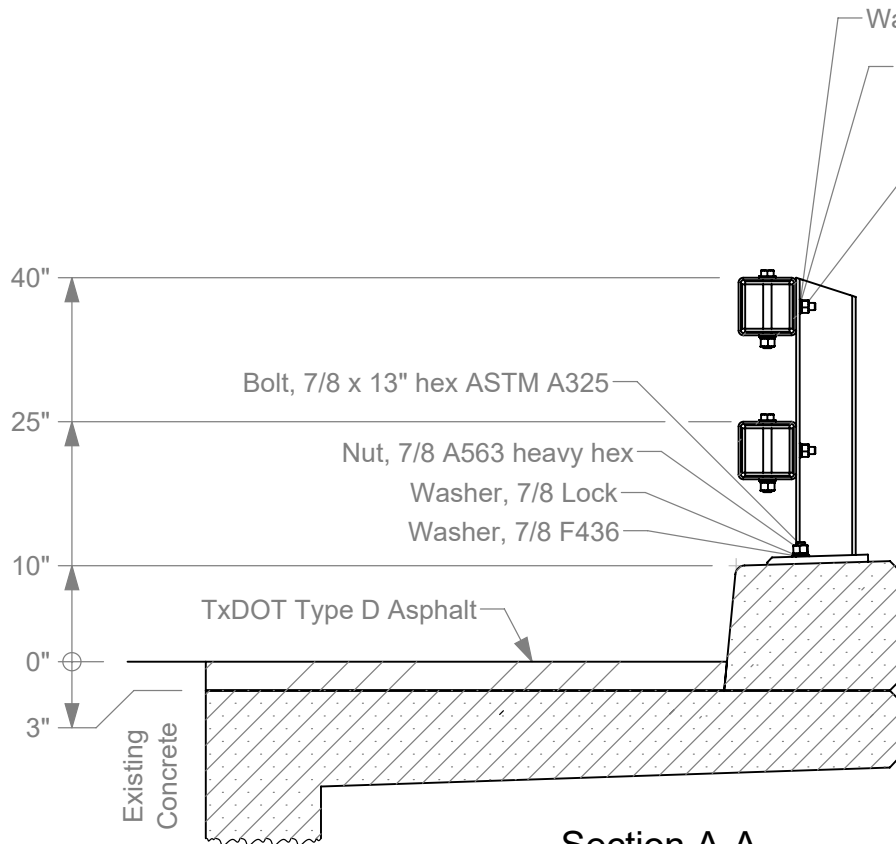
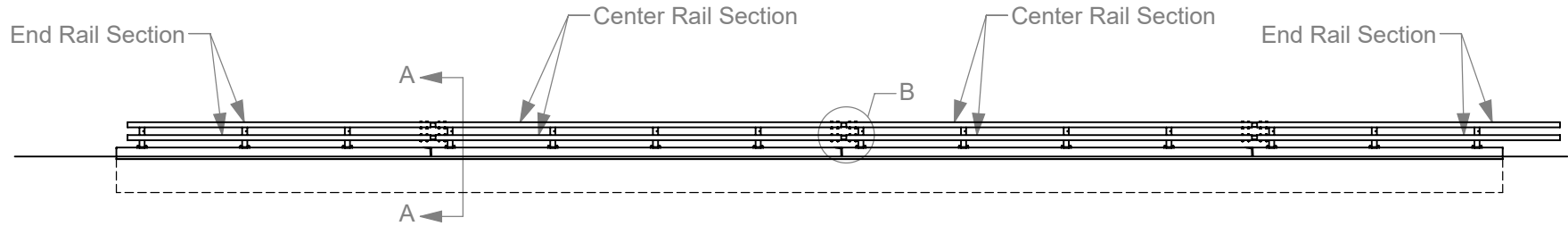
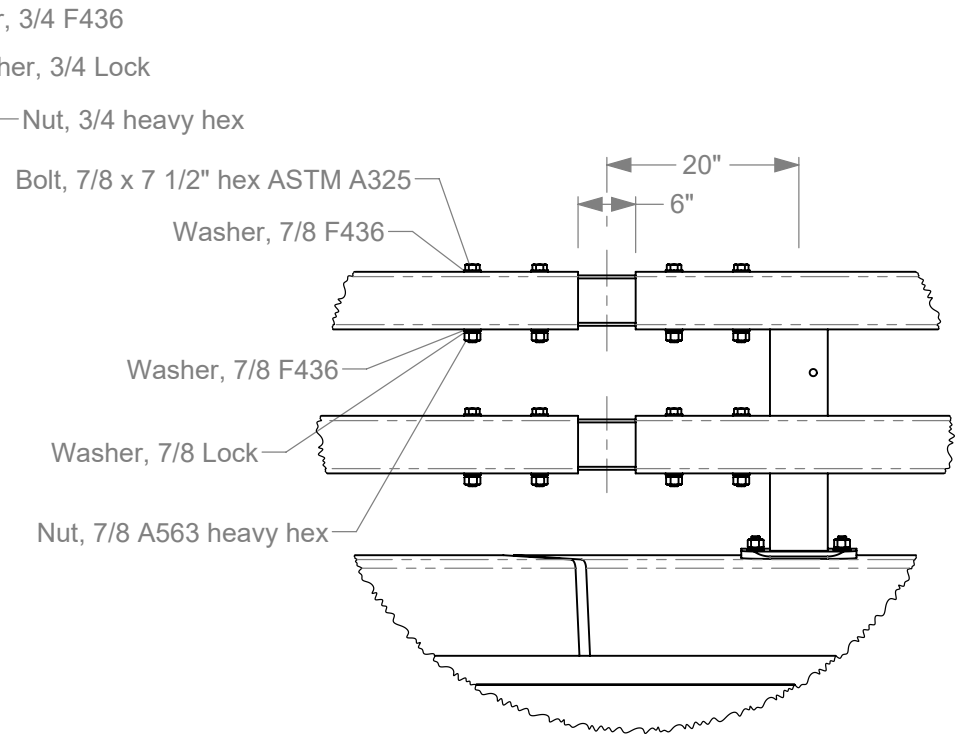


Elevation View




Section A-A
Scale 1 : 20

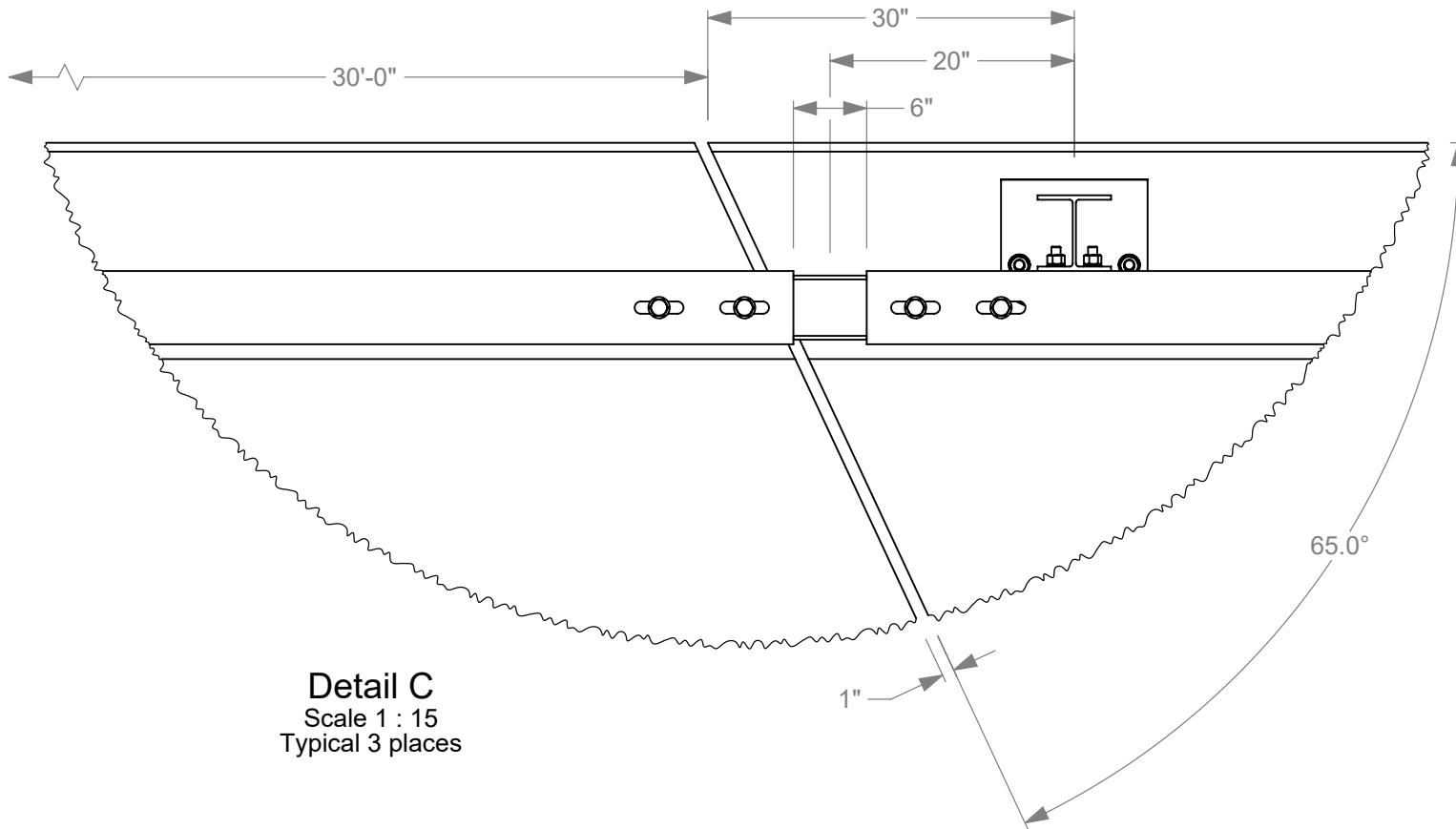
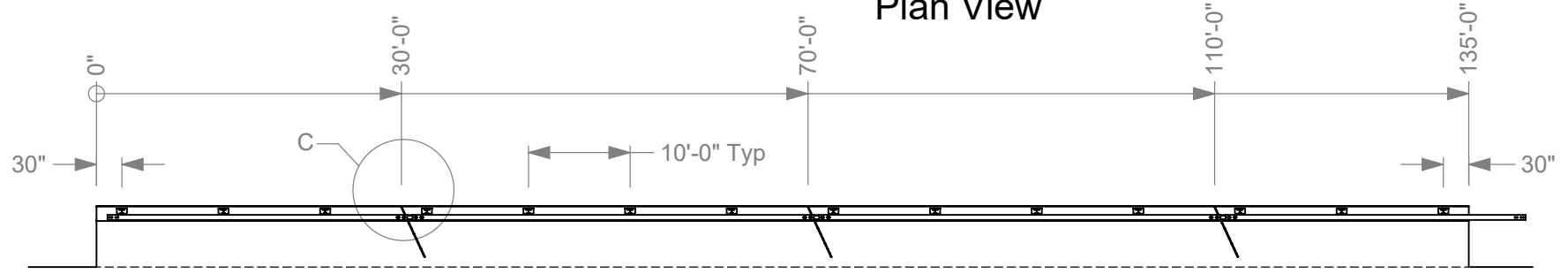


Detail B
Scale 1 : 20
Typ @ all Joints

- 1a.** All rail components, including Rails, Posts, and Hardware, shall be galvanized.
- 1b.** Bolts with Lock Washers shall be tightened to snug only.

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Plan View



Detail C
Scale 1 : 15
Typical 3 places



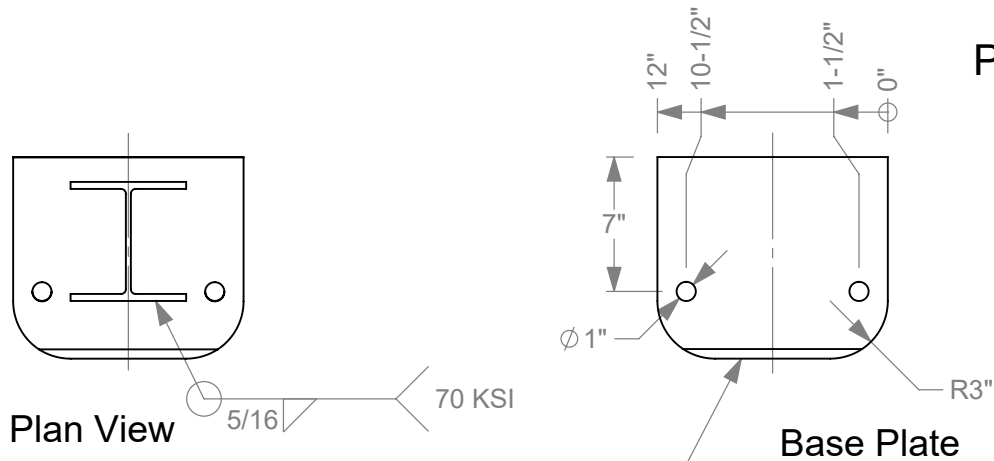
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Drawn by GES

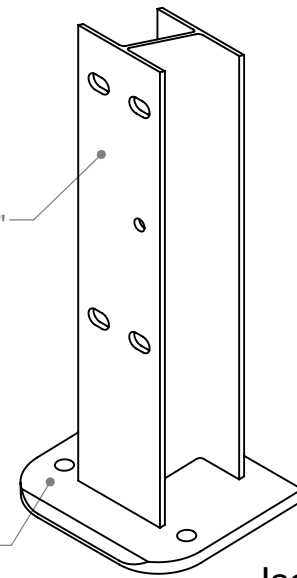
Scale 1:10

Sheet 2 of 8 Plan View

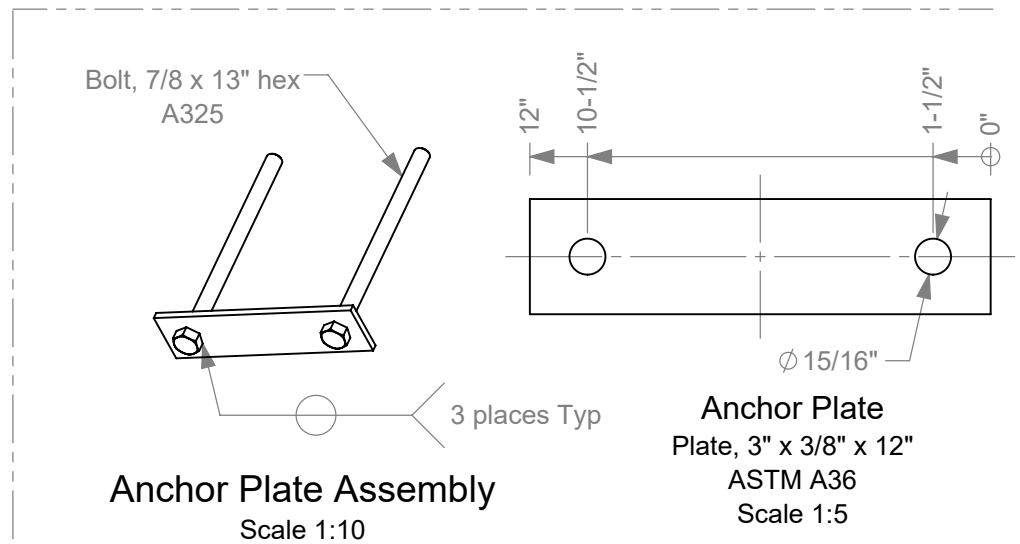
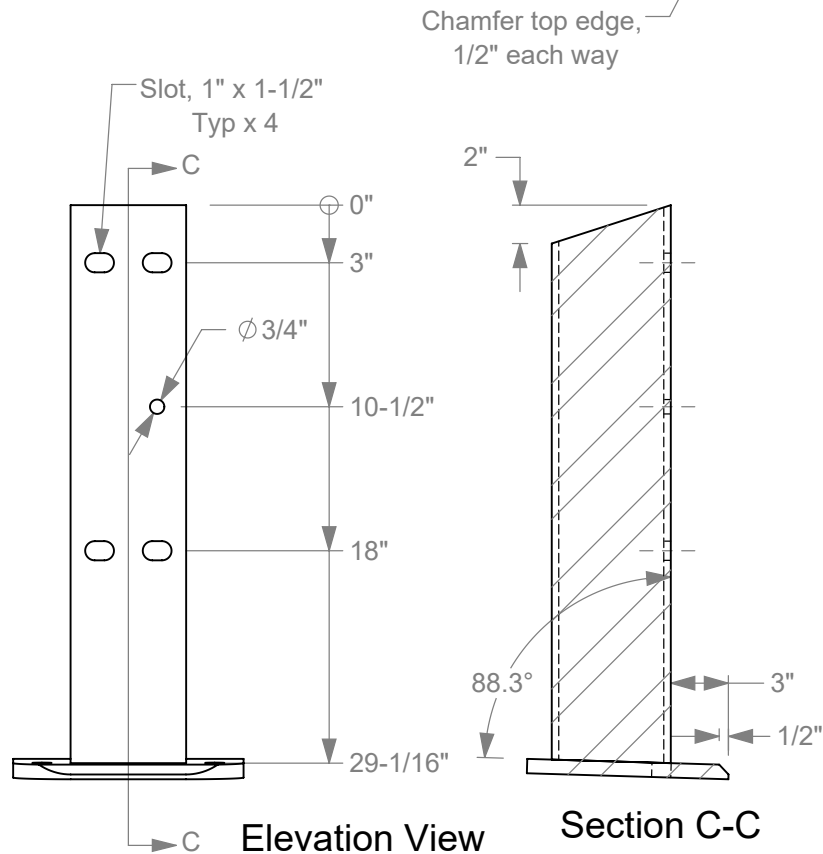


Post Details

W6x20 x 29 1/16"
ASTM A992



Isometric View



- 3a. All welding must be performed by certified welders using industry standard practices.
- 3b. Galvanize all components after fabrication is complete.



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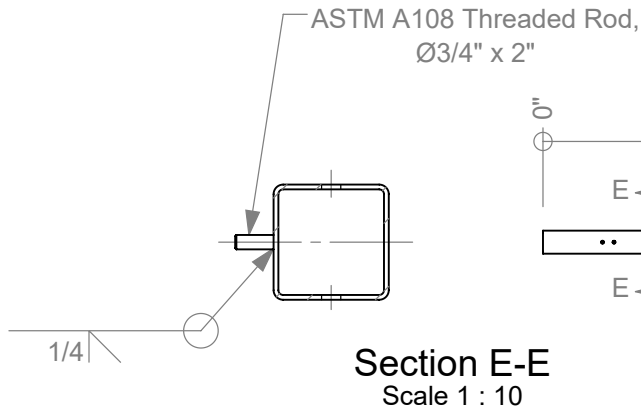
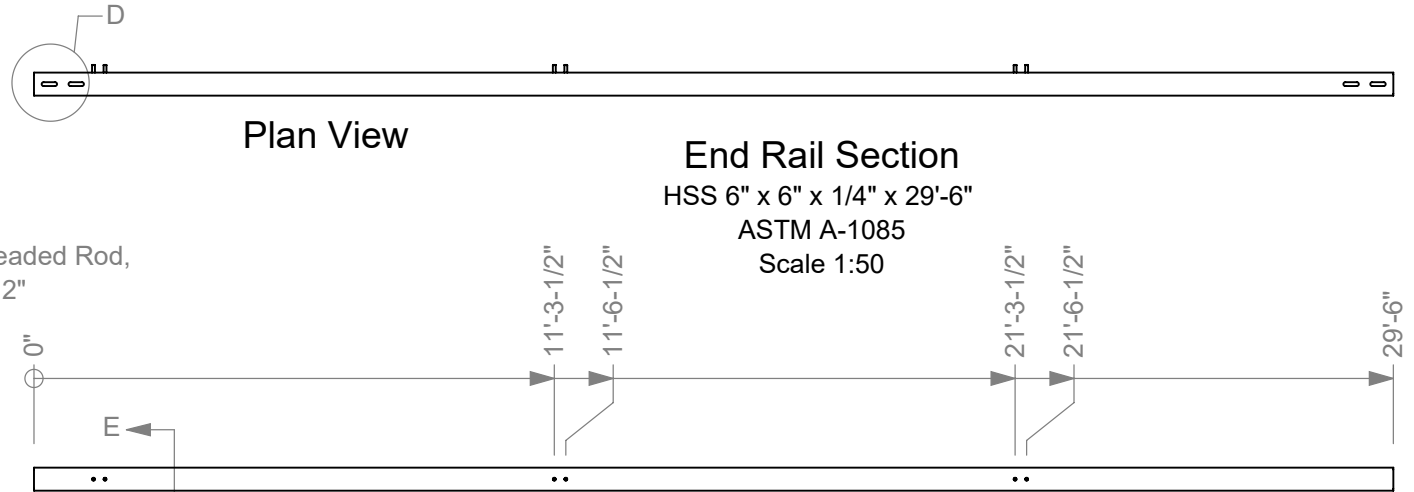
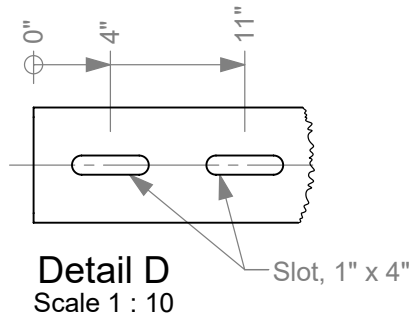
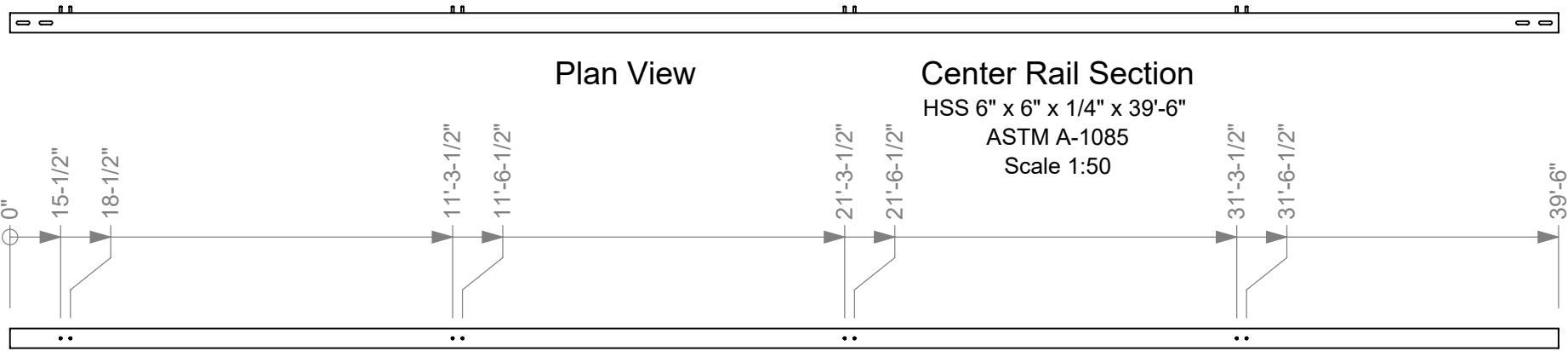
Project #609761 3-5 Colorado Type 10 TL-4 Bridge Rail 2020-02-11

Drawn by GES

Scale 1:10

Sheet 3 of 8 Post Details

Rail Details



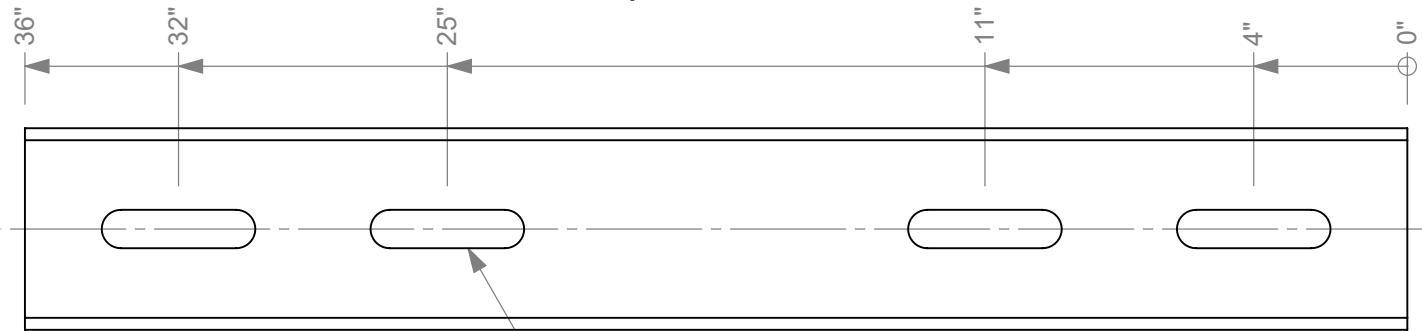
- 4a.** All welding must be performed by certified welders using industry standard practices.
- 4b.** Galvanize all components after fabrication is complete.
- 4c.** Detail D is typical both Rail Sections, both ends. Section E-E is typical both Rail Sections.



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Sheet 4 of 8 Rail Details	

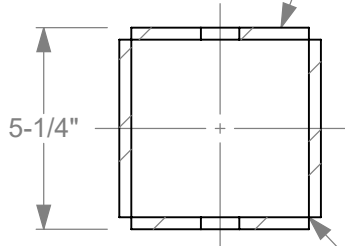
Rail Splice Details



Plan View

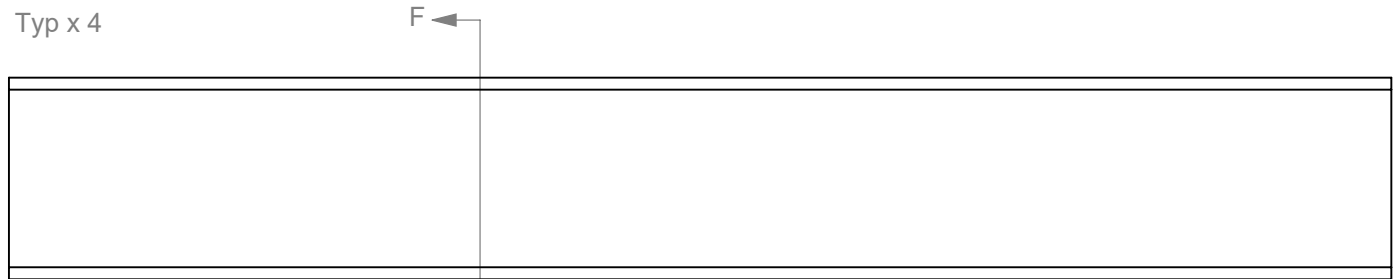
Plate, 4 5/8" x 5/16" x 36"
ASTM A572 Grade 50
Typ x 4

See previous sheet for Slot dimensions.

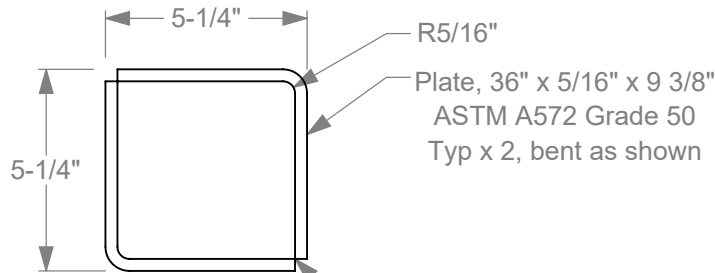


Section F-F

1/4" ∇ Typ 70 KSI



Elevation View

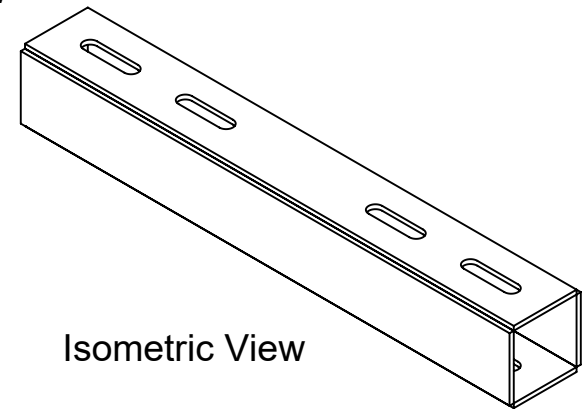


Alternate Fabrication Option*

Slots now shown

1/4" ∇ Typ 70 KSI

R5/16"
Plate, 36" x 5/16" x 9 3/8"
ASTM A572 Grade 50
Typ x 2, bent as shown



Isometric View

*After fabrication this sheet will be edited to show only the fabrication method used.



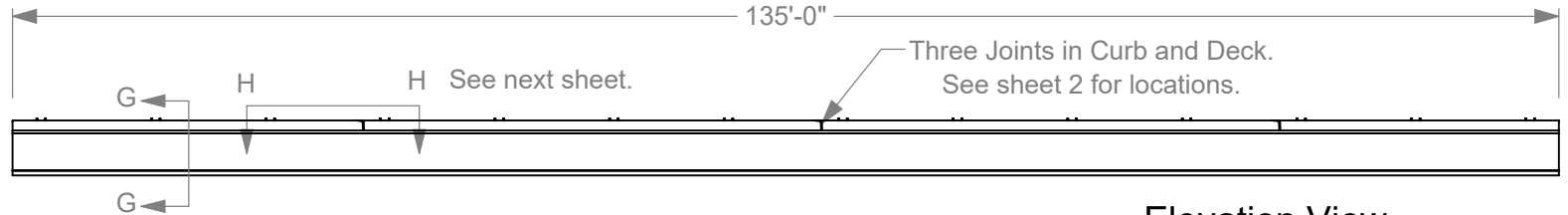
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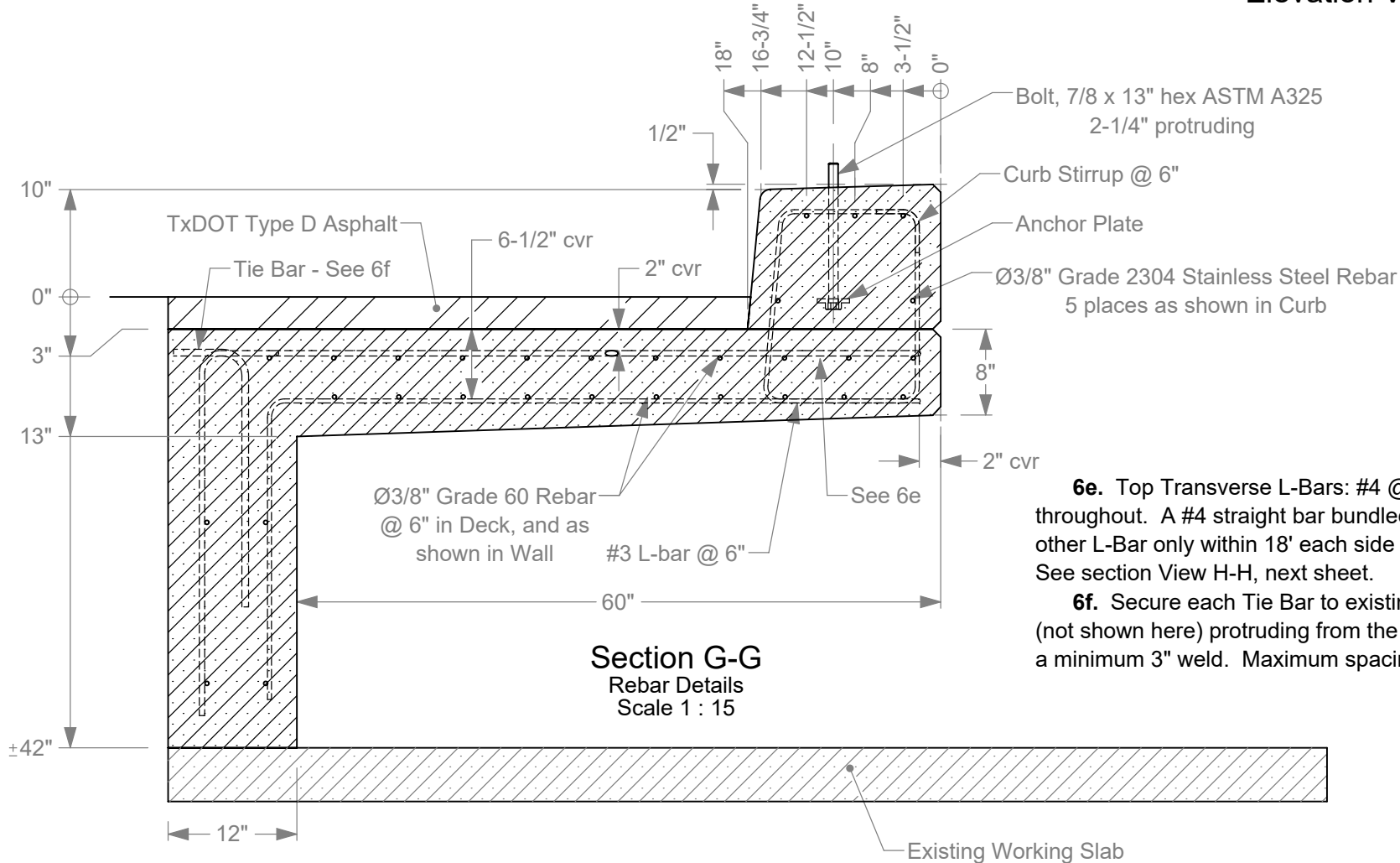
Drawn by GES Scale 1:5 Sheet 5 of 8 Rail Splice Details

Concrete Details

Elevation View



Elevation View



Section G-G
Rebar Details
Scale 1 : 15

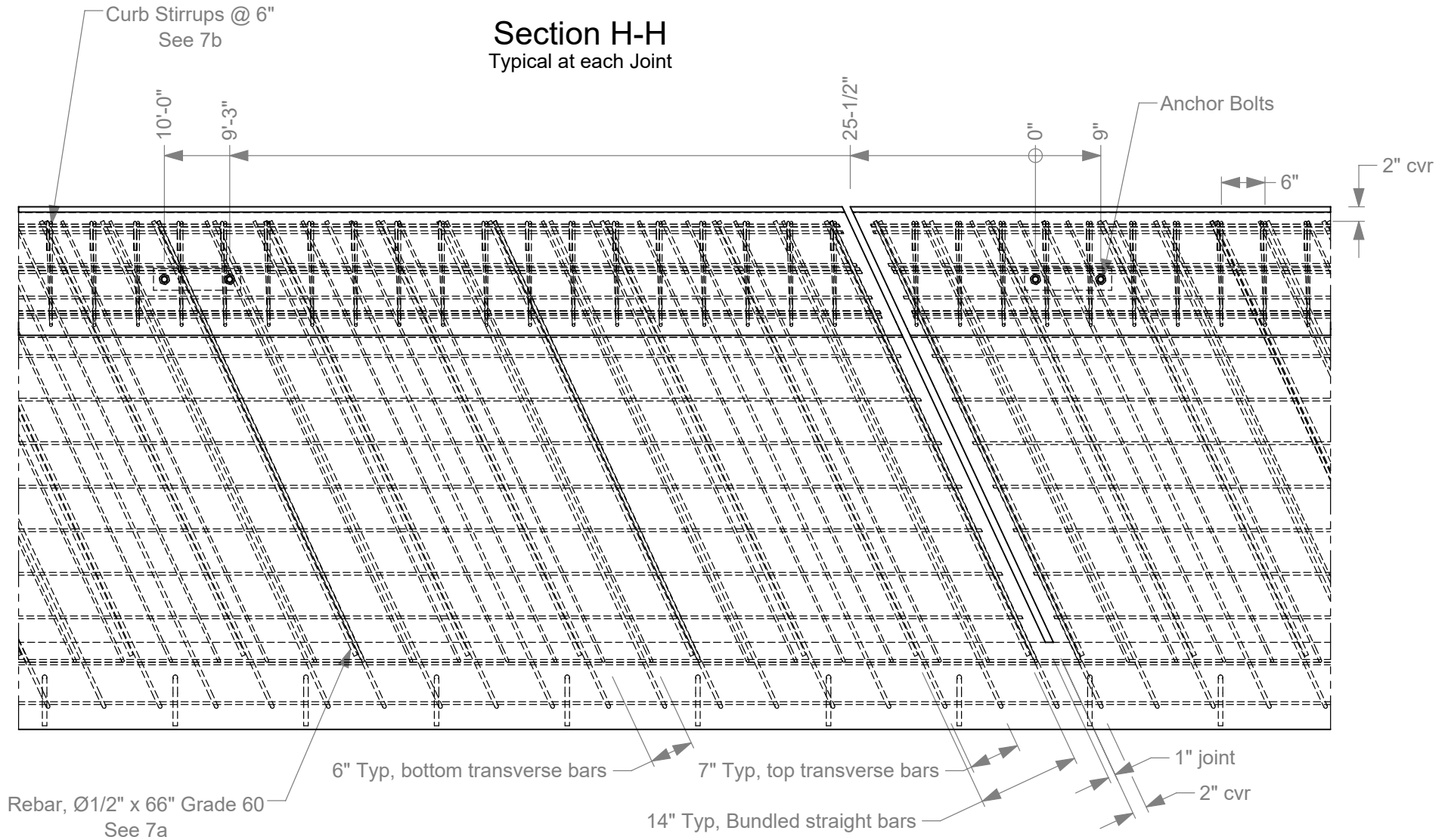
- 6e.** Top Transverse L-Bars: #4 @ 7" throughout. A #4 straight bar bundled with every other L-Bar only within 18' each side of joint. See section View H-H, next sheet.
- 6f.** Secure each Tie Bar to existing rebar (not shown here) protruding from the runway with a minimum 3" weld. Maximum spacing is 18".

- 6a.** Concrete is 4500 psi for Deck and Curb.
- 6b.** Minimum rebar lap is 22" for #3 stainless steel bars, and 18-3/4" for #5 bars.
- 6c.** All rebar dimensions are to center of bar unless otherwise indicated by "cvr" (cover).
- 6d.** R1" fillet traffic side top edge of Curb. Chamfer 3/4" field side edges of Deck and Curb as shown.

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Section H-H

Typical at each Joint



Rebar, Ø1/2" x 66" Grade 60
See 7a

6" Typ, bottom transverse bars


7" Typ, top transverse bars

14" Typ, Bundled straight bars

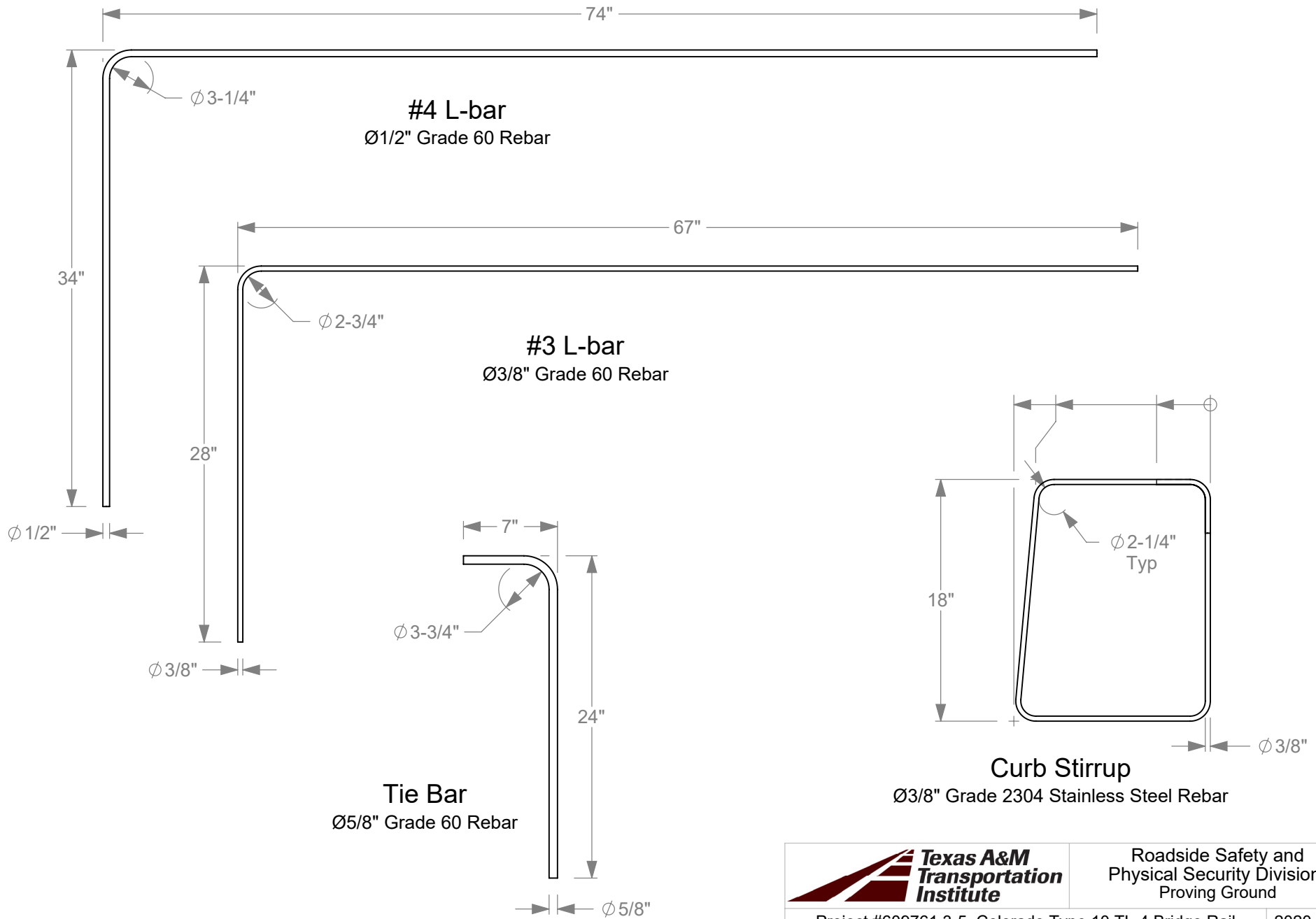
1" joint

2" cvt

- 7a.** Ø1/2" straight bars bundled with every other top transverse L-bar for 18' each side of each joint.
- 7b.** Adjust spacing of Stirrups as needed to avoid interference with Anchor Bolts.

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Rebar Details



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