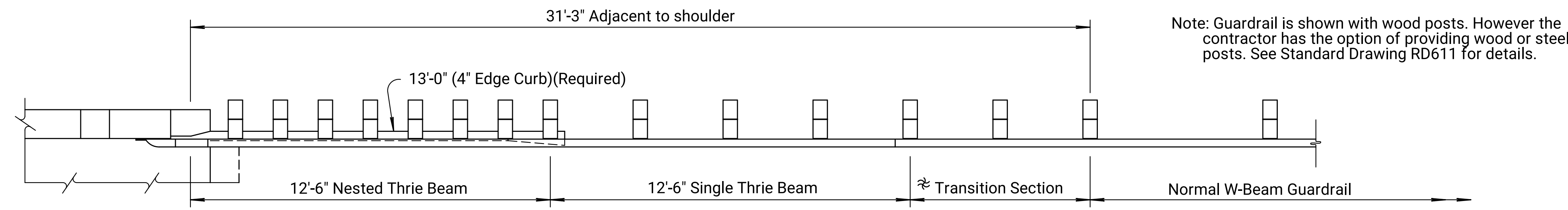
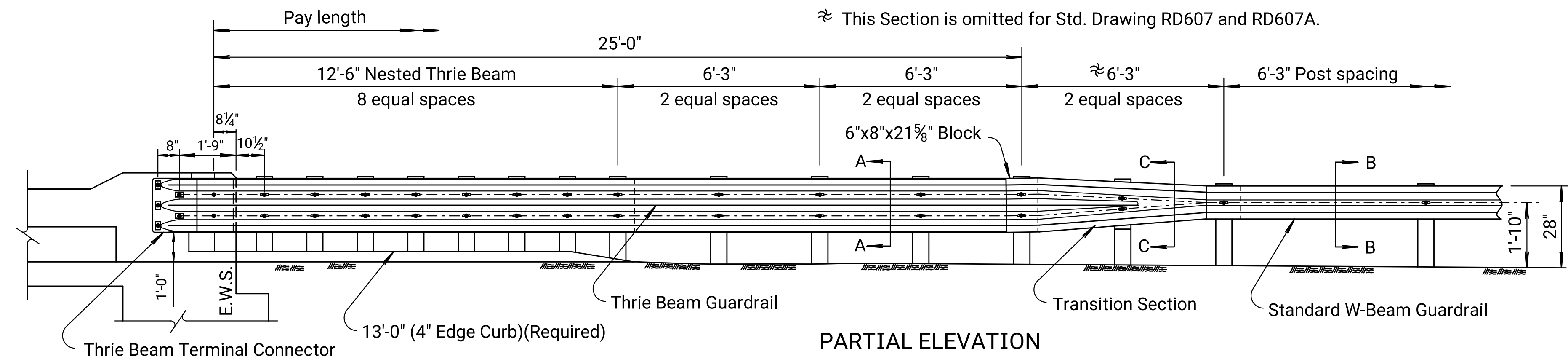


| | | | | |
|--------|-------------|------|-----------|--------------|
| STATE | PROJECT NO. | YEAR | SHEET NO. | TOTAL SHEETS |
| KANSAS | | | | |

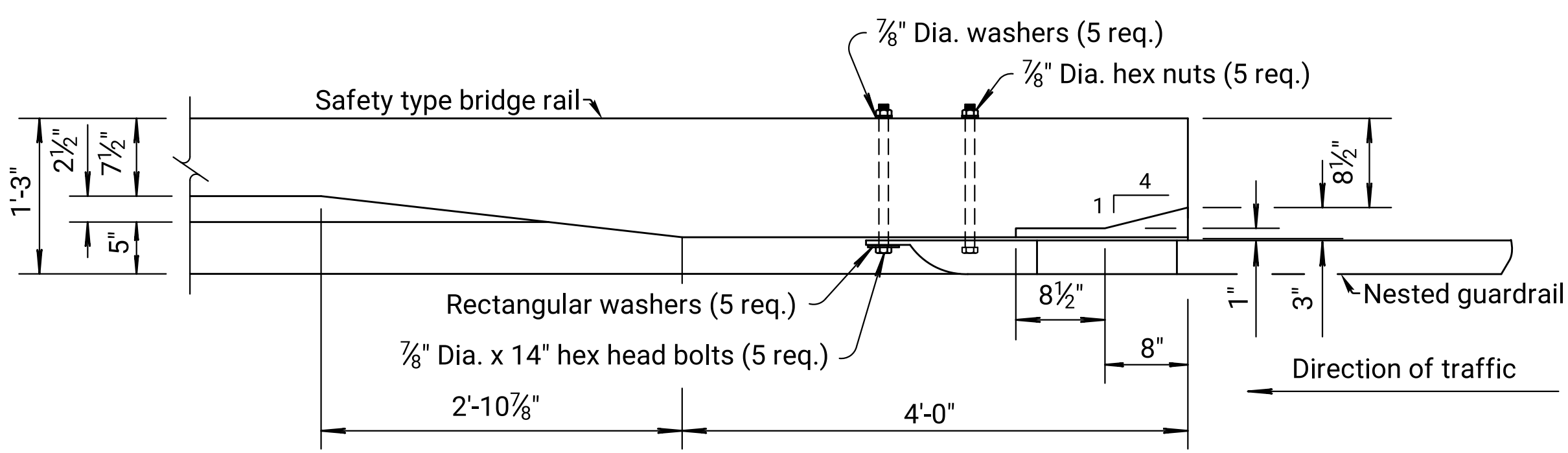


PARTIAL PLAN

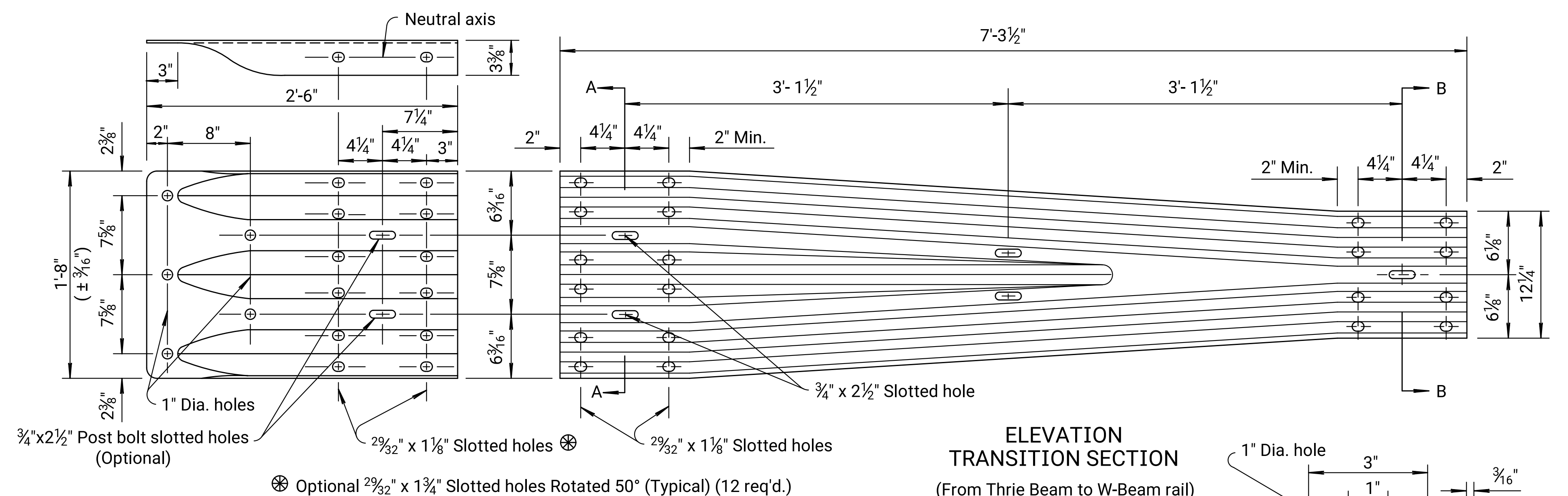


PARTIAL ELEVATION

GENERAL NOTE
 Use galvanized 12 gauge steel rail elements unless otherwise noted. Use galvanized anchor bolts and post rail fittings, see Standard Specifications. Supply guard rail parts that are interchangeable with similar parts regardless of source or manufacturer.
 Fabricate Terminal Connector from 10 gauge steel, see standard specification. The connector has the same section as thrie beam guardrail Terminal connector is subsidiary to the bid item "Steel Plate Guardrail".
 Shop curve rails when radius is less than 150'.
 Lap guardrail splices, including terminal connector, in the direction of traffic. Where traffic is temporarily carried in the opposite direction of final configuration, lap rail splices in the direction of permanent traffic.
 Bridge to guardrail transition consists of 1- 25'-0" Thrie beam with 1- 12'-6" Thrie beam section nested in back of 25'-0" section (see layout), & 1- Thrie beam to W-beam Asymmetrical transition section. Use associated hardware with post spacing shown. Use w-beam guardrail with 6'-3" post spacing with rail furnished in 12'-6" or 25'-0" sections.
 All material and work required for this installation are paid under the bid item "Steel Plate Guardrail".



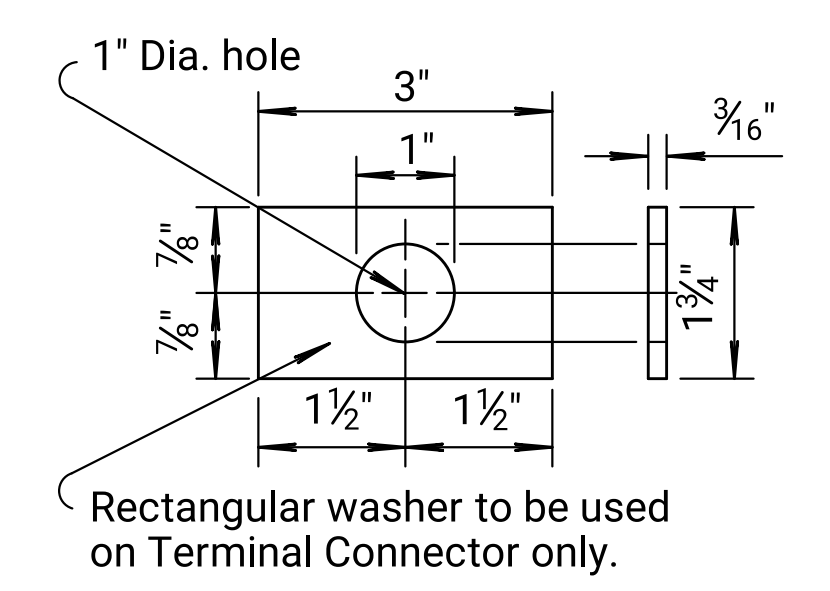
PLAN VIEW
 GUARDRAIL ATTACHMENT
 TO SAFETY SHAPE BRIDGE RAIL



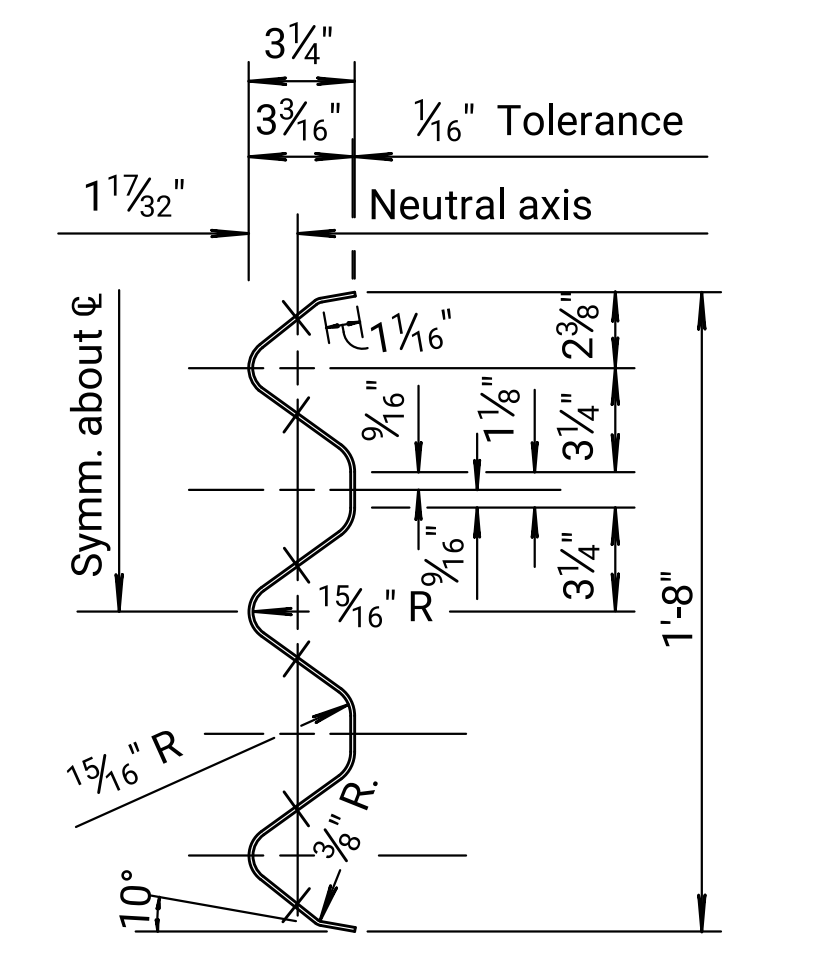
ELEVATION
 TRANSITION SECTION
 (From Thrie Beam to W-Beam rail)

⊗ Optional 29 3/32" x 1 1/8" Slotted holes Rotated 50° (Typical) (12 req'd.)

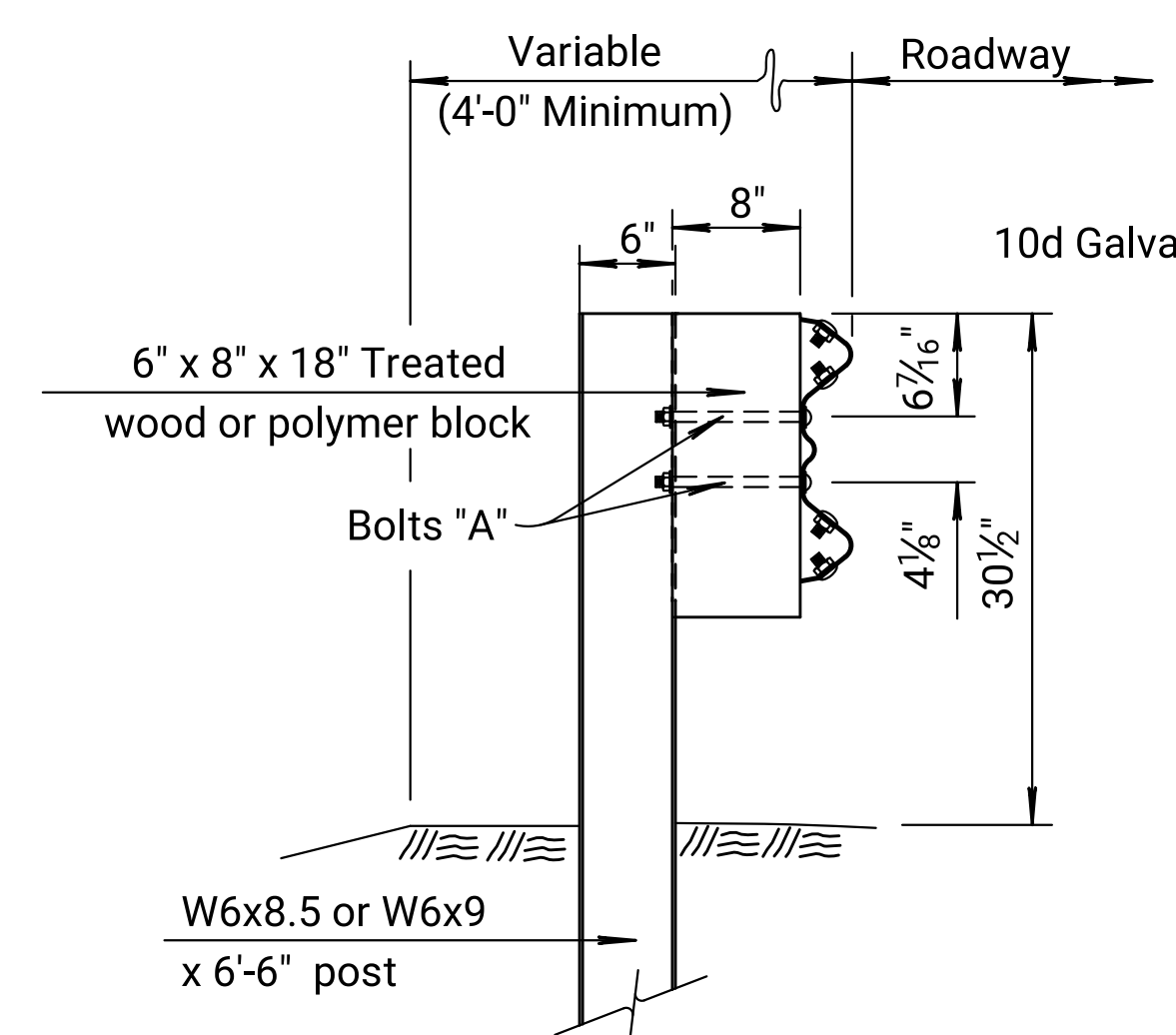
TERMINAL CONNECTOR



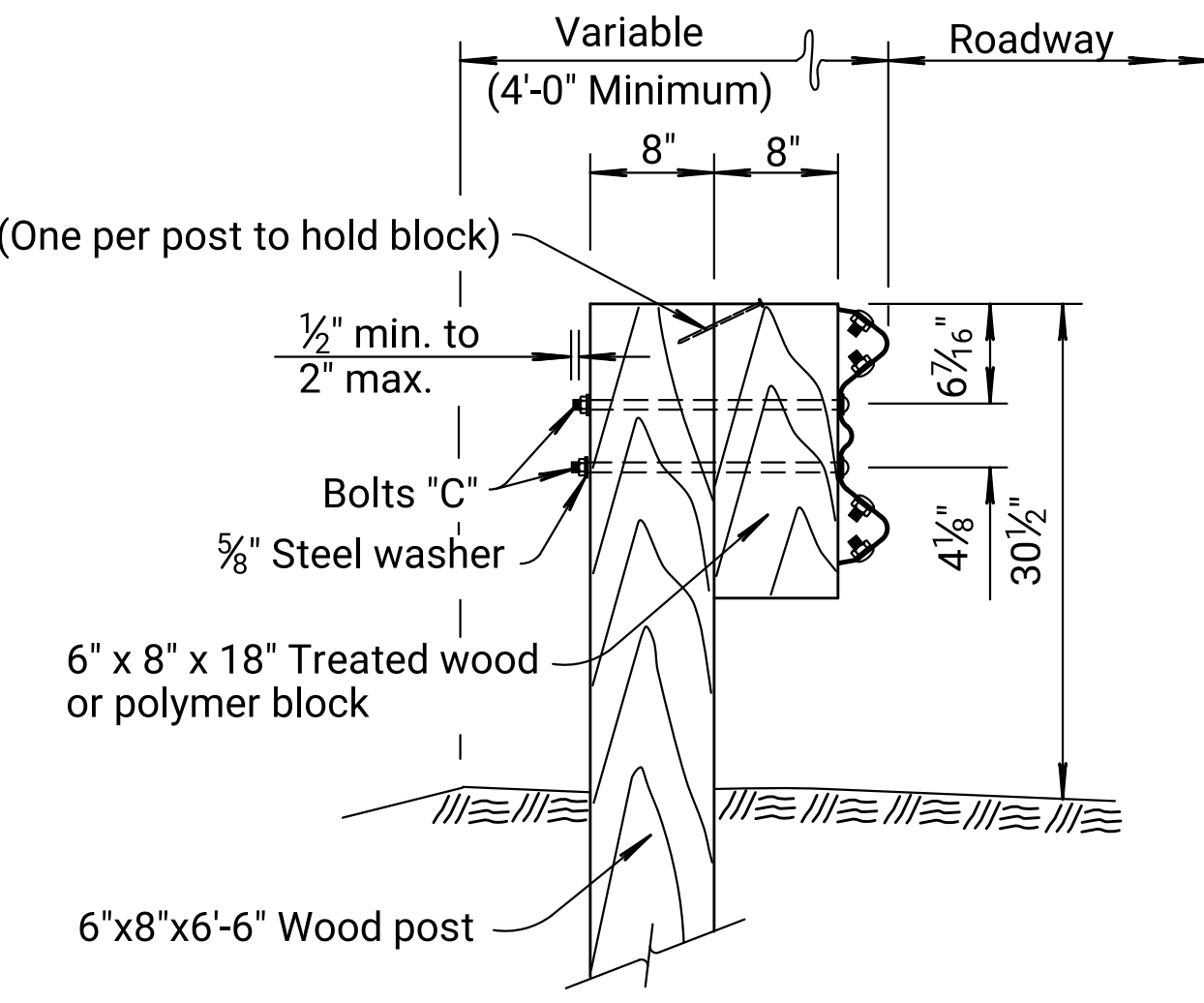
RECTANGULAR WASHER
 (Other approved washer may be used.)



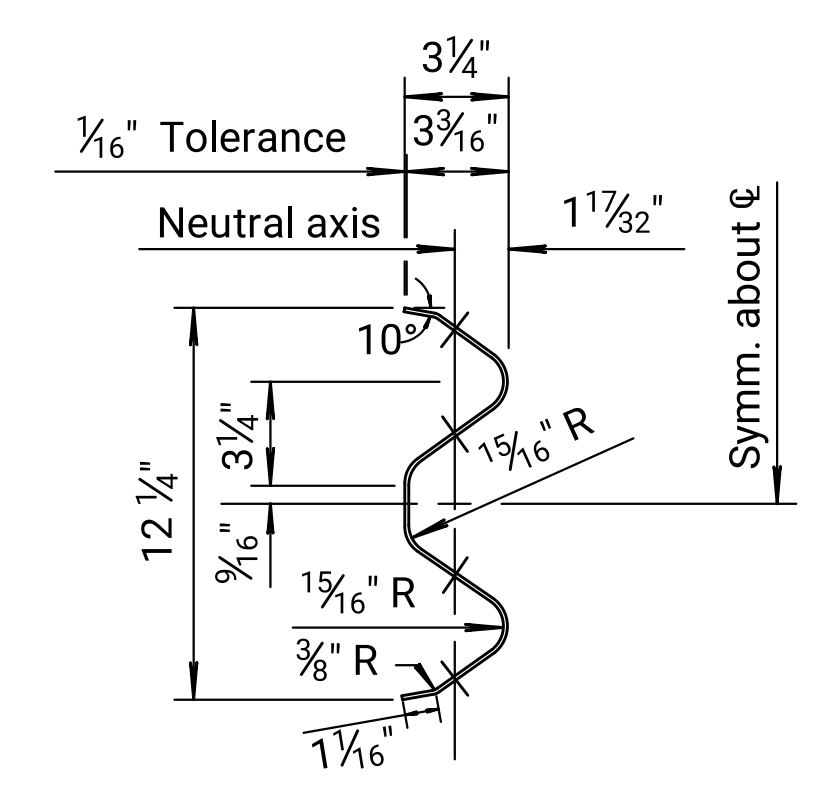
SECTION A-A THRU RAIL ELEMENT
 TYPICAL THRIE BEAM



SECTION C-C (Steel Post)



SECTION C-C (Wood Post)



SECTION B-B THRU RAIL ELEMENT
 TYPICAL W-BEAM

| | | | | |
|-----|----------|--|--------|--------|
| NO. | DATE | REVISIONS | BY | APP'D |
| 13 | 12-06-10 | Rev. Sec. C-C, notes & 28" rail height | S.W.K. | J.O.B. |
| 12 | 07-02-09 | Rev. Safety Shape Br. Rail detail | S.W.K. | J.O.B. |
| 11 | 01-05-04 | Added 4" Edge Curb, revised note | S.W.K. | J.O.B. |

KANSAS DEPARTMENT OF TRANSPORTATION

**DETAILS OF THRIE BEAM
 GUARDRAIL TRANSITION**

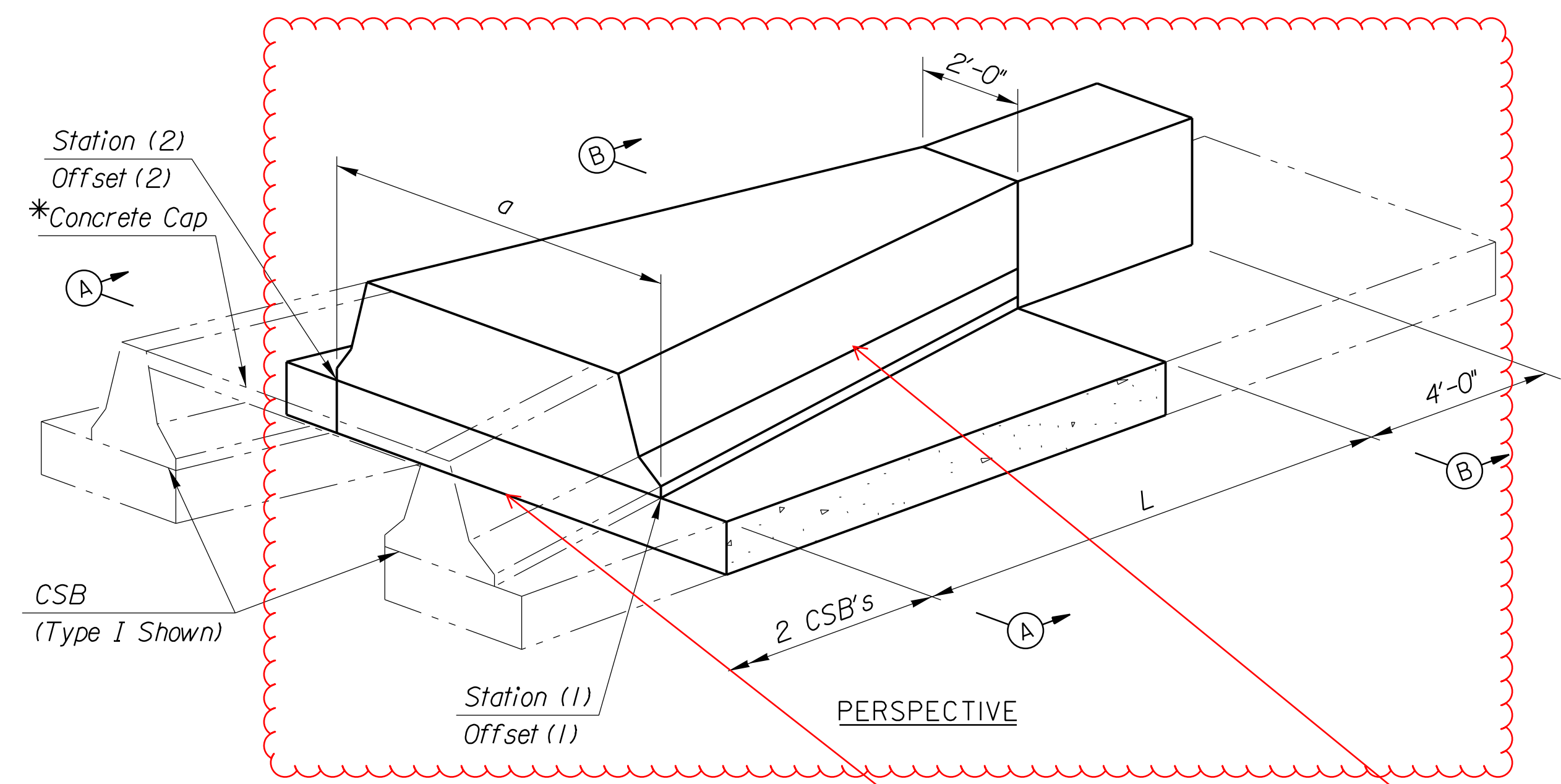
RD613

| | | | |
|------------|---------|-----------|-----------------|
| DESIGNED | 1-11-11 | APP'D. | James O. Brewer |
| QUANTITIES | | TRACED | Bowser |
| DETAIL CK. | | QUAN. CK. | King |

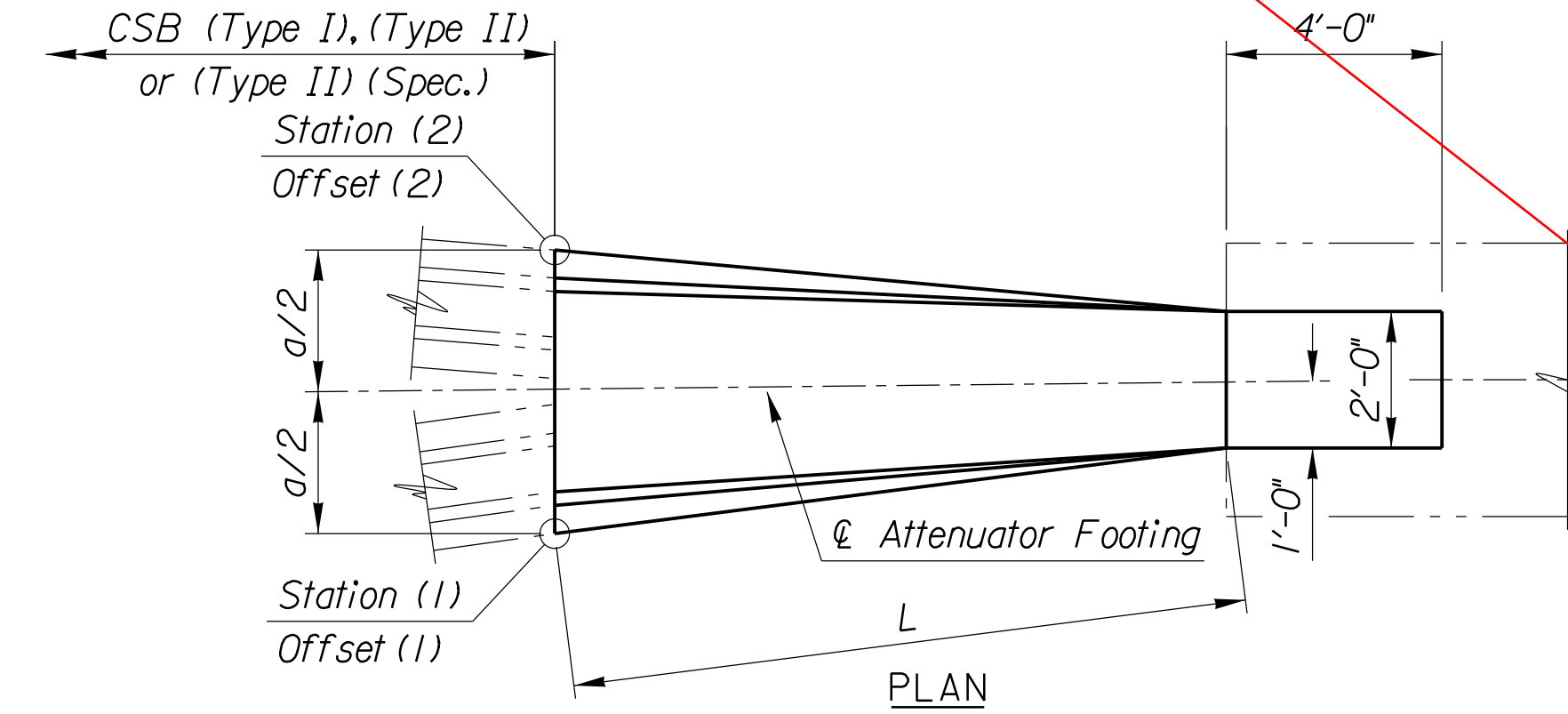
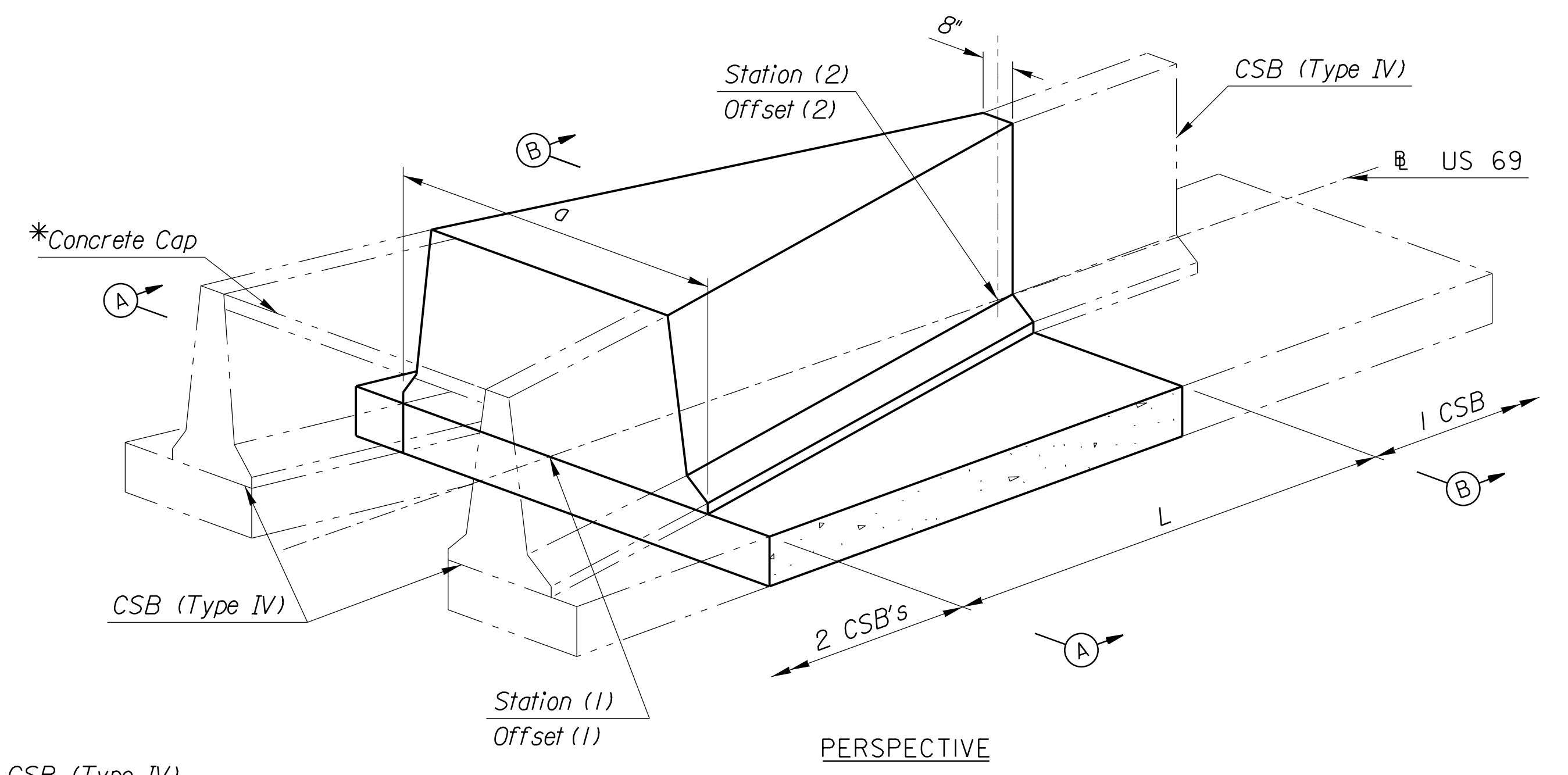
DOT Graphics Certified 03-28-2018

Drawn By: jacob.lawhorn
 File: working_rd613.dgn
 Plotted 28-MAR-2018 14:21

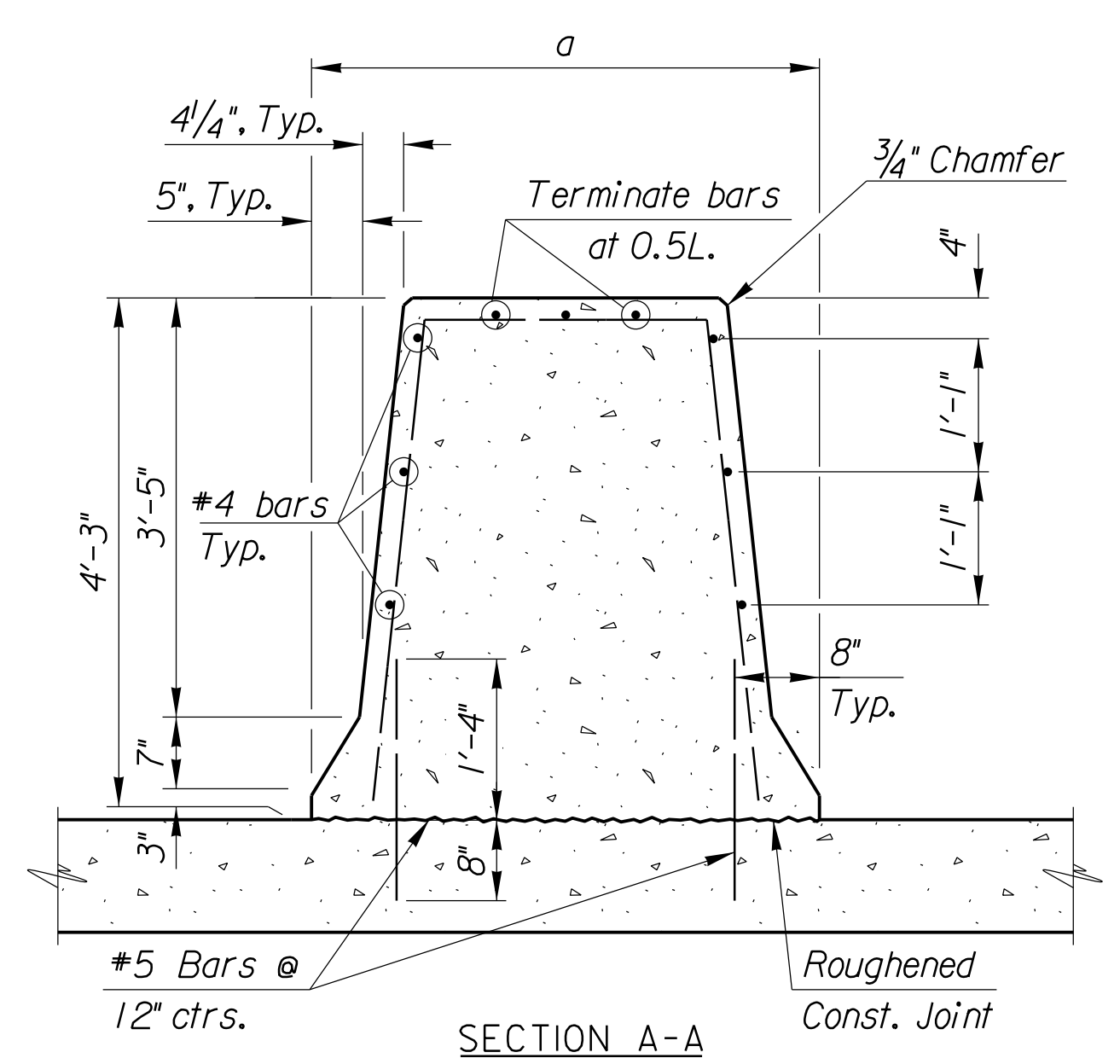
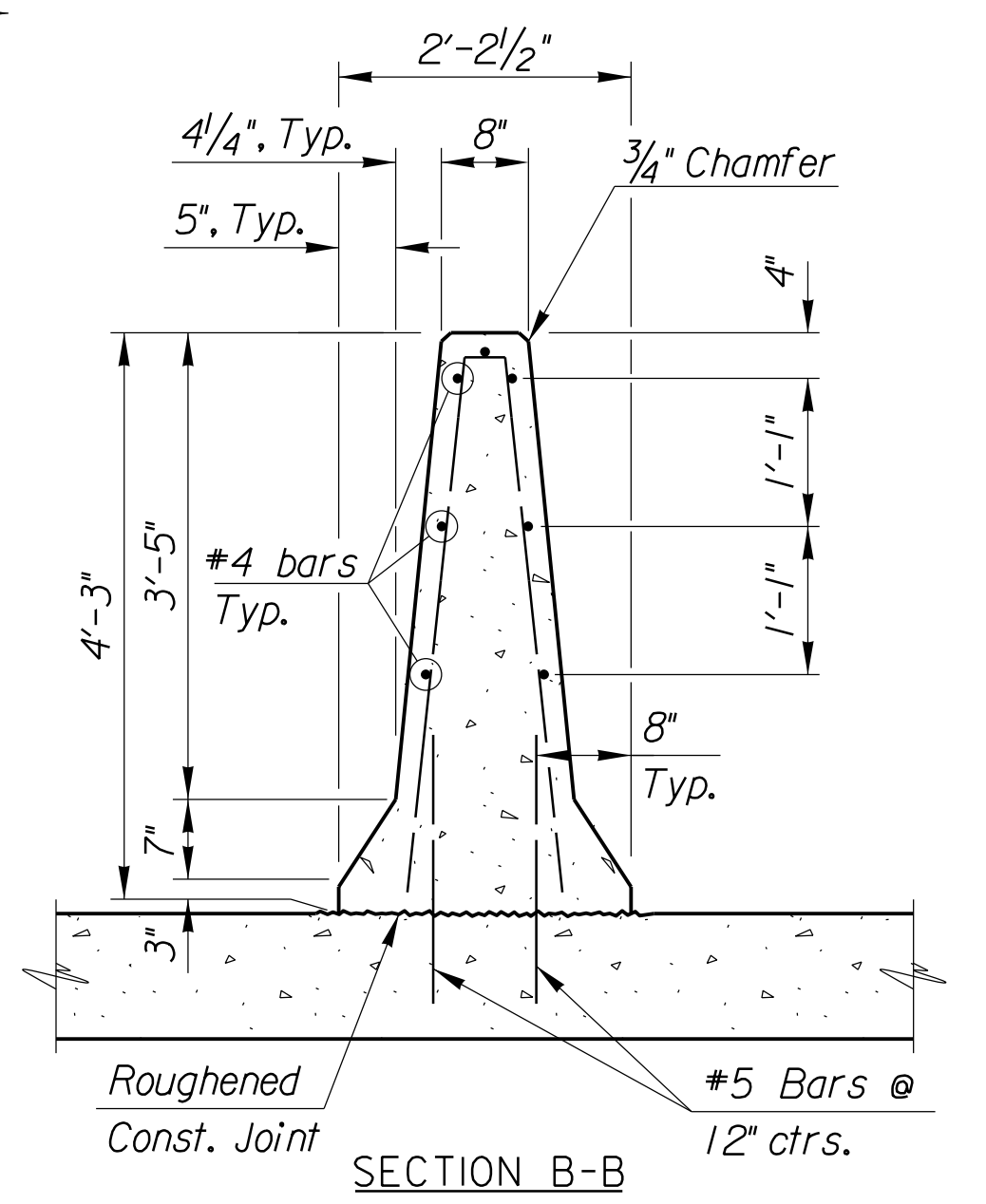
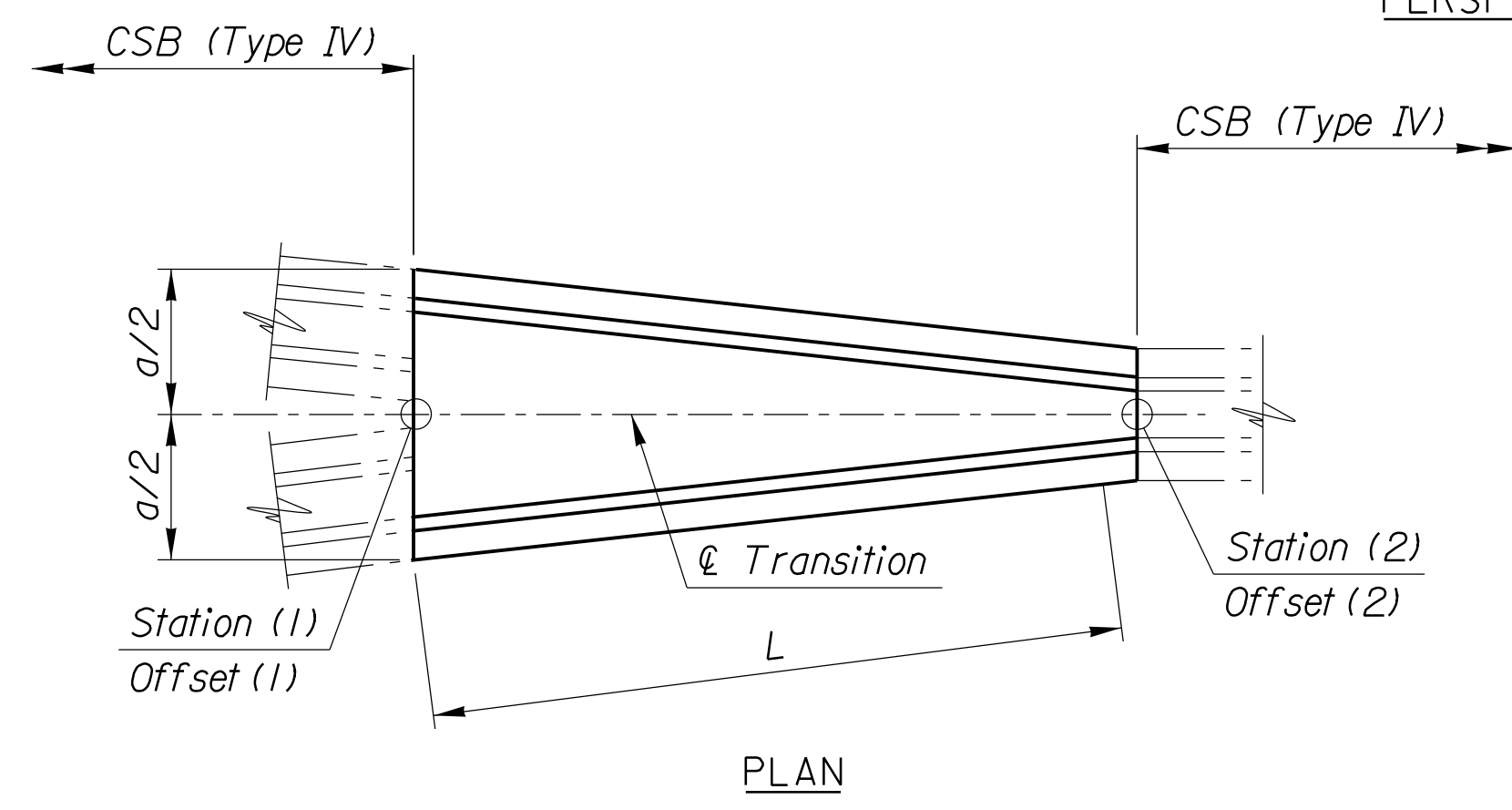
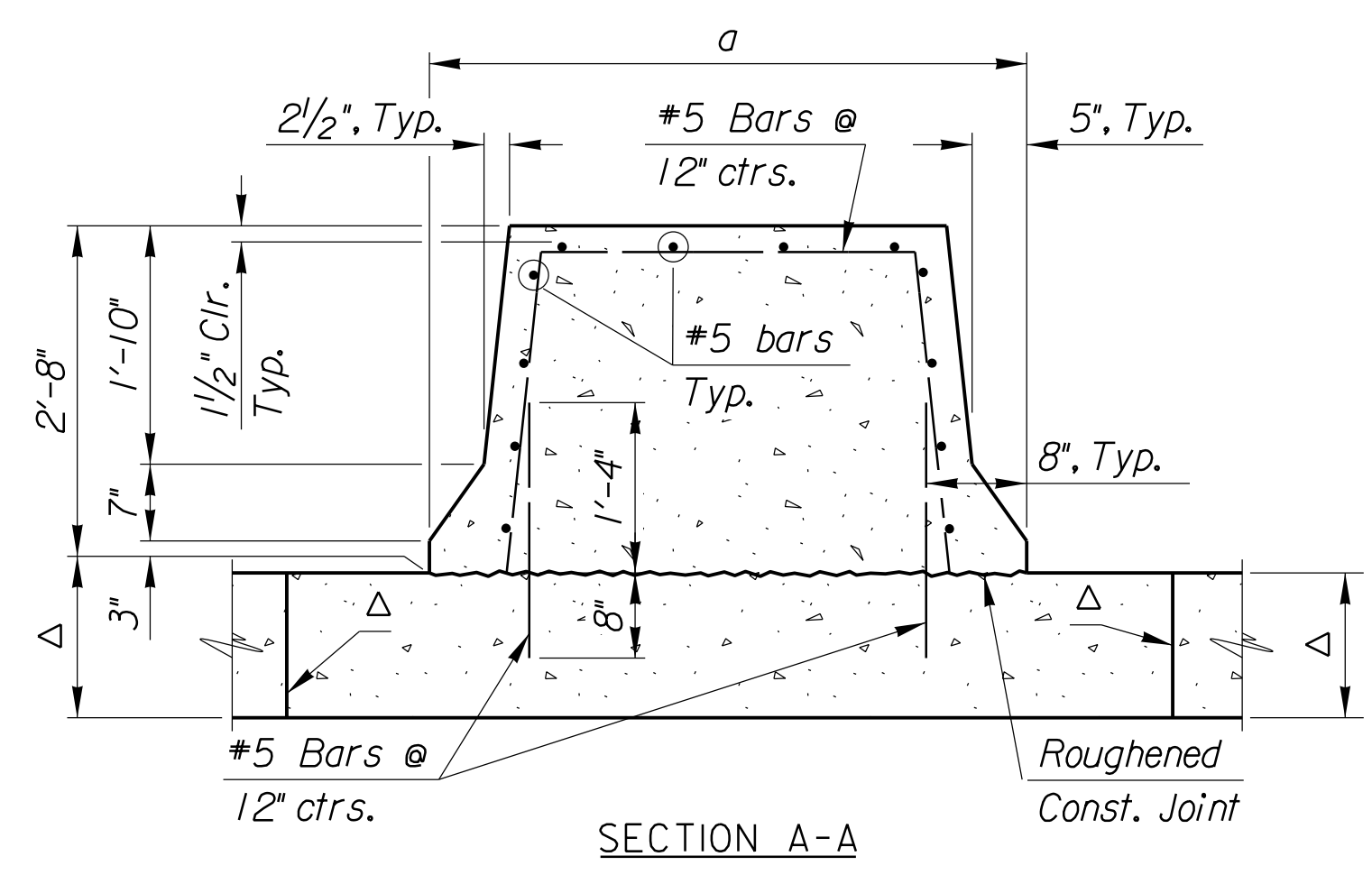
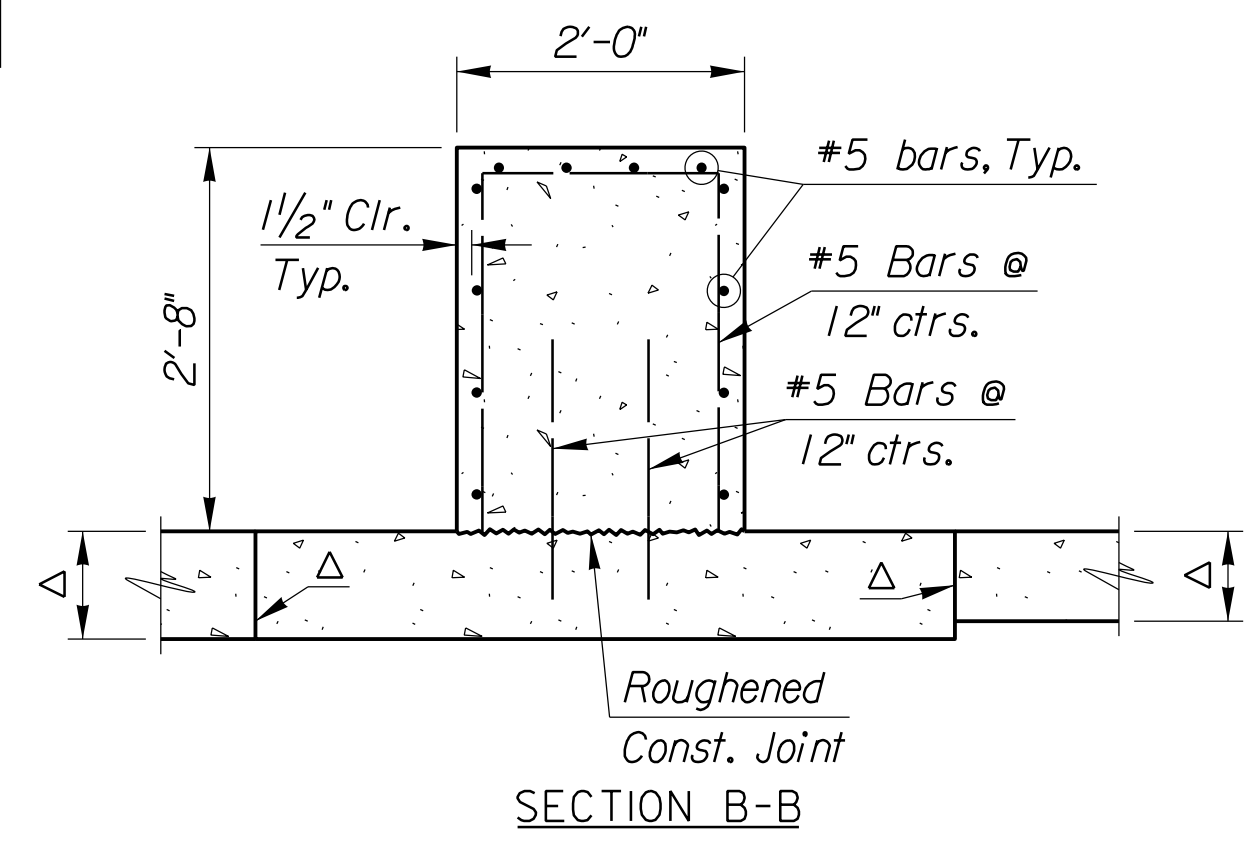
DOT Graphics Certified



Notes:
 The concrete safety barrier transition shall be bid on a linear foot basis. All labor, materials and incidentals required to complete the work shall be included in the bid item "Concrete Safety Barrier (Type I)", "Concrete Safety Barrier (Type II)", "Concrete Safety Barrier (Type II) (Spec.)" or "Concrete Safety Barrier (Type IV)" for payment.
 Minimum cover to reinforcing steel shall be 1/2" unless noted otherwise.
 All concrete shall be Grade 4.0 (AE) or the mix used in the concrete pavement.
 All reinforcing steel shall conform to ASTM A615, Grade 60 (Epoxy Coated).
 *For Locations that require Concrete Cap and median filler see Sheets 158 thru 160.



Barrier will be 32" tall with vertical face, not F-Shape
 This will be thrie-beam AGT transitioning to w-beam, not CSB



TYPE G TRANSITION

| TRANSITION TYPE | LOCATION | | | | | | VARIABLES | |
|-----------------|-----------|-------------|--------------|-----------|-------------|--------------|------------|------------|
| | ROUTE (1) | STATION (1) | OFFSET (1) | ROUTE (2) | STATION (2) | OFFSET (2) | L | a |
| Type G | US 69 | 130+51.15 | 64.44' (Rt.) | 69N-435E | 130+41.27 | 22.10' (Lt.) | 19'-3 1/4" | 4'-9 1/8" |
| | US 69 | 127+40.79 | 64.48' (Lt.) | 69S-119th | 127+35.05 | 34.64' (Rt.) | 9'-7 1/2" | 3'-6 3/8" |
| Type H | US 69 | 123+60.00 | 0.00' | US 69 | 124+20.00 | 0.00' | 60' | 6'-10 3/8" |
| | US 69 | 143+55.00 | 0.00' | US 69 | 143+10.00 | 0.00' | 45' | 6'-1 5/8" |
| | US 69 | 158+70.00 | 0.00' | US 69 | 159+15.00 | 0.00' | 45' | 6'-4 1/4" |
| | US 69 | 171+75.00 | 0.00' | US 69 | 171+30.00 | 0.00' | 45' | 6'-5 7/8" |
| | US 69 | 180+30.00 | 0.00' | US 69 | 180+75.00 | 0.00' | 45' | 6'-1 1/2" |

TYPE H TRANSITION

| | | | | | |
|---|------------|-----------|-------|------------|-----------|
| 3 | | | | | |
| 2 | | | | | |
| 1 | | | | | |
| NO. | DATE | REVISIONS | BY | APP'D | |
| KANSAS DEPARTMENT OF TRANSPORTATION | | | | | |
| CONCRETE SAFETY BARRIER TRANSITION TYPES G AND H | | | | | |
| SHEET NO. | OF | SCALE | APP'D | QUANTITIES | TRACED |
| DESIGNED | DETAIL | CK. | EAR | LJD | QUAN,CK. |
| DESIGN CK. | DETAIL CK. | | | | TRACE CK. |

Plotted on: Thursday April 16, 2015
 nburrlls
 Plot Scale: h0.083332
 Design Filename: pwr/hntbw356/hntbw356.dwg
 Project: 60353 U.S. 69 Brown Project/Production/Bridge Code/CSBR/Types G & H Transitions (Model Cut Sheet)
 ilc00