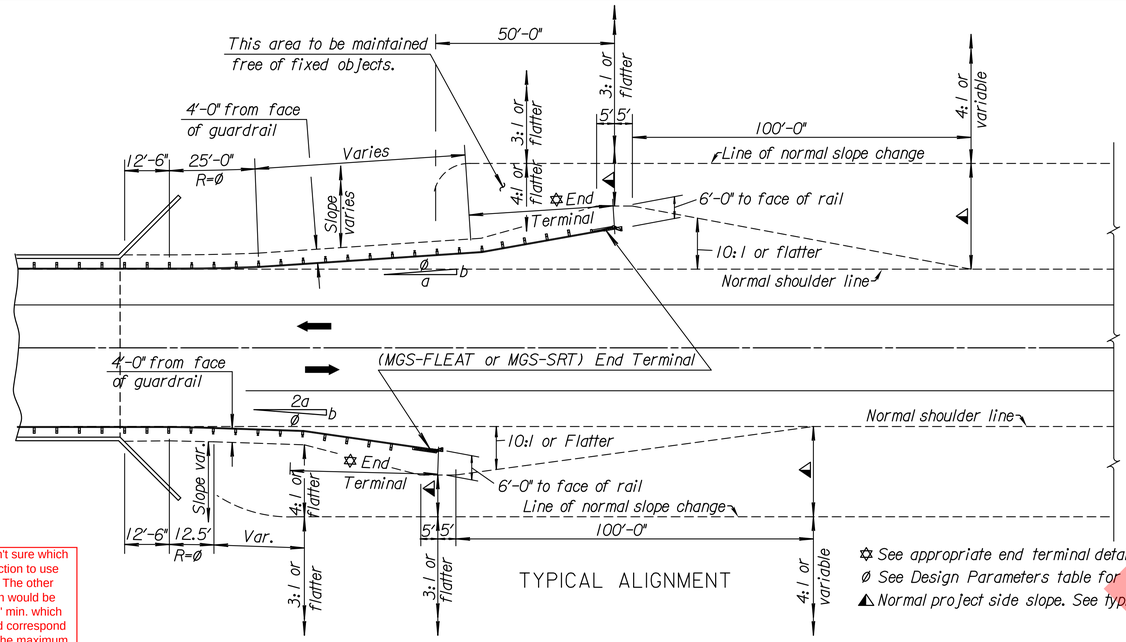
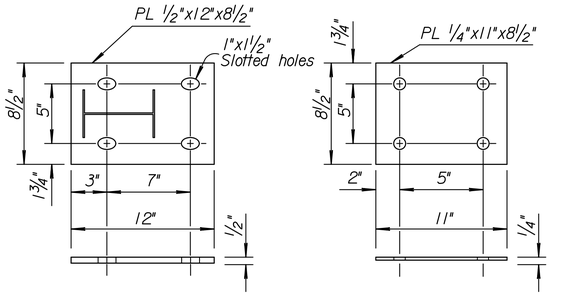
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				



TYPICAL ALIGNMENT

✡ See appropriate end terminal details.
Ø See Design Parameters table for radius and flare rate.
◭ Normal project side slope. See typical sections.



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 culvert greater than 22'-6" wide. See Typical Alignment for guardrail installation from posts attached to culvert to End Terminal.

Use Standard W-Beam Guardrail throughout.

See Standard Drawing RD611A for guardrail post and blockout 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 RD621A for (MGS-SRT) End Terminal.

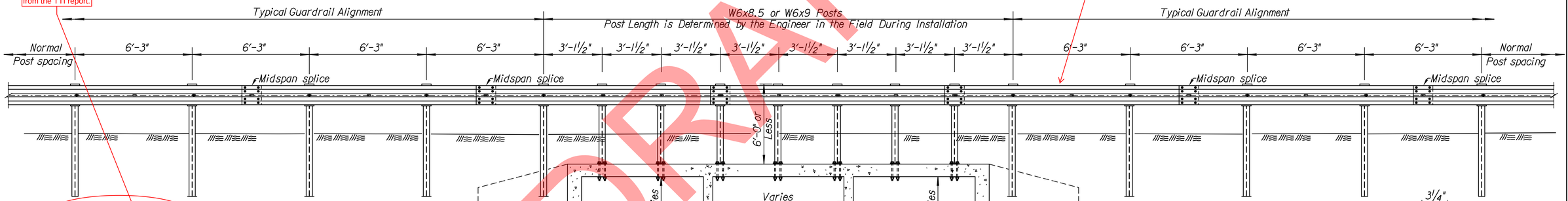
Design Parameters				
Design Speed (mph)	Flare Rate (a:b)	Radius (R)	Flare Rate (2a:b)	Radius (R)
70	15:1	375.55'	30:1	375.14'
60	14:1	350.59'	26:1	325.16'
55	12:1	300.69'	24:1	300.17'
50	11:1	275.76'	21:1	262.70'
45	10:1	250.83'	18:1	225.23'
40	8:1	201.04'	16:1	200.26'

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.

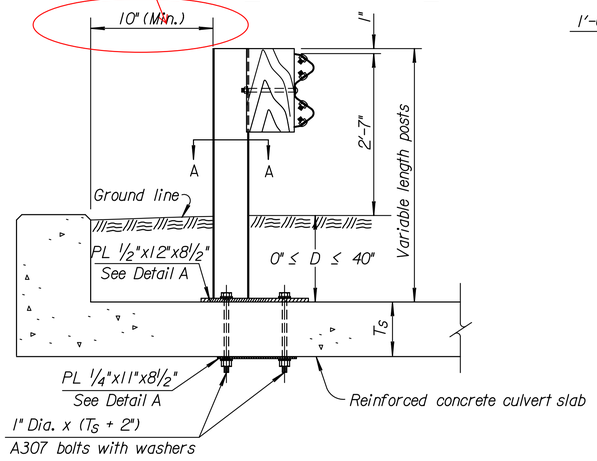
Notes to Designer: Determine guardrail length of need using either KDOT's Length of Need Equation or a graphic design approach with an L_1 distance measured from the edge of the area of concern to the P.I. of the curved guardrail section.

Wasn't sure which deflection to use here. The other option would be 3'-10" min. which would correspond with the maximum from the TTI report.

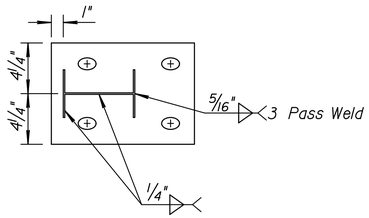
How far beyond the culvert should the 1/2 post spacing extend?



TYPICAL ELEVATIONS

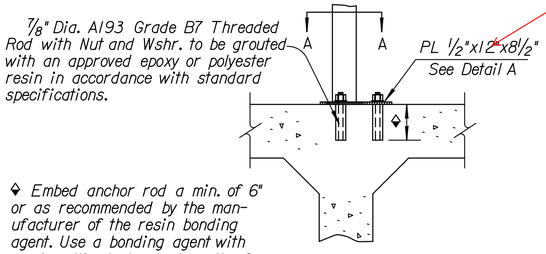


POST DETAILS

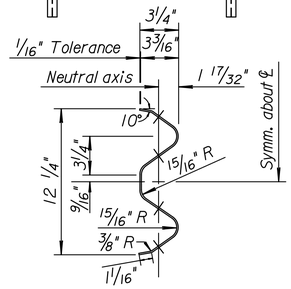


SECTION A-A

Do you have any thoughts about keeping this plate the same rather than using TTI's thicker larger plate?



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



TYPICAL W-BEAM RAIL

NO.	DATE	REVISIONS	BY	APP'D
1				

KANSAS DEPARTMENT OF TRANSPORTATION

ALIGNMENT (FLARED) & DETAILS FOR (MGS) GUARDRAIL PROTECTION ON LOW FILL CULVERTS

RD617C

FHWA APPROVAL		APP'D. James O. Brewer	
DESIGNED	DETAILED	QUANTITIES	TRACED Bowser
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK. Kling

KDOT Graphics Certified 11-06-2012

KDOT Graphics Certified

Plotted : 06-NOV-2012 13:12

Drawn By : trhoads
File : rd617c-1.dgn