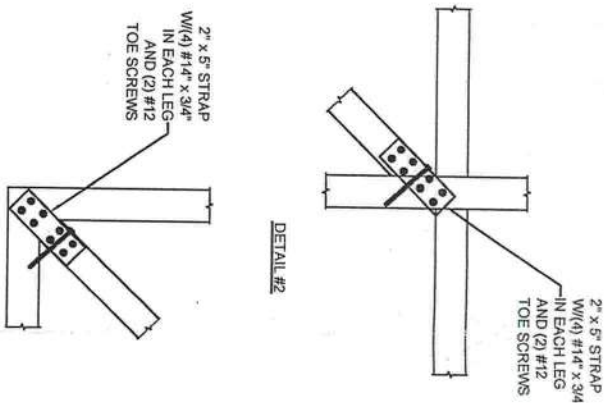


- NOTES FOR ALL FOUNDATION TYPES:
1. THE FOUNDATIONS SHOWN ARE BASED ON A MIN SOIL BEARING PRESSURE OF 1,500 PSF. BEARING CAPACITY OF SOIL SHALL BE VERIFIED BY LICENSED CONTRACTOR PRIOR TO POURING CONCRETE.
 2. THE SLAB/FOUNDATION SHALL BE CLEARED OF DEBRIS, ROOTS AND COMPACTED PRIOR TO PLACEMENT OF CONC.
 3. CONCRETE SHALL BE PER SPECIFICATIONS IN THE DESIGN SUMMARY LETTER

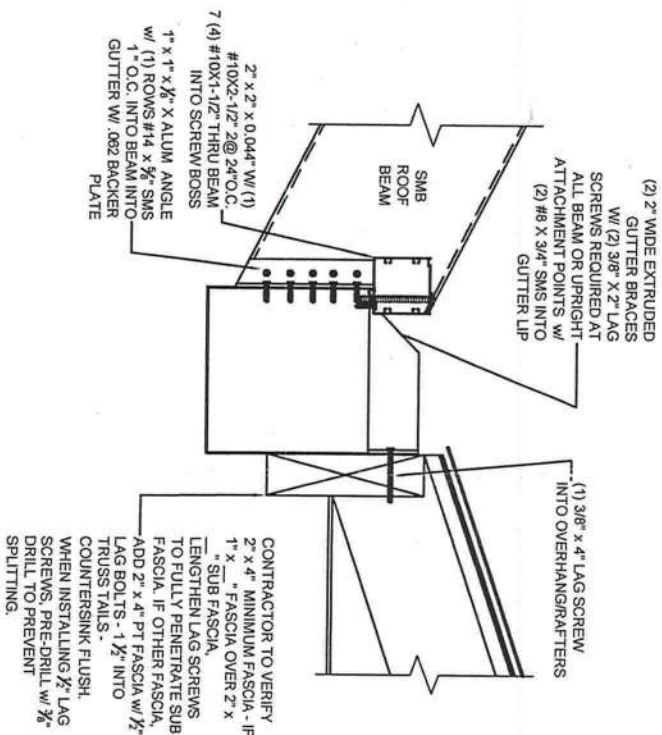
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TYPE I FOOTING (SLAB)
SCALE: NTS



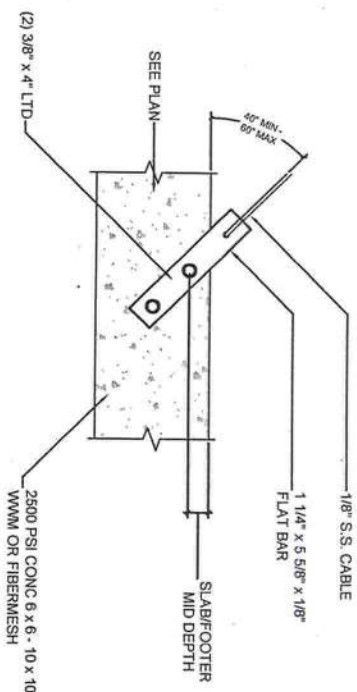
C-1
1X2 TO HOST STRUCTURE DETAIL
SCALE: NTS



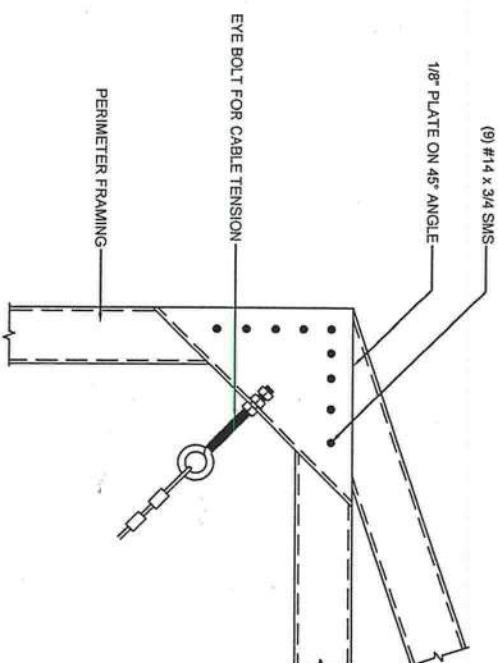
H-3
ROOF BRACING
NOT TO SCALE
SCALE: NTS



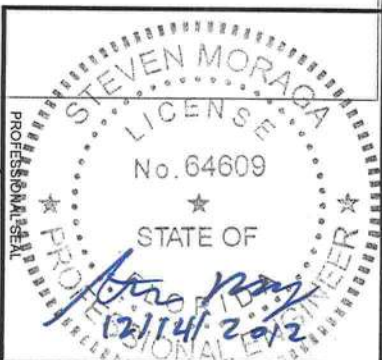
G
GUTTER BRACE & MATING ELEMENT ATTACHMENT DETAIL
SCALE: NTS



H-1
CABLE CONNECTIONS AT FOUNDATION
SCALE: NTS



H-2
CABLE CONNECTION AT CORNER
SCALE: NTS



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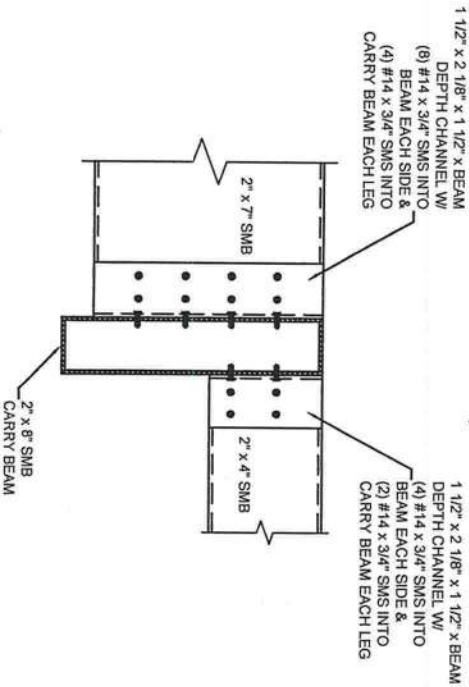
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A-4
CARRY BEAM & MATING ELEMENT ATTACHMENT DETAIL
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