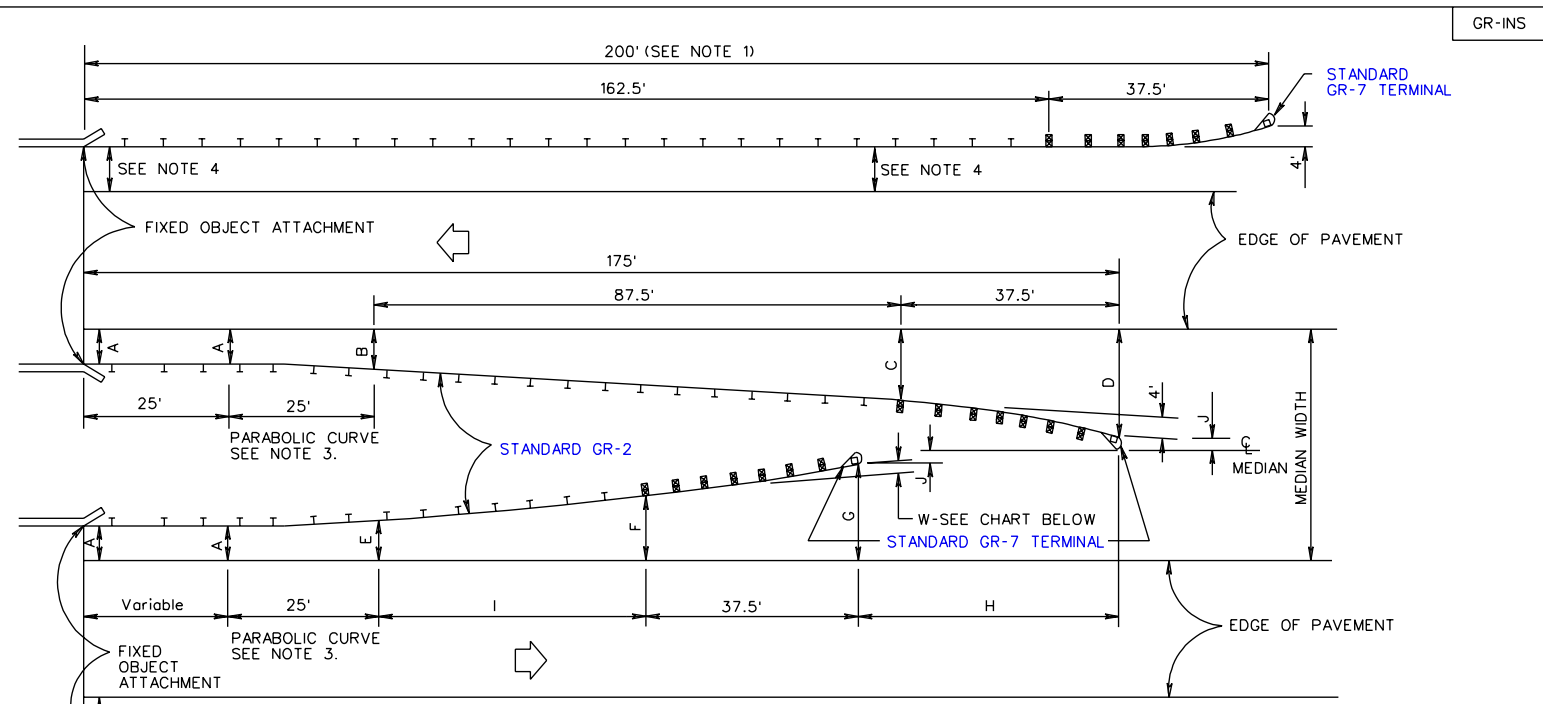


GR-INS



AS NEEDED (NO GUARDRAIL IS REQ'D. ON RUN-OFF UNLESS NEEDED TO SHIELD A HAZARDOUS OBJECT)

1. IF A CUT SECTION IS CLOSER THAN 200', A REDUCED LENGTH AND STANDARD GR-6 TERMINAL ARE TO BE USED. A MINIMUM LENGTH OF GUARDRAIL OF 50' (PLUS TERMINAL) IS REQUIRED.
2. SEE TABLE III, PAGE 501.36 OF THE ROAD AND BRIDGE STANDARDS FOR DEFINITION OF "X" AND "Y".
3. VALUES LESS THAN 0.5 BETWEEN A AND B, A AND E ARE NOT ON PARABOLIC CURVE.
4. RIGHT BRIDGE OFFSET VALUES ARE GIVEN IN GEOMETRIC STANDARDS FOR CORRESPONDING LEFT BRIDGE OFFSET ("A" DIMENSIONS) SHOWN.

DIMENSIONS											
MEDIAN WIDTH	LEFT BRIDGE RAIL OFFSET(A)	B	C	D	E	F	G	H	I	J	W
30'	5'	5.5'	7.0'	11.0'	5.4'	6.0'	8.0'	54.0'	33.5'	4.0'	2.0'
40'	5'	6.0'	10.5'	16.0'	6.0'	10.0'	16.0'	44.0'	43.0'	4.0'	2.5'
40'	8'	7.4'	10.5'	16.0'	7.8'	10.8'	16.0'	48.0'	39.0'	3.0'	3.5'
40'	12'	11.2'	12.0'	16.0'	11.4'	12.0'	16.0'	48.5'	38.0'	3.0'	3.0'

OFFSETS (Y) FOR INTRODUCED GUARDRAIL TRANSITIONS										
LENGTH L	X	Y								
		W-0.50'	W-0.75'	W-1.00'	W-2.00'	W-2.50'	W-3.00'	W-3.50'	W-4.00'	
25.00'	X <sub>1</sub>	6.25	0.03'	0.05'	0.06'	0.06'	0.07'	0.08'	0.10'	0.11'
	X <sub>2</sub>	12.50	0.13'	0.19'	0.25'	0.22'	0.28'	0.33'	0.39'	0.44'
	X <sub>3</sub>	18.75	0.28'	0.42'	0.56'	0.55'	0.63'	0.75'	0.88'	1.0'
	X <sub>4</sub>	25.00	0.50'	0.75'	1.00'	0.89'	1.11'	1.33'	1.56'	1.78'
37.50'	X <sub>5</sub>	31.25				1.39'	1.74'	2.08'	2.43'	2.78'
	X <sub>6</sub>	37.50				2.00'	2.50'	3.00'	3.50'	4.00'

DETAIL OF GUARDRAIL AT DUAL BRIDGES

SPECIFICATION REFERENCE  
221  
505

W BEAM GUARDRAIL INSTALLATION CRITERIA

VIRGINIA DEPARTMENT OF TRANSPORTATION

501.34