

CONTRACTOR: TIMBERLAKE ALUMINUM CONSTRUCTION
DESIGN CRITERIA:

Applicable Codes, Regulations, and Standards

- The 2010 Florida Building Code specifically Chapter 16 Structural Design, Chapter 20 Aluminum, and Chapter 23 Wood.
- 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
- ASCE 7-10.

Wind Loads

- Building Occupancy Category, Paragraph 1604.5 and Table 1604.5: Risk Category 1.
- 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: **120 MPH**.
- Exposure Category, Paragraph 1609.4.3: **B**
- Screen roof enclosure, Table 2002.4

Foundation Design

Footing Size and Reinforcing: Existing concrete. No additional concrete footing or slab is required to resist the loads imposed upon the existing slab by the proposed construction if the existing slab is a minimum of 4" thick and in sound condition, free from structural cracking, spalling, or other deterioration.

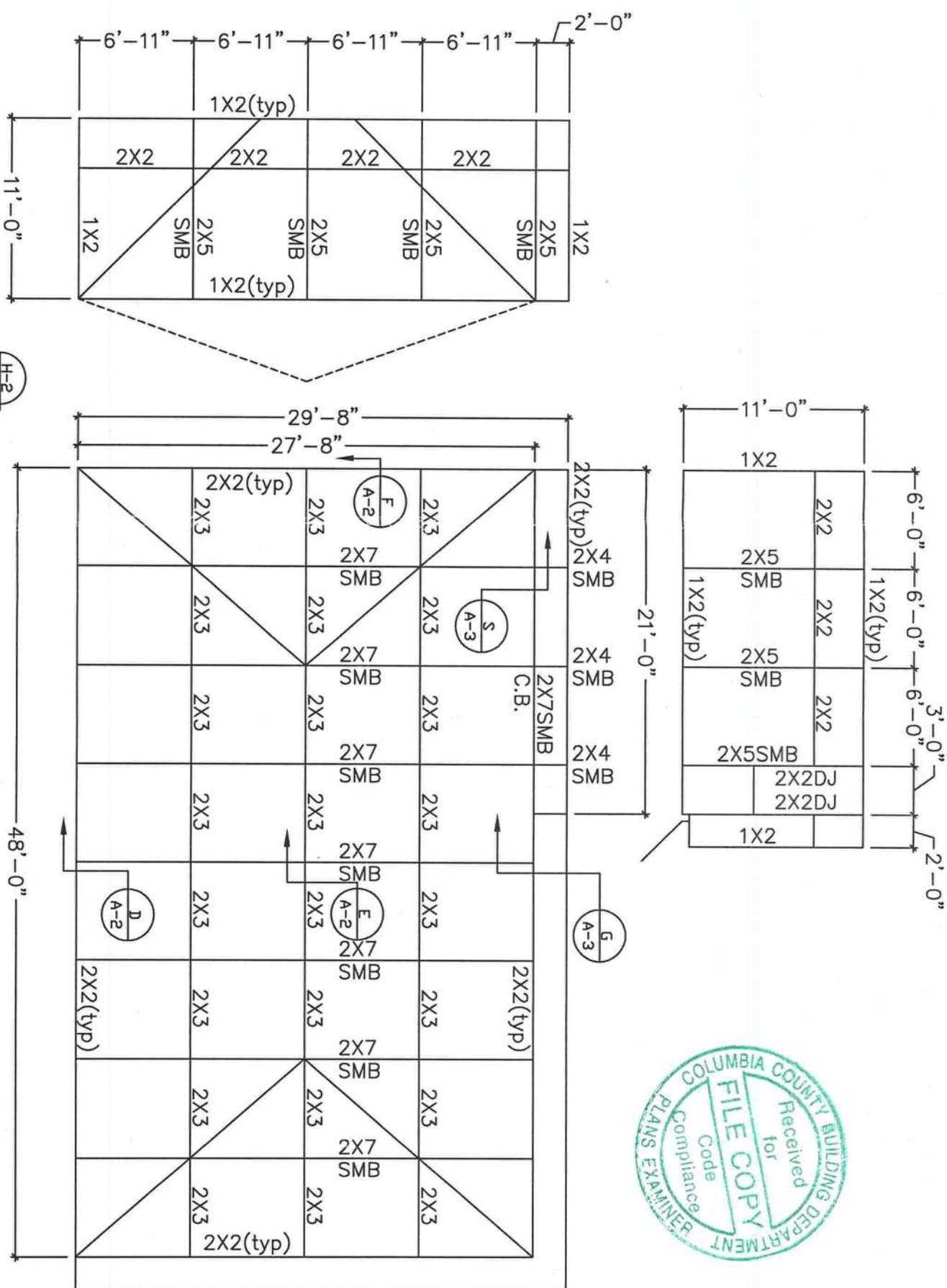
Specifications

The following specifications are applicable to this project:

- Where concrete specifications are required, whether in the screen enclosure scope or not, by one or more regulatory agency, the following specifications are applicable:
 - Concrete shall conform to ASTM C94 for the following components:
 - Portland Cement Type 1, - ASTM C 150
 - Aggregates - Large Aggregate 3/4" max - ASTM C 33
 - Air entraining +/- 1% - ASTM C 260
 - Water reducing agent - ASTM C 494
 - Clean Potable water
 - Other admixtures not permitted
 - Metal accessories shall conform to:
 - Reinforcing Bars - ASTM A615, grade 60
 - Welded wire fabric - ASTM A185
 - Concrete slump at discharge chute not less than 3" or more than 5". Water added after batching is not permitted.
 - Prepare and place concrete per American Concrete Institute Manual of Standard Practice, Parts 1, 2, and 3 including hot weather recommendations.
 - Moist cure or polyethylene curing permitted.
 - Prior to placing concrete, treat the entire subsurface area for termites in compliance with the FBC.
 - Concrete shall be placed over a polyethylene vapor barrier.
 - Aluminum extrusions shall be 6005 T5 Alloy.
 - Fasteners are required to be SAE Grade 2 or better zinc plated.
 - 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.
 - The minimum nominal thickness of protector panels (kickplates) shall be an industry standard of 0.024 inches.
 - Screened enclosures containing swimming pools shall comply with the applicable requirements of FBC R4101.17 Residential Swimming Barrier requirements.
 - Screen material shall be 18/14 screen unless approved by Suncoast Architecture & Engineering, LLC.
 - Door location shall be determined by contractor in the field.
 - Roof Bracing shall be a minimum 2"x2"x0.44". Connection shall be similar to C/A-2 w/ top strap.
 - When pavers are under aluminum members contractor shall epoxy to deck or grout to deck w/ 3000 PSI grout with bonding agent.
 - Design shall be based upon "PINNED" upright analysis unless approved by Suncoast Architecture & Engineering.

Roof Type

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
TEL: (727) 532-9000
FAX: (727) 532-9008
FLORIDA LICENSES: AA26001769 & CA #28841

PROJECT ADDRESS:
MARTIN
997 SW HILL CREEK DR
COLUMBIA, FL

DRAWN BY
EL

DATE DRAWN
06/29/12

REVISION

SHEET NO:

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

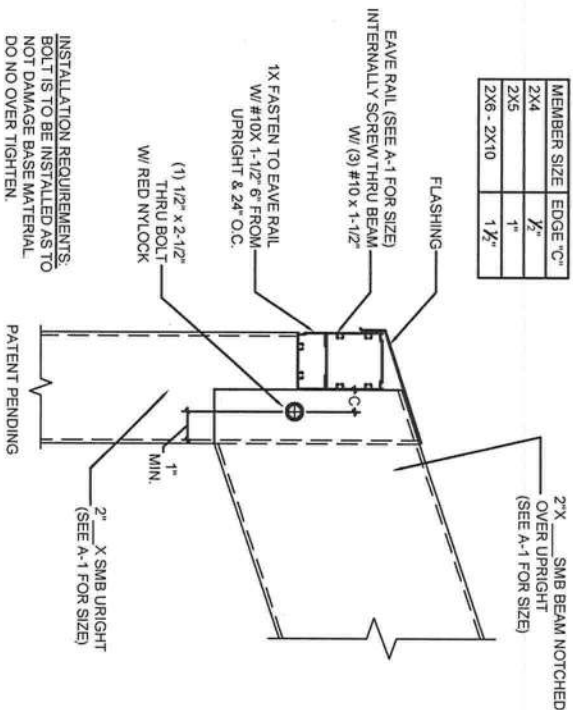
1 x 2: 1" x 2" x 0.040"
1 x 3: 1" x 2" x 0.045"

SNAP SECTIONS

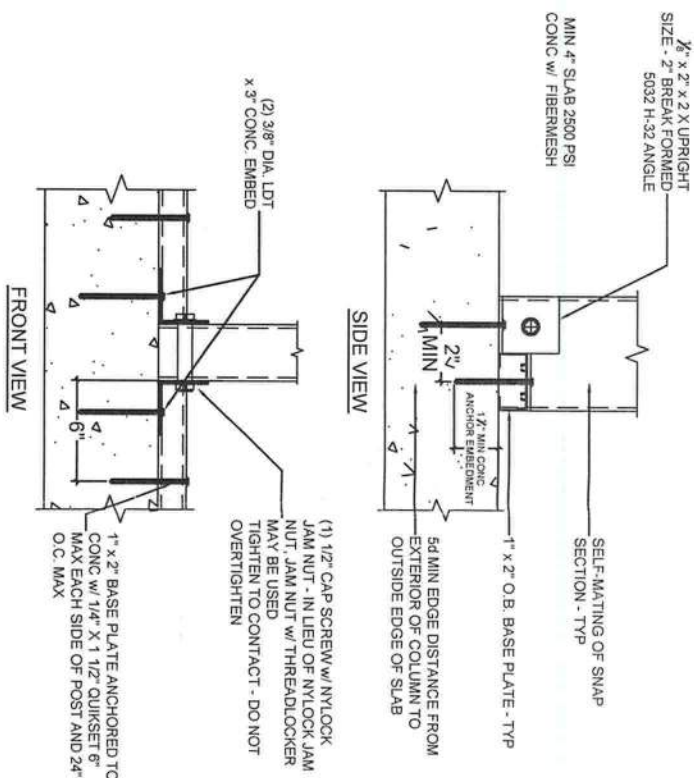
2 x 2 Snap: 2" x 2" x 0.045"
2 x 3 Snap: 2" x 3" x 0.050"
2 x 4 Snap: 2" x 4" x 0.045"

SELF MATING (SMB)

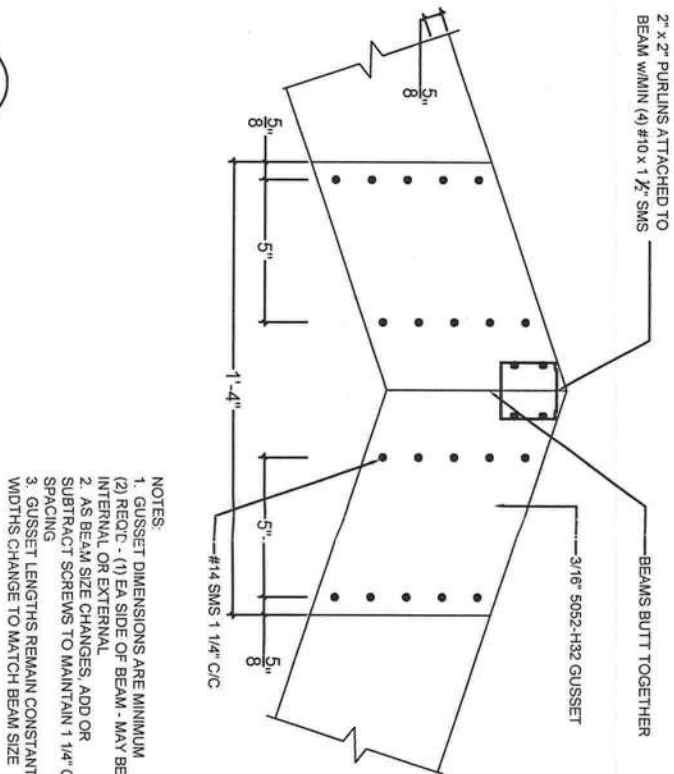
2 x 4 SMB: 2" x 4" x 0.044" x 0.100"
2 x 5 SMB: 2" x 5" x 0.050" x 0.100"
2 x 6 SMB: 2" x 6" x 0.050" x 0.120"
2 x 7 SMB: 2" x 7" x 0.057" x 0.120"
2 x 8 SMB: 2" x 8" x 0.072" x 0.124"
2 x 9 SMB: 2" x 9" x 0.072" x 0.124"
2 x 10 SMB: 2" x 10" x 0.092" x 0.398"



D UPRIGHT TO BEAM CONNECTION
SCALE: NTS

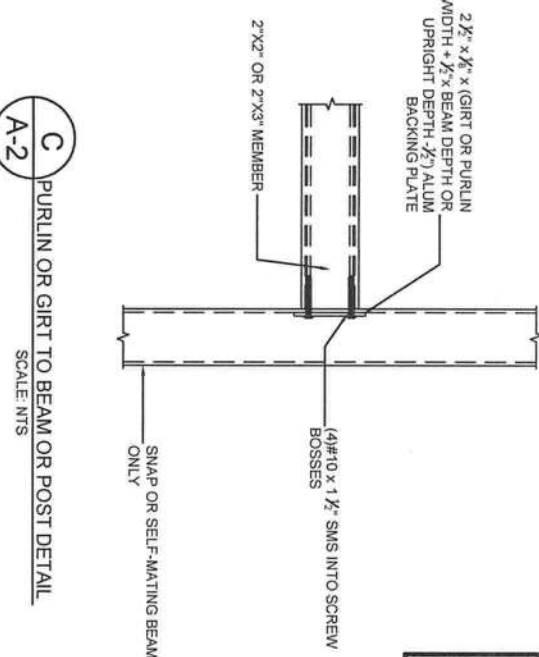


B 2" x 4" OR LARGER SELF-MATING UPRIGHT TO DECK DETAILS
SCALE: NTS

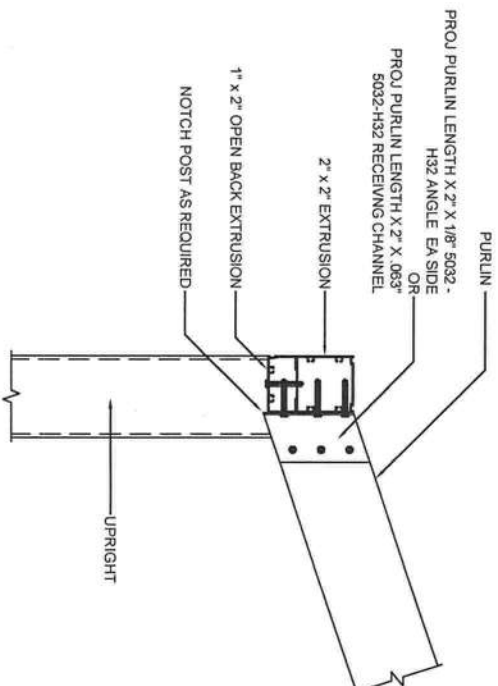


E TYPICAL INTERNAL OR EXTERNAL GUSSET DETAIL - RIGID MEDIUM
SCALE: NTS

- NOTES:
1. GUSSET DIMENSIONS ARE MINIMUM
 2. REQ. - (1) EA SIDE OF BEAM - MAY BE INTERNAL OR EXTERNAL
 3. AS BEAM SIZE CHANGES, ADD OR SUBTRACT SCREWS TO MAINTAIN 1 1/4" C/C SPACING
 4. GUSSET LENGTHS REMAIN CONSTANT, WIDTHS CHANGE TO MATCH BEAM SIZE



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



F SLOPED PURLIN CONNECTION DETAIL
SCALE: NTS



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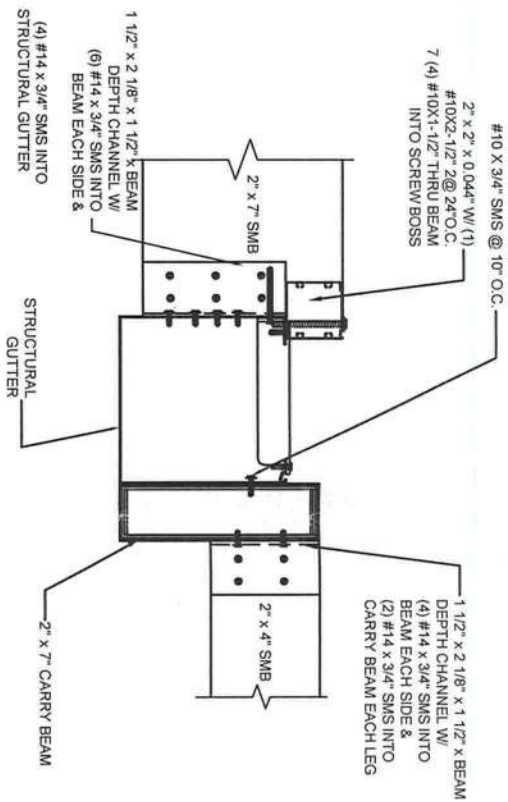
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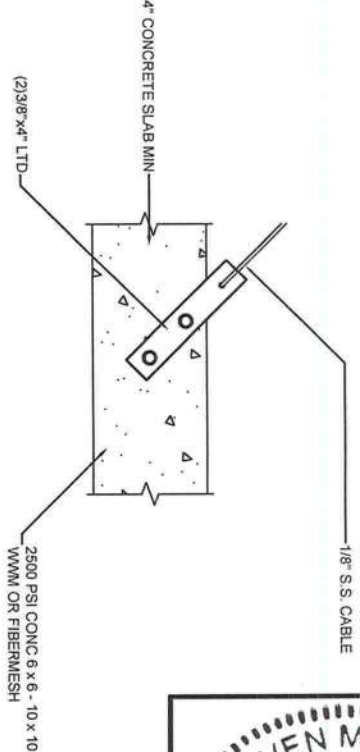
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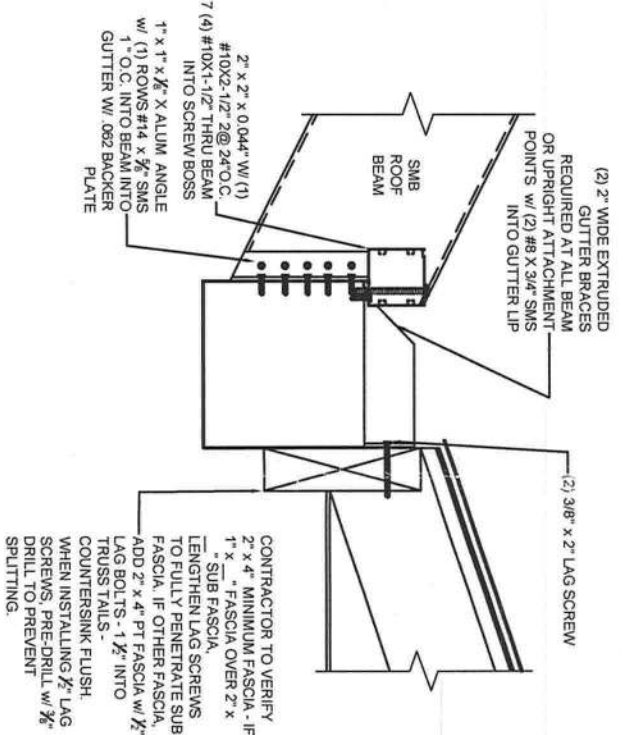
A-2



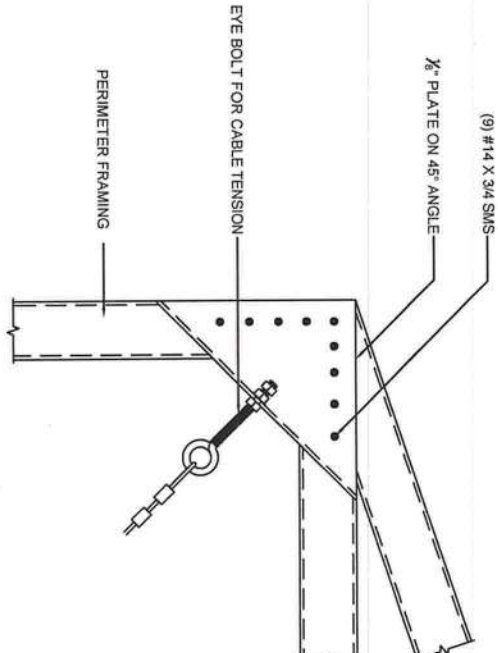
S CARRY BEAM & MATING ELEMENT ATTACHMENT DETAIL
SCALE: NTS



H-1 CABLE CONNECTIONS AT FOUNDATION
SCALE: NTS



G GUTTER BRACE & MATING ELEMENT ATTACHMENT DETAIL
SCALE: NTS



H-2 CABLE CONNECTION AT CORNER
SCALE: NTS



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