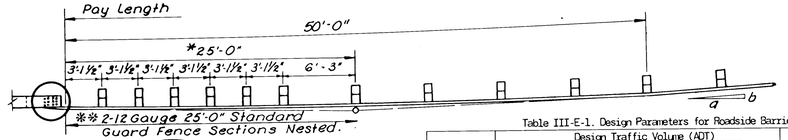
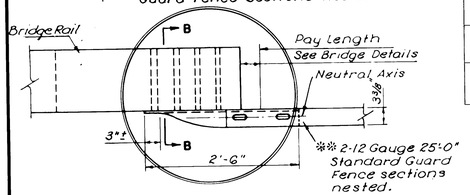
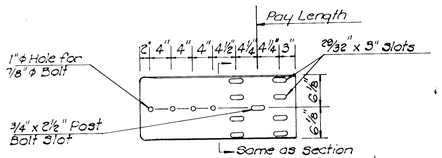
FHWA REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	59-81-59421(6)	1980	22	32

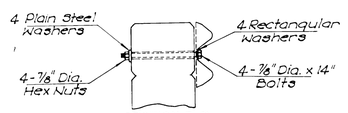
* If guard fence is shown on the plans, the 25 foot section is applicable at both entrance and exit ends of bridges. This section of nested fence and post spacing is also applicable when area of concern is 5' or less from guard fence.





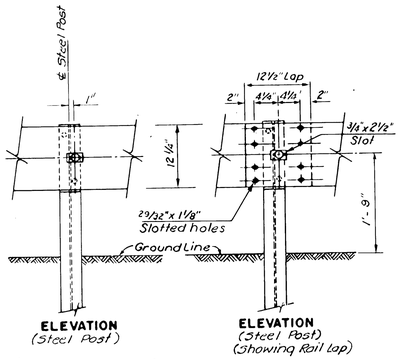


SPECIAL END SHOE



SECTION B-B

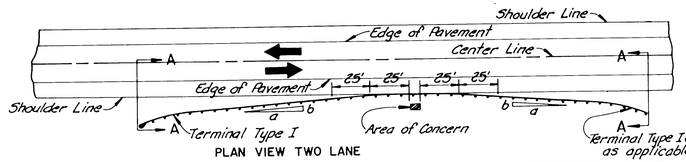
** One section of the two shall be considered as subsidiary to the bid item "Steel Plate Guard Fence (Galv.)".



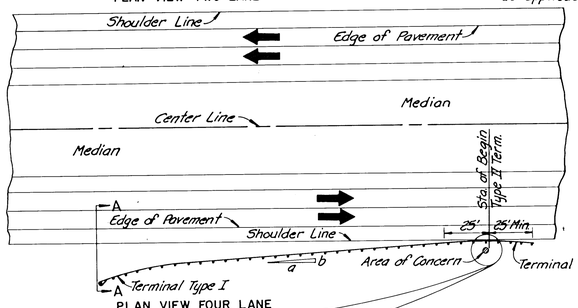
ELEVATION (Steel Post)

ELEVATION (Steel Post) (Showing Rail Lap)

ARRANGEMENT AT POSTS



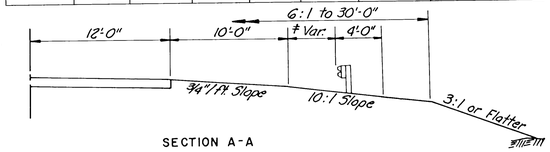
PLAN VIEW TWO LANE



PLAN VIEW FOUR LANE

Table III-E-1. Design Parameters for Roadside Barrier Layouts

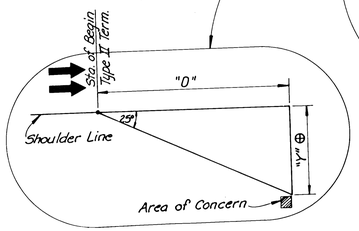
	Design Traffic Volume (ADT)							
	Over 6,000	2,000-6,000	800-2,000	800-250	Under 250			
Operating Speed (mph)	Runout Length L_R (ft)	Runout Length L_R (ft)	Runout Length L_R (ft)	Runout Length L_R (ft)	Runout Length L_R (ft)	Shy Line Offset (ft)	Flare Rate (a:b)	Radius
60	400	360	330	300	270	8.0	15	651.3
50	320	290	260	240	210	6.5	11	551.5
40	240	220	200	180	160	5.0	9	451.8

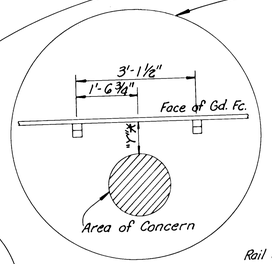


SECTION A-A

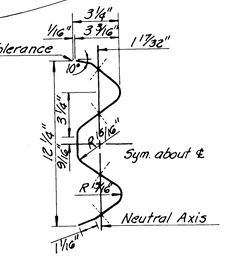
‡ 4'-0" when guard fence is on shoulder line.

⊕ When "Y" is greater than 10' the "0" distance $\left(\frac{"Y"}{\text{Tan. } 25°}\right)$ may be subtracted from the total length of guard fence. The length of guard fence when "Y" is greater than 10' equals the length of need plus the length of the area of concern, plus 2 terminal end sections (37.5') minus "0" distance $\left(\frac{"Y"}{\text{Tan. } 25°}\right)$.

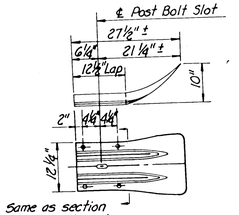




* When "Y" is less than 5' the guard rail shall be double nested for 25'. The posts shall be equally spaced at 3'-1½" ctrs. from the area of concern. See plan in upper left corner and note.

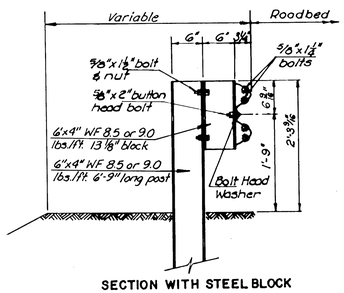


SECTION THRU RAIL ELEMENT
Rail element not less than #12 U.S. Std. Gauge



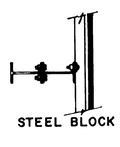
Same as section thru rail element

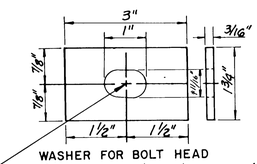
STANDARD END SECTION



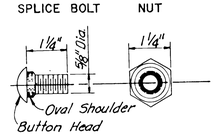
SECTION WITH STEEL BLOCK

Note: All dimensions subject to manufacturing tolerances.





WASHER FOR BOLT HEAD
Other approved washer may be used.
‡ Use 1" Round hole in Rectangular washer for special end shoe.



POST BOLT: Similar except length

GENERAL NOTE FOR GUARD FENCE

The Grade of Steel for Steel Posts and Steel Blocks shall meet the requirements of Sub-Section 1006.16 of the Standard Specification.

6" x 4" WF 8.5 or 9.0 lbs./ft. 5'-9" long steel posts and 6" x 4" WF 8.5 or 9.0 lbs./ft. 13 1/8" steel blocks shall be galvanized in accordance with ASTM A 123; the requirements for use of a pivoted hammer for testing shall not apply. Galvanizing shall be done after the posts and blocks are fabricated.

Other approved designs of steel blocks or offset brackets may be used in lieu of the type shown.

Only one type of block or offset bracket will be permitted within a single project.

Wood blocks will not be permitted on steel posts.

Galvanized steel rail plates shall be used. All post rail fittings and anchor bolts shall be galvanized in accordance with Standard Specification.

Guard rail parts furnished under this specification shall be interchangeable with similar parts regardless of the source or manufacturer.

Steel rail plates may be furnished in 25' sections.

All steel rails to be shop curved when radius is less than 150'.

Excavation of all classes, including rock, shale and other materials regardless of the elevations encountered, required for the erection of Guard Fence shall be considered as subsidiary to the various bid items for which payment is made.

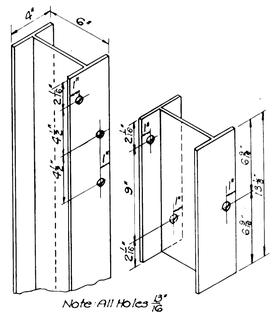
Guard Fence Posts may be Wood (as shown on Std. 608.6) or Steel (as shown on this sheet) with no change in type of Post permitted within a single project.

Special End Shoe shall be 10 Gauge steel and galvanized in accordance with ASTM Designation: A 525 with coating class 2.50. The shoe has the same section as through beam guard rail. Special end shoe shall be subsidiary to Guard Fence.

All bolts, nuts and washers to be galvanized in accordance with sub section 1006.16 of the Standard Specifications.

Guard fence posts may be set by digging, or by driving. During driving operations, post caps shall be used, which are so designed as to protect the post from crushing.

See Std. 608.50 for barrier terminals Type I and Type II.



HOLE PUNCHING DETAILS

NO	DATE	REVISIONS	BY	APP'D
4				
3				
2				
1	10-11-79	New Design Criteria and BCT	W.L.H.	L.R.P.

KANSAS DEPARTMENT OF TRANSPORTATION

STEEL PLATE GUARD FENCE WITH STEEL POSTS

STD. NO. 608.6A

October 11, 1979	SCALE None	APP'D	
DESIGNED	DETAILED Bowser	QUANTITIES	TRACED Bowser
DESIGN CK.	DETAIL CK. Hecht	QUAN. CK.	TRACE CK. Hecht