

**CONTRACTOR:** LAKE SIDE ALUMINUM, LLC  
**DESIGN CRITERIA:**

### Applicable Codes, Regulations, and Standards

1. The 2001 Florida Building Code with 2009 Supplements, specifically Chapter 16 Structural Design, Chapter 20 Aluminum, and Chapter 23 Wood.
2. AA ASM 35 and Specifications for Aluminum Structures, Part 1-A and 1-B of the Aluminum Design Manual prepared by The Aluminum Association, Inc. Washington, D.C., 2005 Edition
3. ASCE 7-05

## Wind Loads

1. Building Occupancy Category, Paragraph 1604.5 and Table 1604.5: **Category I.**
2. Basic Wind Speed, Table 1609 State of Florida Debris Region & Basic Wind Speed, Paragraph 1609.3.1 and Table 1609.3.1 Equivalent Basic Wind Speed: **110 MPH.**
3. Exposure Category, Paragraph 1609.4.3: **C**
3. Building Category for Aluminum Structures, Paragraph 2002.6: **Building Category I.**

## Foundation Design

Actual Maximum Beam Span: **42'-0"**

**Footings:** Existing concrete slab. 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.

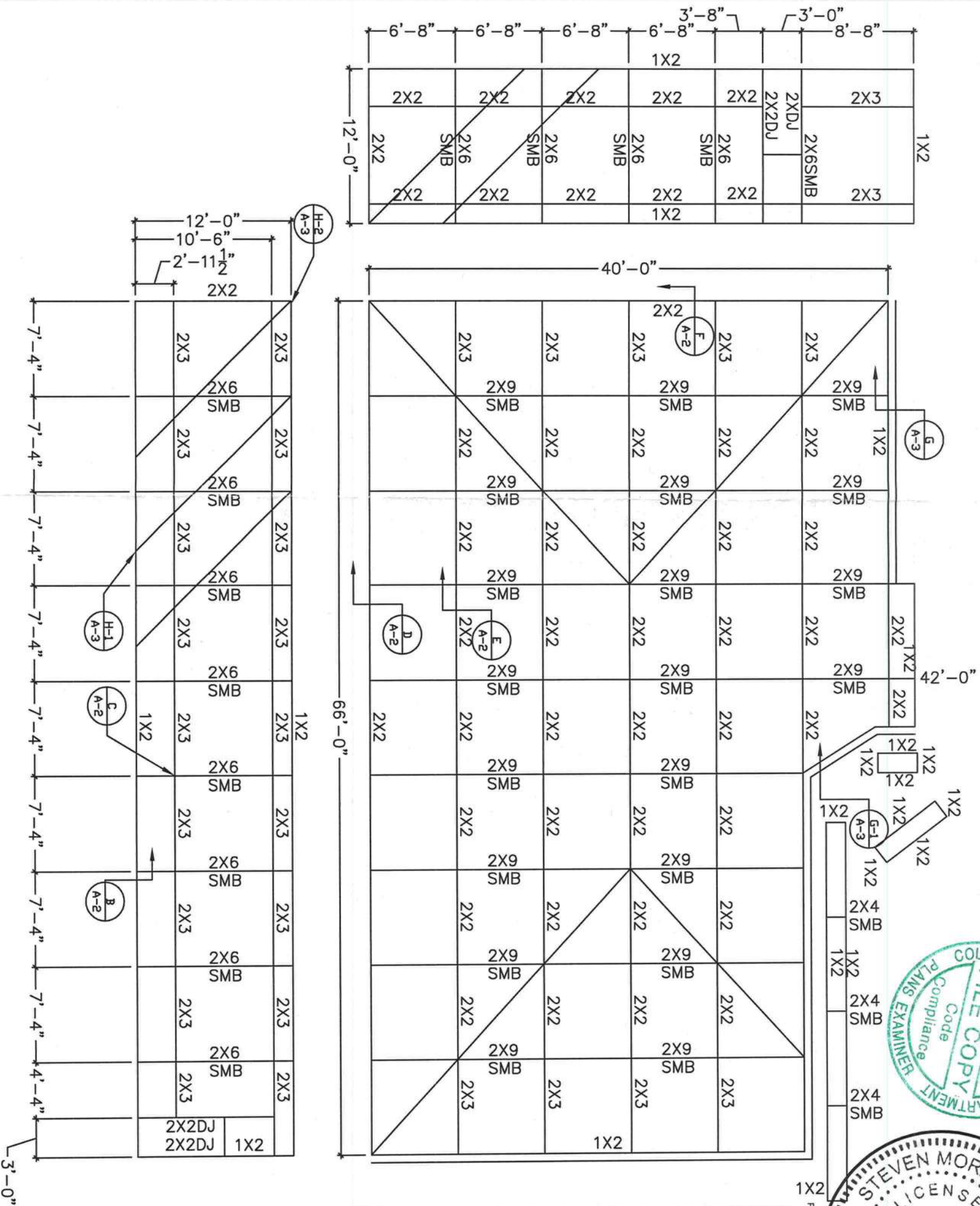
### Specifications

The following specifications are applicable to this project:

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



A circular professional engineer seal for Steven Moraga. The outer ring contains the text "STEVEN MORAGA" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by three stars. Inside the ring, the word "LICENSE" is at the top and "STATE OF" is at the bottom, also separated by three stars. The center of the seal displays the license number "No. 64609" and the date "3/10/2013". A blue ink signature, "Steven Moraga", is written across the center of the seal.

STEVEN MORAGA, PE

FLORIDA LICENSE: 64609

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PROJECT ADDRESS:

BOYD  
900 NW FRONTIER DR  
LAKE CITY, FL 32055

**A-1**  
**PLAN**

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"

OPEN BACK SECTIONS

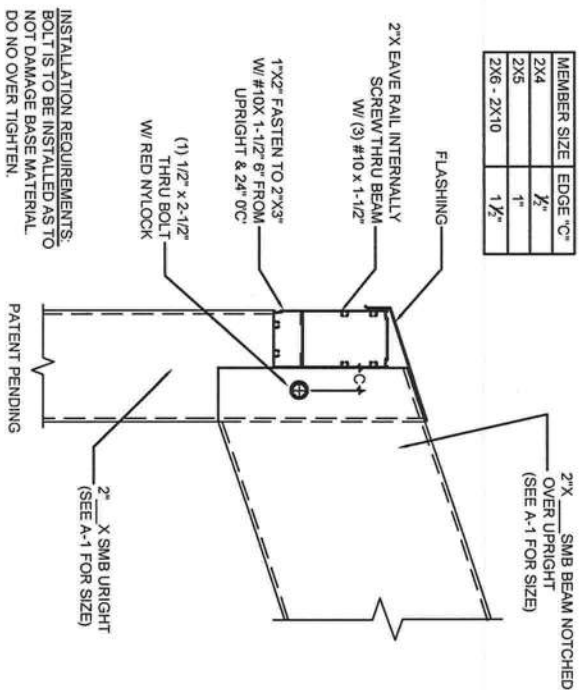
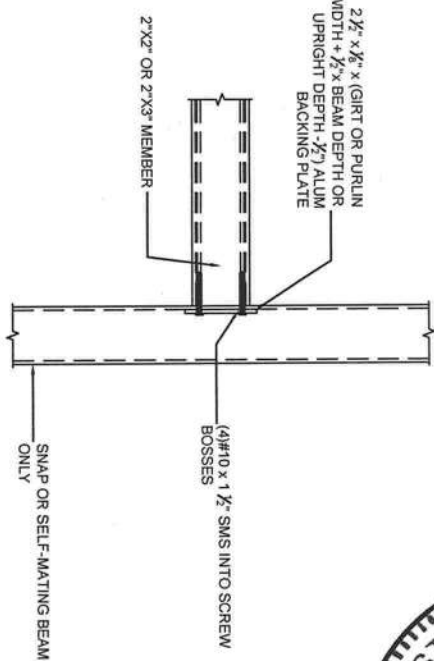
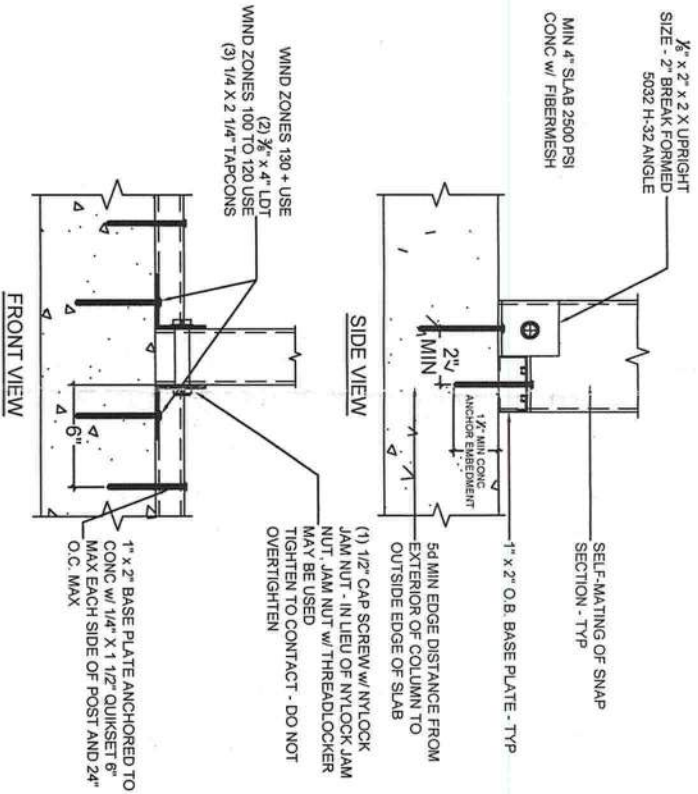
1 x 2: 1" x 2" x 0.040"  
1 x 3: 1" x 2" x 0.045"

SNAP SECTIONS

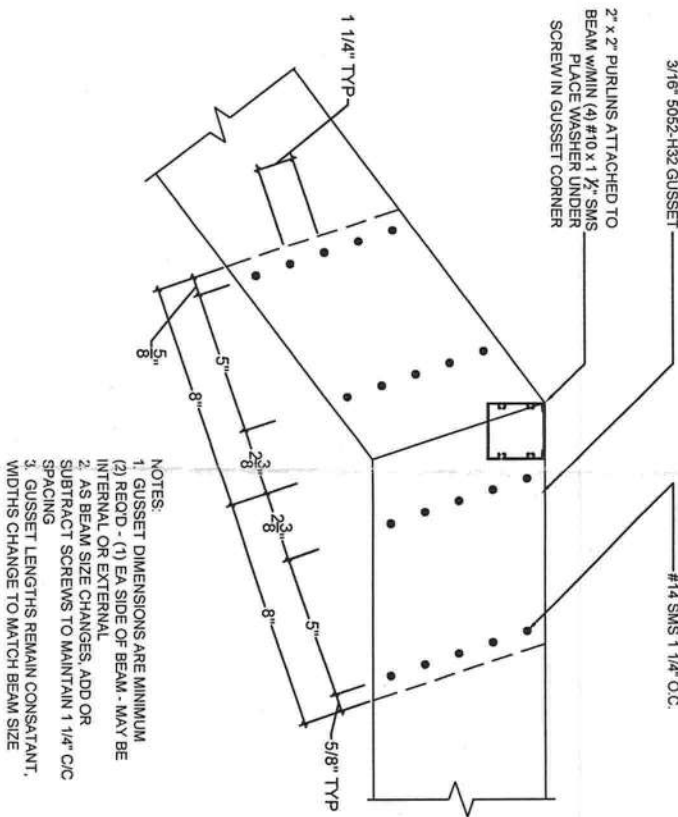
2 x 2 Snap: 2" x 2" x 0.045"  
2 x 3 Snap: 2" x 3" x 0.050"  
2 x 4 Snap: 2" x 4" x 0.045"

SELF-MATING (SMB)

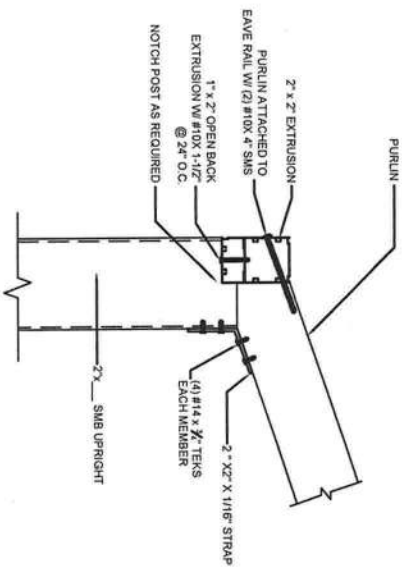
2 x 4 SMB: 2" x 4" x 0.044" x 0.100"  
2 x 5 SMB: 2" x 5" x 0.050" x 0.100"  
2 x 6 SMB: 2" x 6" x 0.050" x 0.120"  
2 x 7 SMB: 2" x 7" x 0.057" x 0.120"  
2 x 8 SMB: 2" x 8" x 0.072" x 0.124"  
2 x 9 SMB: 2" x 9" x 0.072" x 0.124"  
2 x 10 SMB: 2" x 10" x 0.092" x 0.398"



D UPRIGHT TO BEAM CONNECTION  
SCALE: NTS



- NOTES:
1. GUSSET DIMENSIONS ARE MINIMUM
  2. RECD - (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 CONSISTANT, WIDTHS CHANGE TO MATCH BEAM SIZE



F SLOPED PURLIN CONNECTION DETAIL  
SCALE: NTS



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A-2  
DETAILS



## DETAILS

