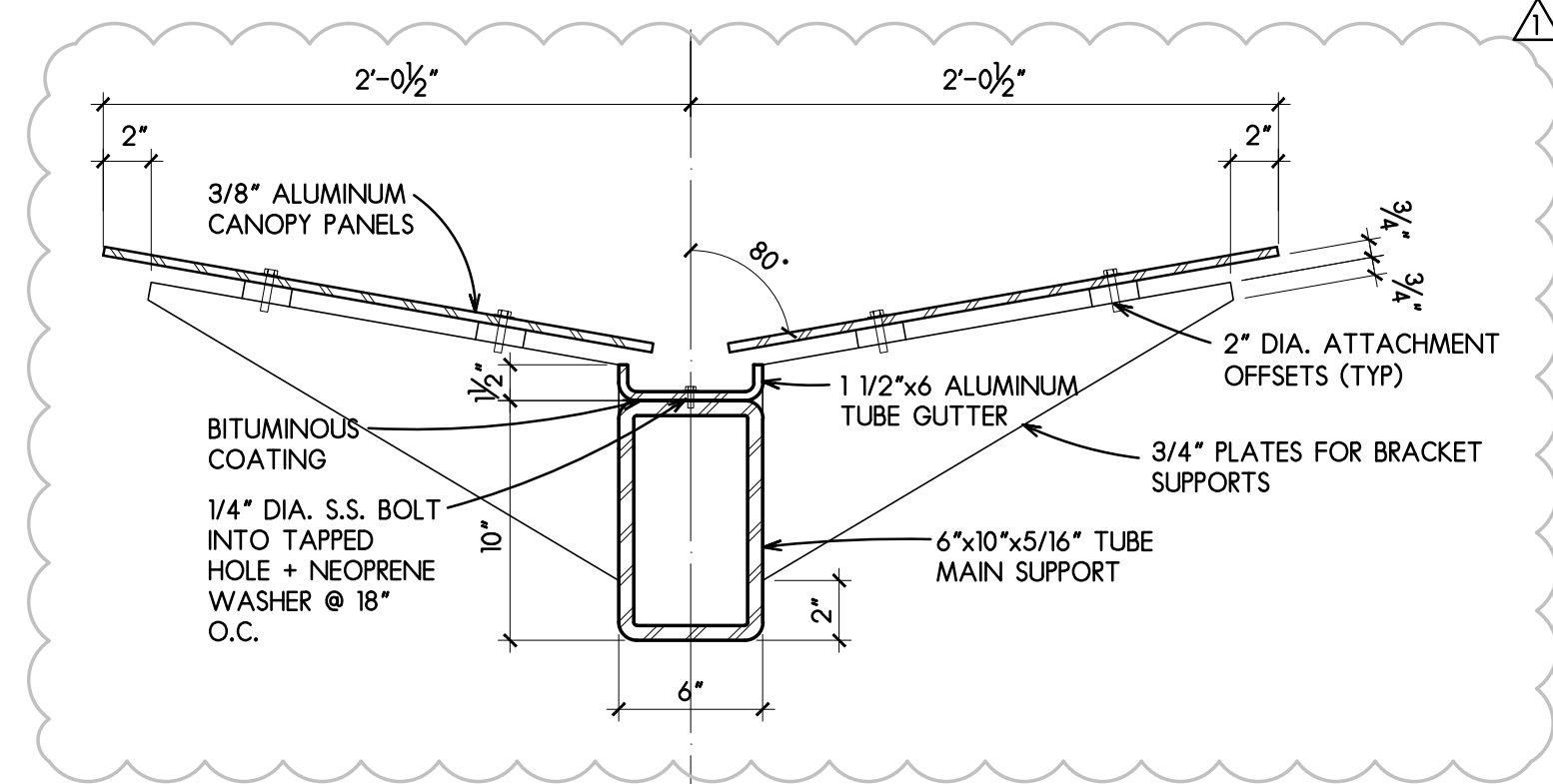
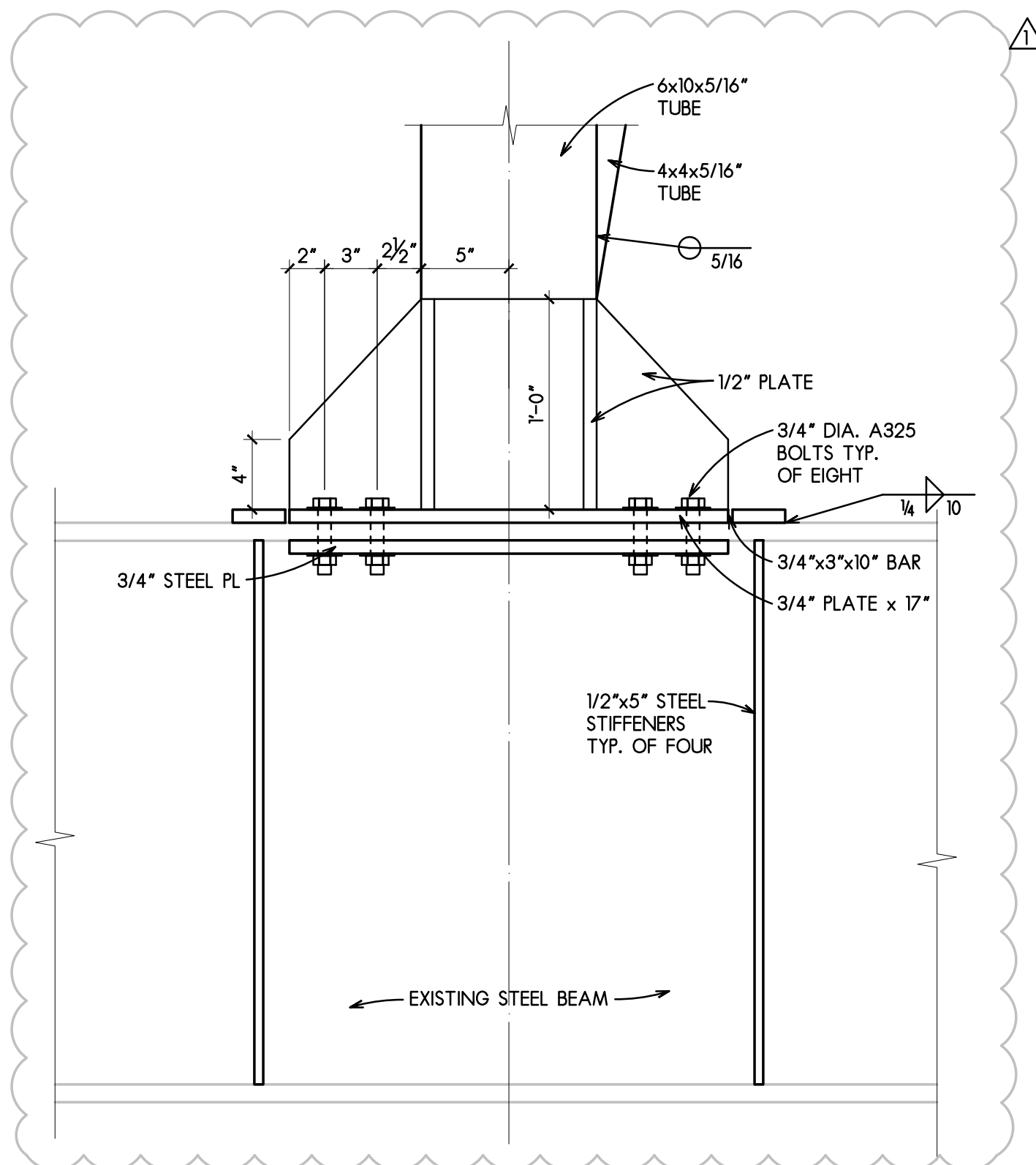


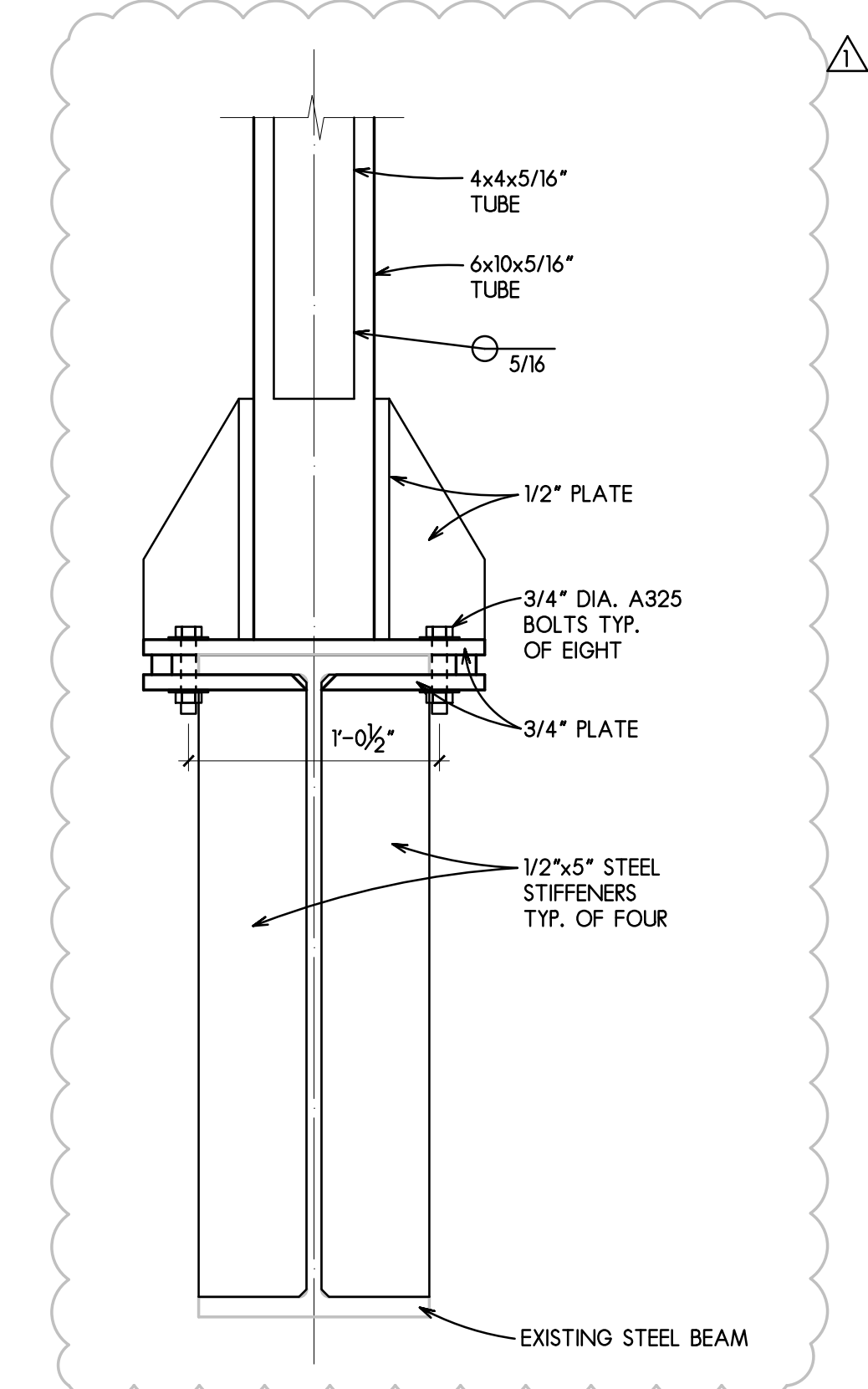
**9 GUTTER DIVERTER**  
SCALE: 1 1/2" = 1'-0"



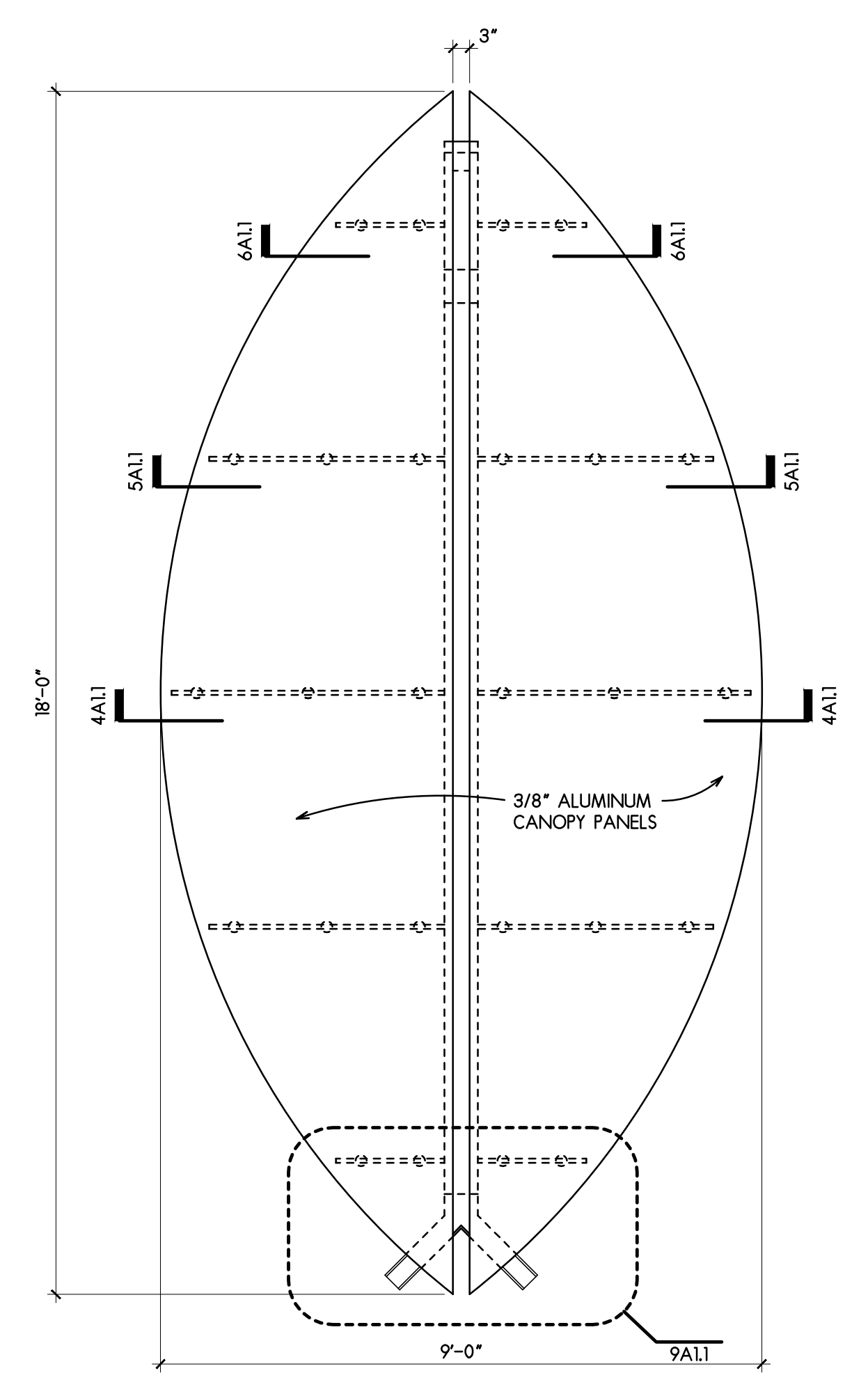
**6 CANOPY ROOF DETAIL**  
SCALE: 1 1/2" = 1'-0"



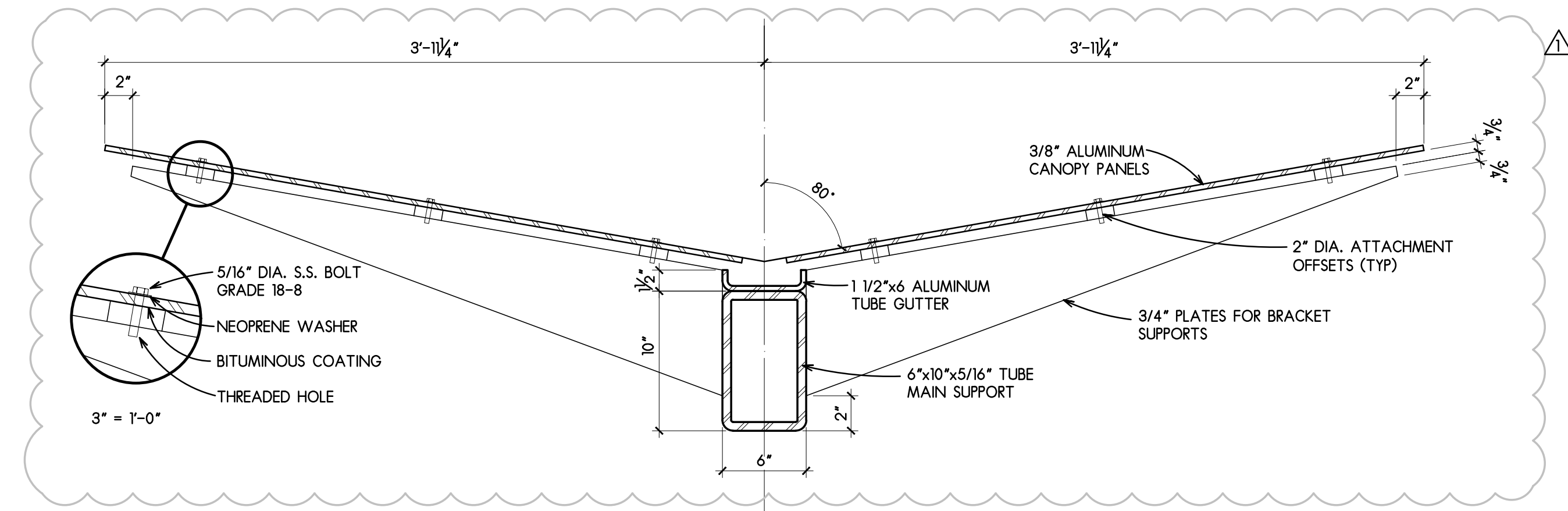
**7 CANOPY ROOF DETAIL**  
SCALE: 1 1/2" = 1'-0"



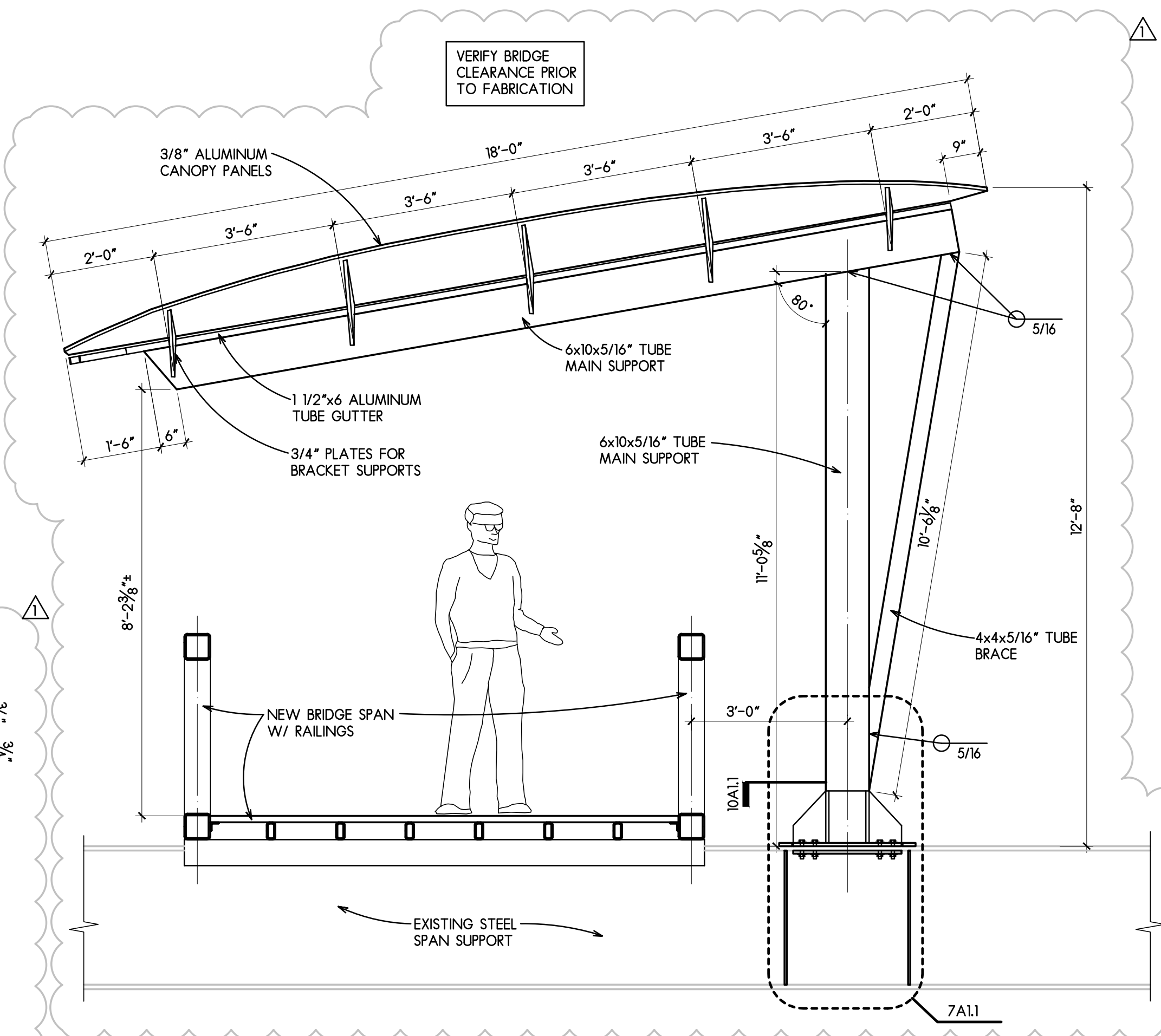
**8 CANOPY ROOF DETAIL**  
SCALE: 1 1/2" = 1'-0"



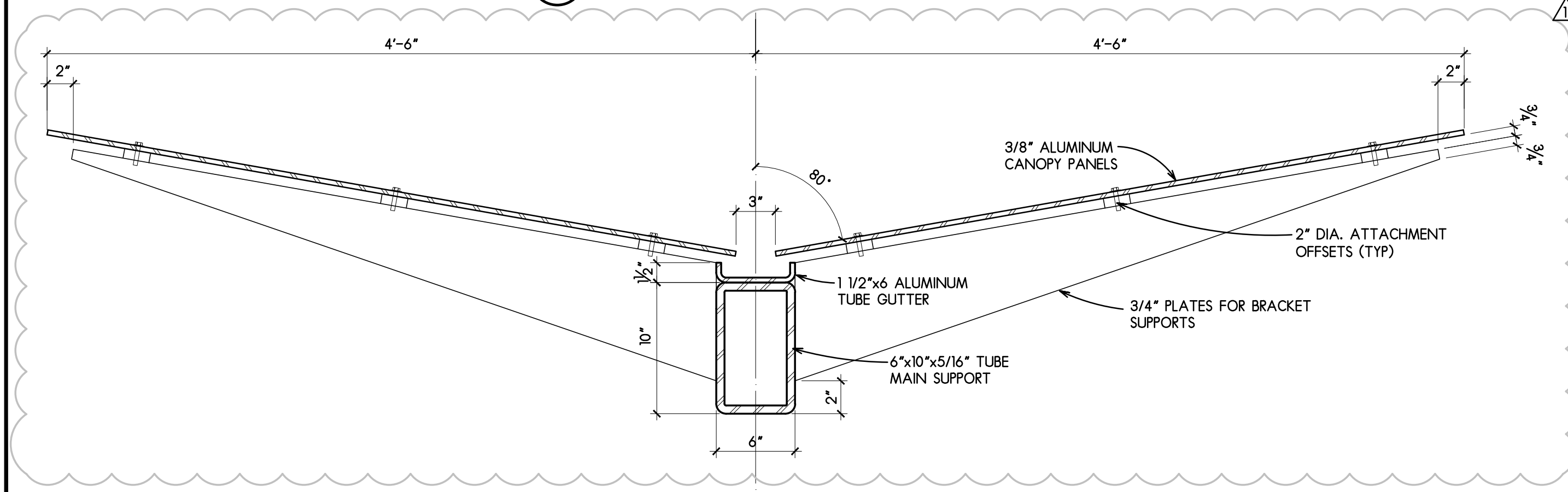
**3 ROOF PLAN**  
SCALE: 1/2" = 1'-0"



**5 CANOPY ROOF DETAIL**  
SCALE: 1 1/2" = 1'-0"



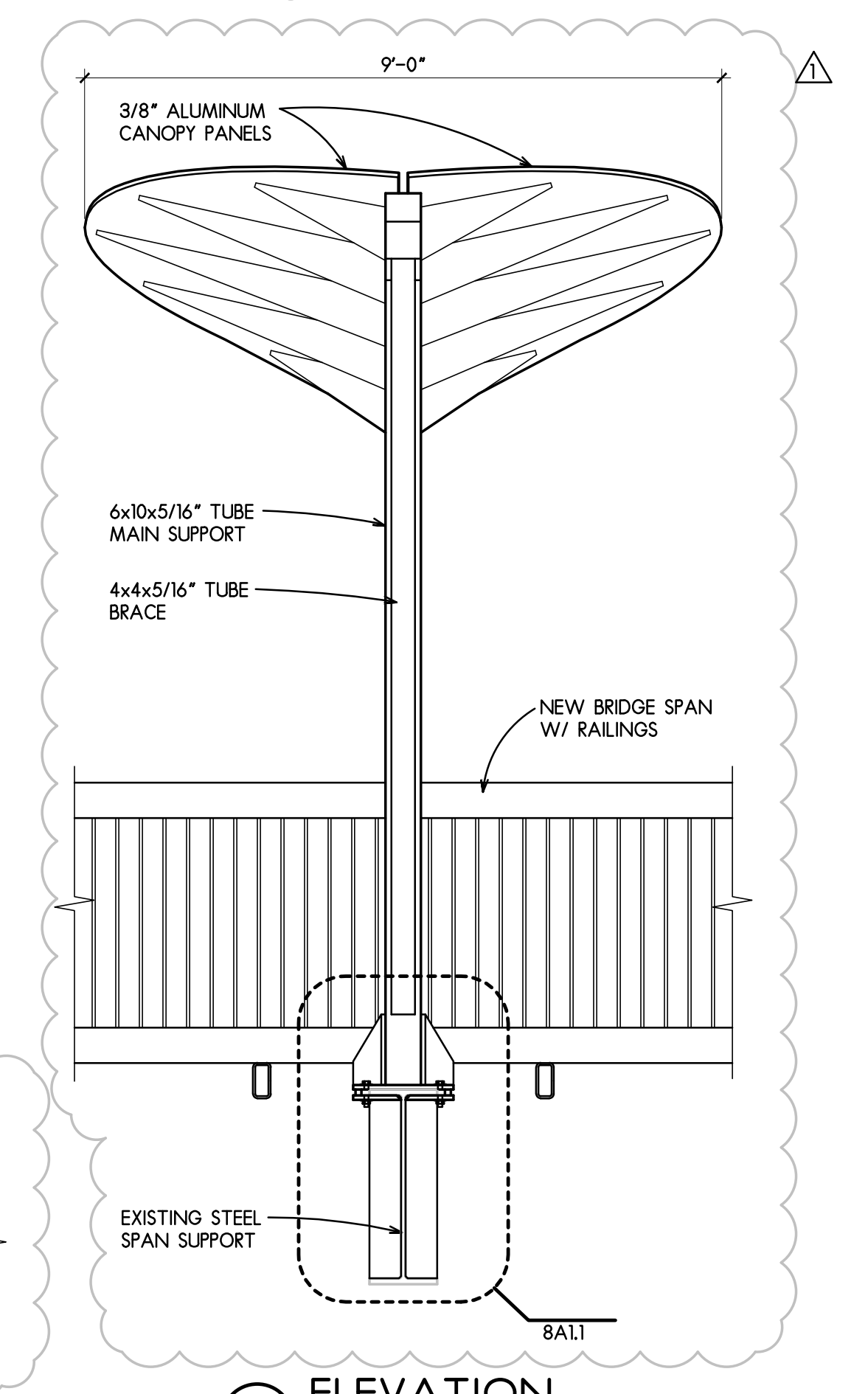
**2 ELEVATION**  
SCALE: 1/2" = 1'-0"



**4 CANOPY ROOF DETAIL**  
SCALE: 1 1/2" = 1'-0"

**GENERAL NOTES :**  
1. GENERAL CONTRACTOR TO CONSTRUCT CANOPY AT PIER 3 FOR VERIFICATION OF ALL CLEARANCES PRIOR TO FABRICATING AND ERECTING ALL OTHER LEAF CANOPIES.

**10 PLAN VIEW**  
SCALE: 1/2" = 1'-0"



**1 ELEVATION**  
SCALE: 1/2" = 1'-0"

**CANOPY STRUCTURE DETAILS**  
SCALE: AS NOTED

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DRAWN		DLS

DATE: 12-10-2018	PROJECT NUMBER	SHEET NUMBER
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SECTION 05 73 00 - LEAF-SHAPED PLATES FOR RAILINGS.

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
  1. Ornamental steel leaf-shaped plates for railings.

1.2 COORDINATION AND SCHEDULING

- A. Coordinate fabrication of leaf-shaped plates with fabrication of railings. Furnish to fabricator of railings.
- B. Fabricator of railings shall weld leaf-shaped plates to railing pickets, and provide surface preparation and shop painting of the completed railing assemblies in accordance with steel painting system specified on Drawings.

1.3 ACTION SUBMITTALS

- A. Shop Drawings: Include plans, elevations, sections, and attachment details.

Samples for Verification: One leaf Type 4, full size.

PART 2 - PRODUCTS

2.1 METALS, GENERAL

- A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.

2.2 STEEL

- A. Plates: ASTM A 36/A 36M.

2.3 FABRICATION

- A. Form leaf-shaped plates to patterns and sizes indicated on Drawings.
- B. Ease edges on both sides of plates to a 1/16 inch radius.
- C. Form routed lines on surface of plates to configuration indicated on Drawings.

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 05 73 00

SECTION 10 73 00 - CANOPIES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Pre-engineered, pre-finished custom aluminum canopies.

1.2 REFERENCES

- A. American Architectural Manufacturers Association (AAMA):
  1. AAMA 2605 - Voluntary Specification for High Performance Organic Coatings on Architectural Extrusions and Panels.
  1. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
  2. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
  3. ASTM B 429 - Standard Specification for Aluminum-Alloy Extruded Pipe and Tube.

1.3 DESIGN REQUIREMENTS

- A. Design members to withstand dead, live, wind and other applicable loads in accordance with ASCE-10 and applicable code.

- B. Columns, Beams, Braces, and Trim: Aluminum structural shapes.

- C. Structural Framing:
  1. Hell-arc welded.
  2. Mechanically fastened pieces using internally concealed bolted connections.

- D. Design Loads:
  1. Comply with Building Code for site location.
  2. Collateral Loads: Additional loads imposed by other materials or systems.

1.4 SUBMITTALS

- A. Product Data: Mill specification.
- B. Shop Drawings: Layout and erection drawings showing framing, and trim details, clearly indicating proper assembly.
- C. Samples: Color selection samples consisting of actual coating material on aluminum members.
- D. Quality Assurance/Control Submittals:
  1. Qualifications: Letter certifying erectors required qualifications.

1.5 QUALITY ASSURANCE

- A. Design structural components, develop shop drawings, and perform shop and site work under direct supervision of Professional Engineer experienced in design of this Work and licensed at Project location.

- B. Welder Qualifications: All welders must be AWS certified welders.

1.6 DELIVERY, STORAGE, AND HANDLING

- E. Follow manufacturer's instructions.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Steel Tube: ASTM A500 Grade B - Plate A36 - Bolts A325, Weld E70XX
- B. Aluminum Shape: 6061 alloy, T-6 temper.

2.2 COMPONENTS

- A. Structural Members:
  1. Radius-cornered tubular shapes as required by structural engineering design.

2.3 ACCESSORIES

- A. Fasteners:
  1. Fasteners: Type 18-8 stainless steel, type recommended by manufacturer for specific condition.

2.4 FABRICATION

- A. Shop Assembly: Fabricate cross beams and columns into one-piece rigid bents with corners mitered and hell-arc welded to the extent that completed bents can be shipped on local, state, and federal highways without special permit. Provide bolted connections for bents required to be shipped unassembled.

- B. Shop Assembly: Fabricate cross beams and columns for field assembled bolted connections.

2.5 FINISHES

- A. Aluminum
  1. Thermo-Set Enamel: AA-C-12C-42R-1, comply with AAMA 603.
    - a. Color: As selected by architect from manufacturer's standard color range.
  2. Fluoropolymer Coating: 70 percent PVDF resin based fluoropolymer, AA-C-12C-42R-1, custom color as selected by architect, comply with AAMA 605.
    - a. Two coat application.

B. Metals

Special Coating System for Steel Components of Canopy Assemblies:

- A. Epoxy Zinc-Rich Primer: Complying with MPI#20 and compatible with topcoat.
- B. Epoxy Intermediate Coat: Complying with MPI#77 and compatible with primer and topcoat.
- C. Polyurethane Topcoat: Complying with MPI#72 and compatible with undercoat.
- D. Preparing Steel Canopy Components for Shop Priming: Prepare uncoated ferrous-metal surfaces to comply with SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
- E. Primer Application: Apply shop primer to prepared surfaces of steel components unless otherwise indicated. Comply with requirements in SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.

High-Performance Coating: Apply epoxy intermediate and polyurethane topcoats to prime-coated surfaces. Comply with coating manufacturer's written instructions and with requirements in SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting. Apply at spreading rates recommended by coating manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine points of attachment to bridge structure. Verify locations and details comply with shop drawings.
- B. Coordinate with responsible trade to perform corrective work on unsatisfactory points of attachment.
- C. Commencement of work by installer is acceptance of existing conditions.

3.2 ERECTION

- A. Erect canopies in accordance with manufacturer's installation instructions.
- B. Set bents plumb, straight, and true to line, adequately braced to maintain position.

- C. Keep aluminum surfaces from direct contact with ferrous metal or other incompatible materials by applying one coat of clear bituminous coating.

3.3 CLEANING

- A. Clean surfaces soiled by work as recommended by manufacturer.
- B. Remove surplus materials and debris from the site.

3.4 PROTECTION

- A. Protect finished aluminum surfaces from damage due to subsequent construction operations.

END OF SECTION

SECTION 26 51 00 - LIGHT FIXTURE

Electrical/Optical

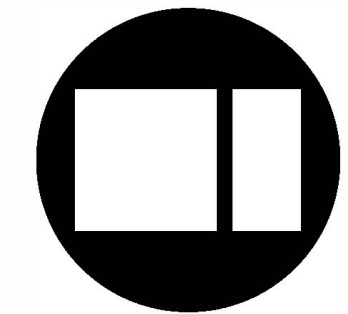
- Power Supply: 120-277V/50-60 HZ
- Integral EC electronic converter in thermally-separated compartment
- (NTC) Negative Temperature Coefficient thermocouple monitoring of LED's: In the event of overheating the current will be reduced by 50%
- Built-in low voltage surge protection on Printed Circuit Board
- 0-10V dimming terminal block standard
- Light Source: Operating temp of 85C to maximize a long life
- High output LED's are binned to 3000K/4000K@ <3 McAdams Ellipses
- CRI: 80

Mechanical

- Recycled Marine Grade ALS112/LM6/CP401 Aluminum with <0.1% Copper
- UV Stabilized architectural grade powder coat for resistance to atmospheric aging and color fading
- Conversion Coated aluminum to prevent any galvanic reactions & improve the bond of the powder coat
- Polymer Coated stainless steel fasteners (15% Teflon) to reduce any chance of galvanic reaction between the aluminum housing and the fasteners
- Salt spray tested and approved
- IK (Impact Resistance) Rating: IK07
- IP (Ingress Protection) Rating: IP65 (Suitable for commercial and industrial applications)
- Silicon Gasket: 4mm thickness
  - \*Cure Profile: Post Cure 10'/171°C and 1h/250°C
  - \*Hardness, Shore A: 35
  - \*Elongation: 585%
  - \*Plasticity (mm X 100): 150
- Field changeable PCB (including color temperature)
- Field changeable Optical (lens) system: One-piece PMMA Optical lens
- Tempered Safety Glass lens (4mm thickness) and frame with safety clips
- Thermally separated driver compartment for optimal thermal management of drivers and the light source
- Optional: Gimbal mounted 30° tiltable and 355° rotatable

Warranty & Standards

- ETL Listed, Suitable for wet locations
- Salt spray tested
- LED Lifetime: LED > 60,000h Ta 25°C (L70/B10) Control Gear >50,000h Ta 25°C
- 5-year warranty
- Note: Modularity of the DAC accounts for easily adjusting lenses/optics, PCB's etc



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