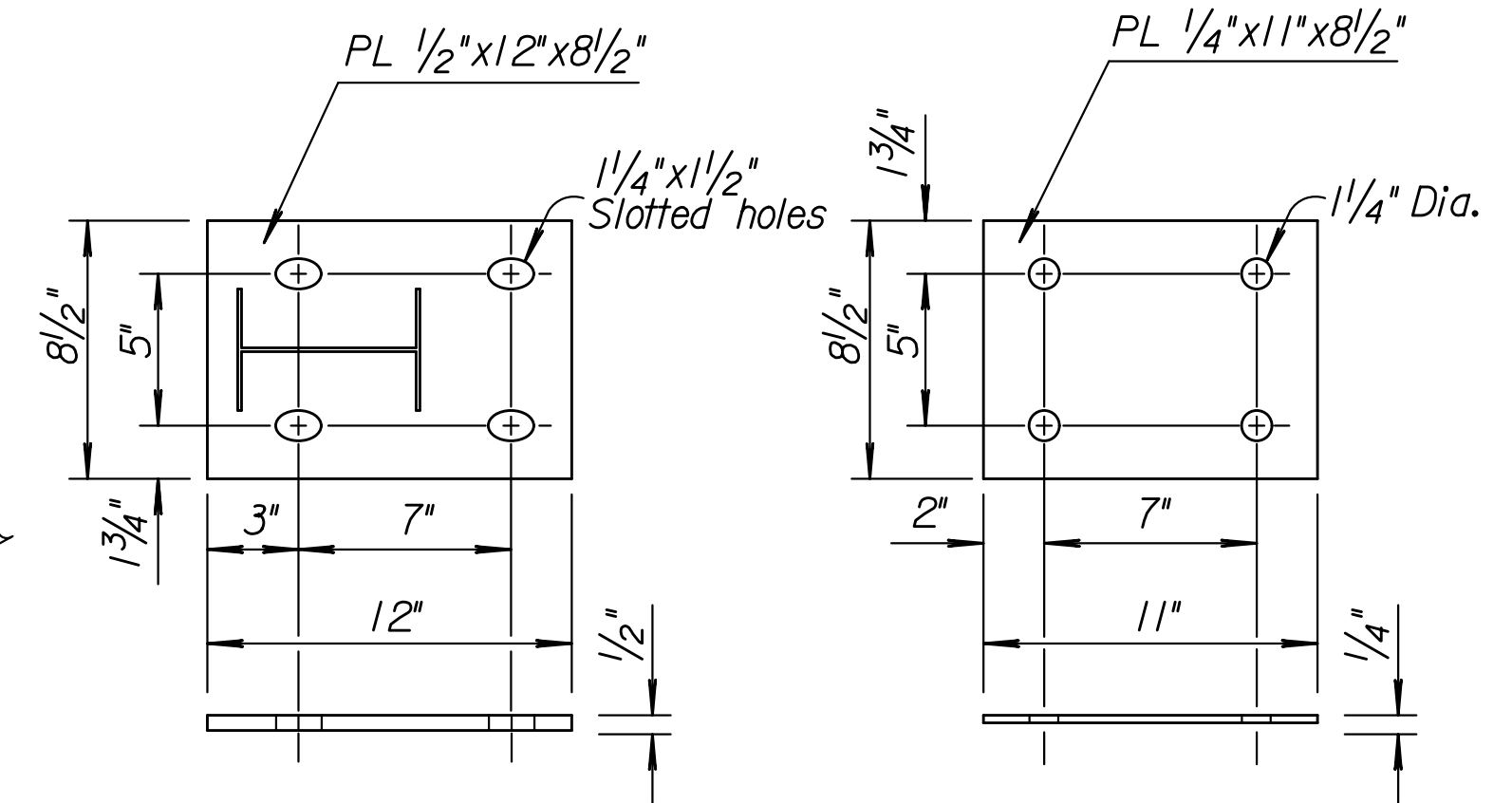
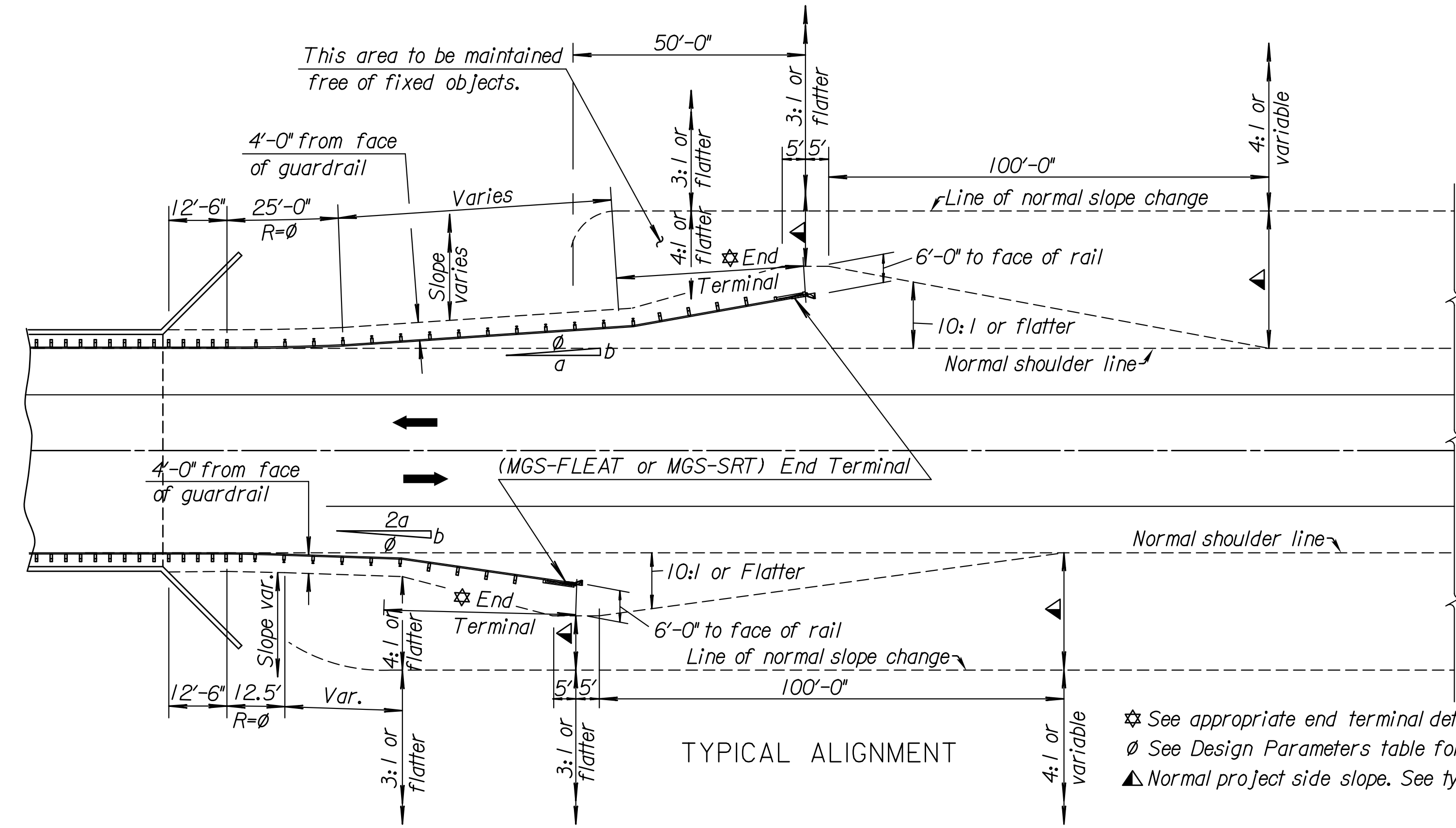


Notes to Designer: Determine guardrail length of need using either KDOT's Length of Need Equation or a graphic design approach with an L₁ distance measured from the edge of the area of concern to the P.I. of the curved guardrail section.

Plotted: 03-OCT-2013 08:21

Drawn By: tfrroads
File: rd617e.dgn

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				



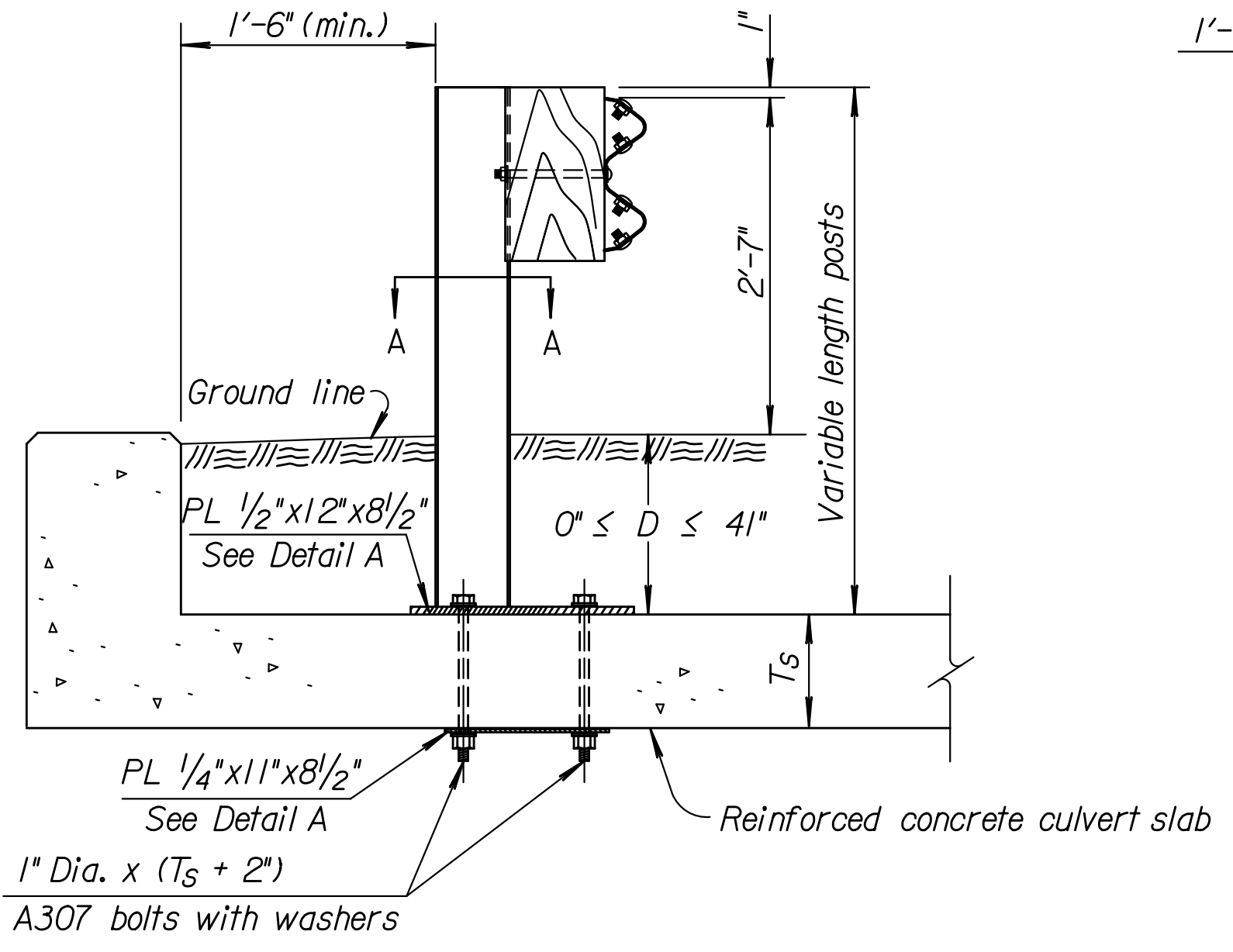
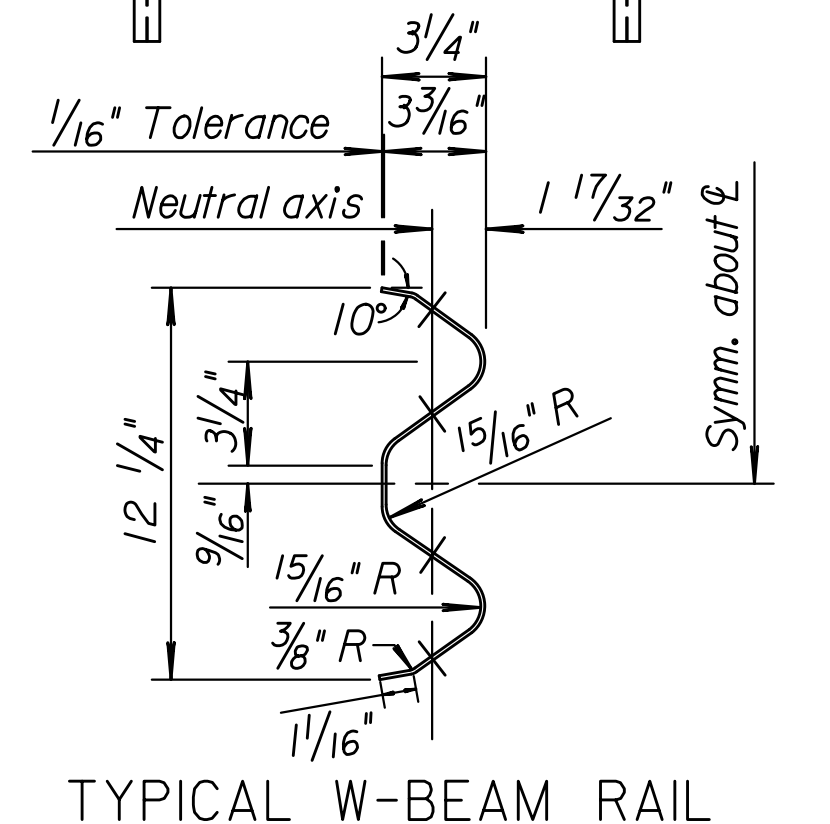
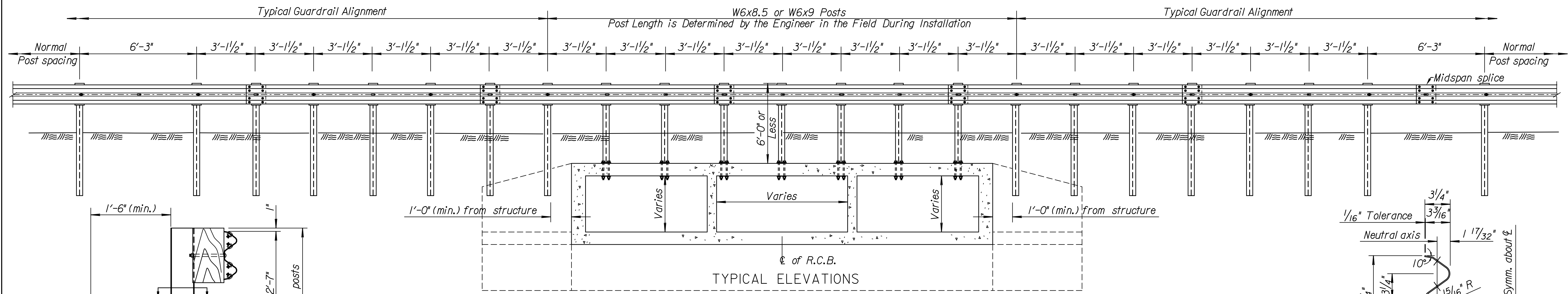
DETAIL OF BASE PLATE DETAIL OF STEEL PLATE
DETAIL A FOR ATTACHMENT ASSEMBLY

GENERAL NOTES
Use this Standard Drawing for (MGS) Guardrail installed over a low fill bridge-sized structure. See Typical Alignment for guardrail installation from posts attached to structure to End Terminal.
Use Standard W-Beam Guardrail throughout.
See Standard Drawing RD611A for guardrail post and breakout details not shown on this sheet.
Guardrail layout shown this sheet is for flared installation, see Standard Drawing RD606E for (MGS-FLEAT) End Terminal or Standard Drawing RD621B for (MGS-SRT) End Terminal.

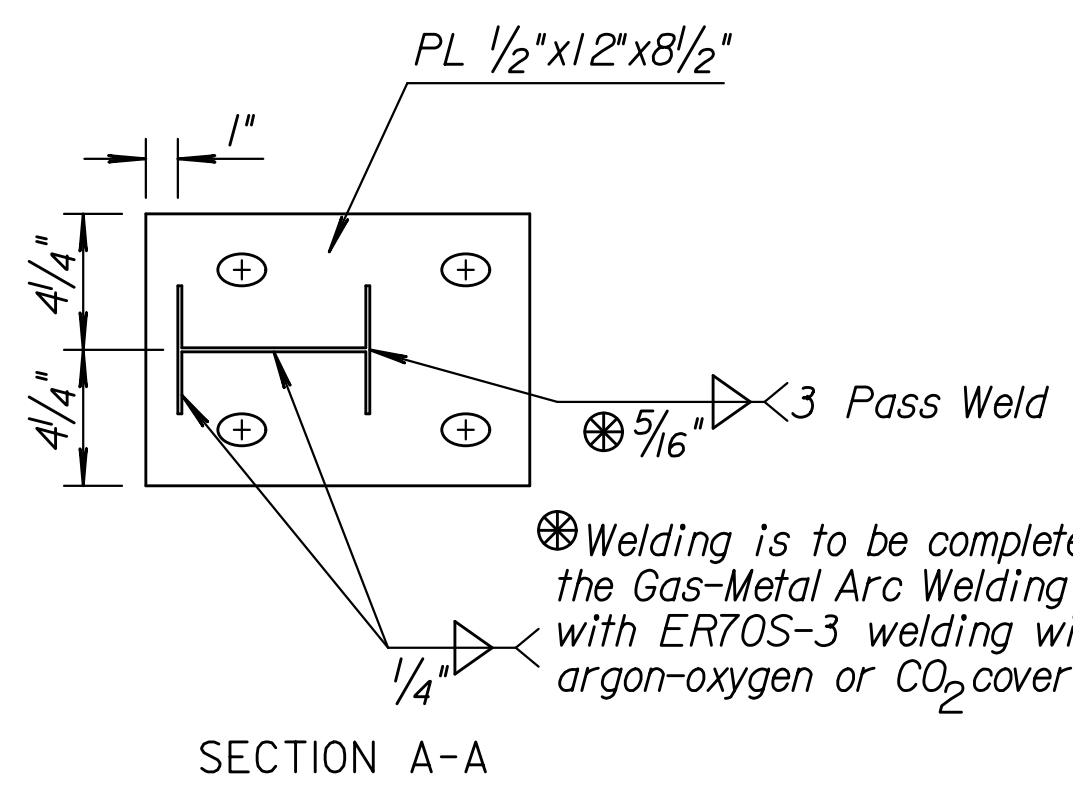
Design Parameters				
Design Speed (mph)	Flare Rate (a:b)	Radius (R)	Flare Rate (2a:b)	Radius (R)
70	15:1	375.55'	30:1	375.14'
60	14:1	350.59'	26:1	325.16'
55	12:1	300.69'	24:1	300.17'
50	11:1	275.76'	21:1	262.70'
45	10:1	250.83'	18:1	225.23'
40	8:1	201.04'	16:1	200.26'

Note: Where guardrail is beyond shy line use flare rate of a:b and 25'-0" curve length. When guardrail is located inside shy line use flare rate of 2 a:b and 12'-6" curve length.

☆ See appropriate end terminal details.
∅ See Design Parameters table for radius and flare rate.
▲ Normal project side slope. See typical sections.



POST DETAILS



SECTION A-A

1" Dia. A307 Grade A Threaded Rod with Nut and Washer to be grouted with an approved epoxy or polyester resin in accordance with standard specifications.

◆ Embed anchor rod a min. of 8" Use a bonding agent with a min. bond strength of 1,800 psi.

⊗ Welding is to be completed using the Gas-Metal Arc Welding process with ERTOS-3 welding wire and argon-oxygen or CO₂ cover gas.

ALTERNATE POST ATTACHMENT
(This attachment to be used only when bolting through the top slab is not practical.)

I 1-3-13		Initial Release		S.W.K.	J.O.B.
NO.	DATE	REVISIONS	BY	APP'D	

KANSAS DEPARTMENT OF TRANSPORTATION
ALIGNMENT (FLARED) & DETAILS FOR (MGS) GUARDRAIL ON BRIDGE-SIZED STRUCTURES
RD617E

FHWA APPROVAL	I-3-13	APP'D.	James O. Brewer
DESIGNED	DETAILED	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.

KDOT Graphics Certified 10-03-2013

KDOT Graphics Certified