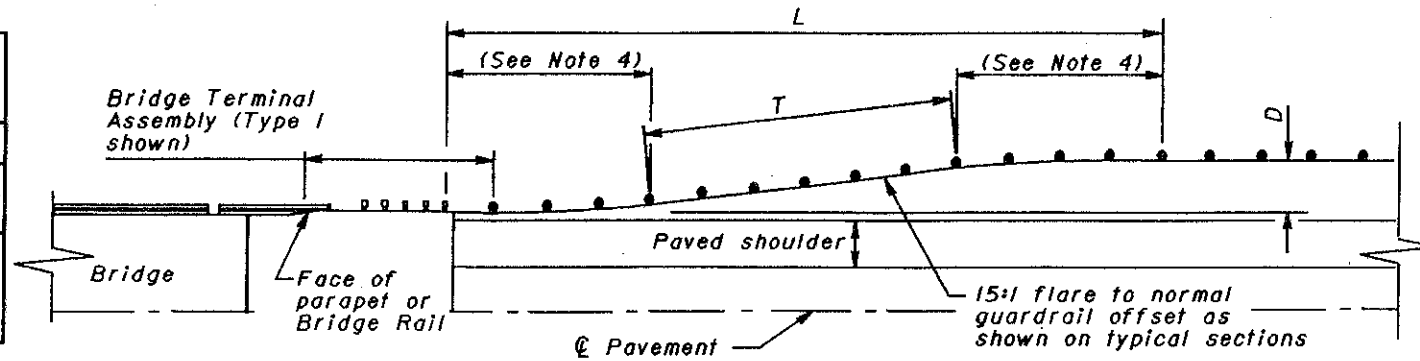


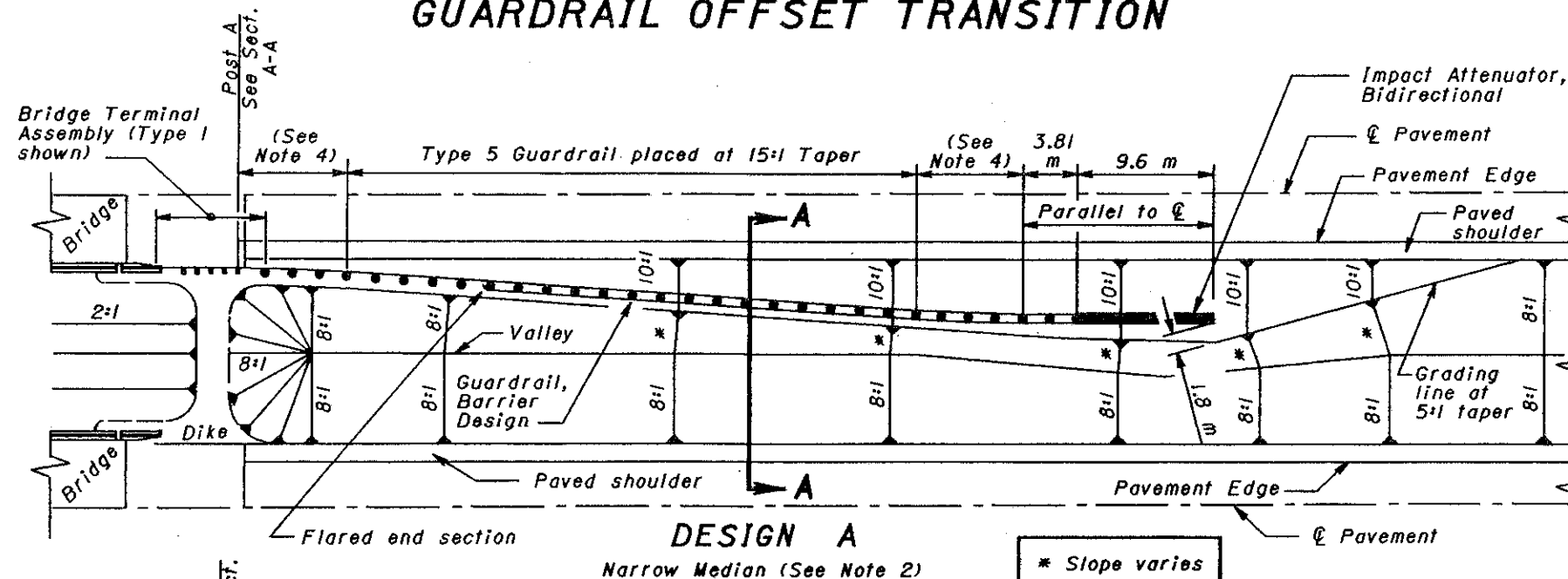
Recommended Lengths for Guardrail Offset Transitions		
D	L	T
Difference in Offset	Total Length	Tangent Length on Flares
0.6	19.05	3.81
1.2	26.67	11.43
1.8	38.10	22.86
2.4	45.72	30.48
3.0	53.34	38.10



NOTES

- 1) The length of guardrail needed shall be determined according to methods contained in Section 601 of the Location and Design Manual. Quantities shown on this sheet are based on these methods, using a lateral offset of 9 m for the hazard, a runout length of 144m, and a guardrail taper rate of 15:1.
- 2) Design "A" shall be used in narrow medians where the end of the guardrail run extends into the clear zone of the opposite side traffic. In medians where the guardrail run would otherwise extend beyond the centerline of the median, the guardrail run should be turned to follow the centerline using a standard flare arc. The plans shall clearly indicate what portion of the flared guardrail run is to be constructed using barrier guardrail.
- 3) Design "B" shall be used where the guardrail run lies outside the clear zone of the opposite side traffic. In this case, the design of the guardrail flare in the median would be similar to that of the guardrail approach on the outside shoulder. Estimated quantities are provided in the box below.
- 4) Use a 7.62 m Standard Flare Arc as per Std. Constr. Dwg. GR-5.1M.
- 5) Cross-slopes in front of guardrail must be 10:1 or flatter. The 8:1 slopes shown in the median at other locations are the recommended practice, although other slopes may be designated in the plans.

GUARDRAIL OFFSET TRANSITION

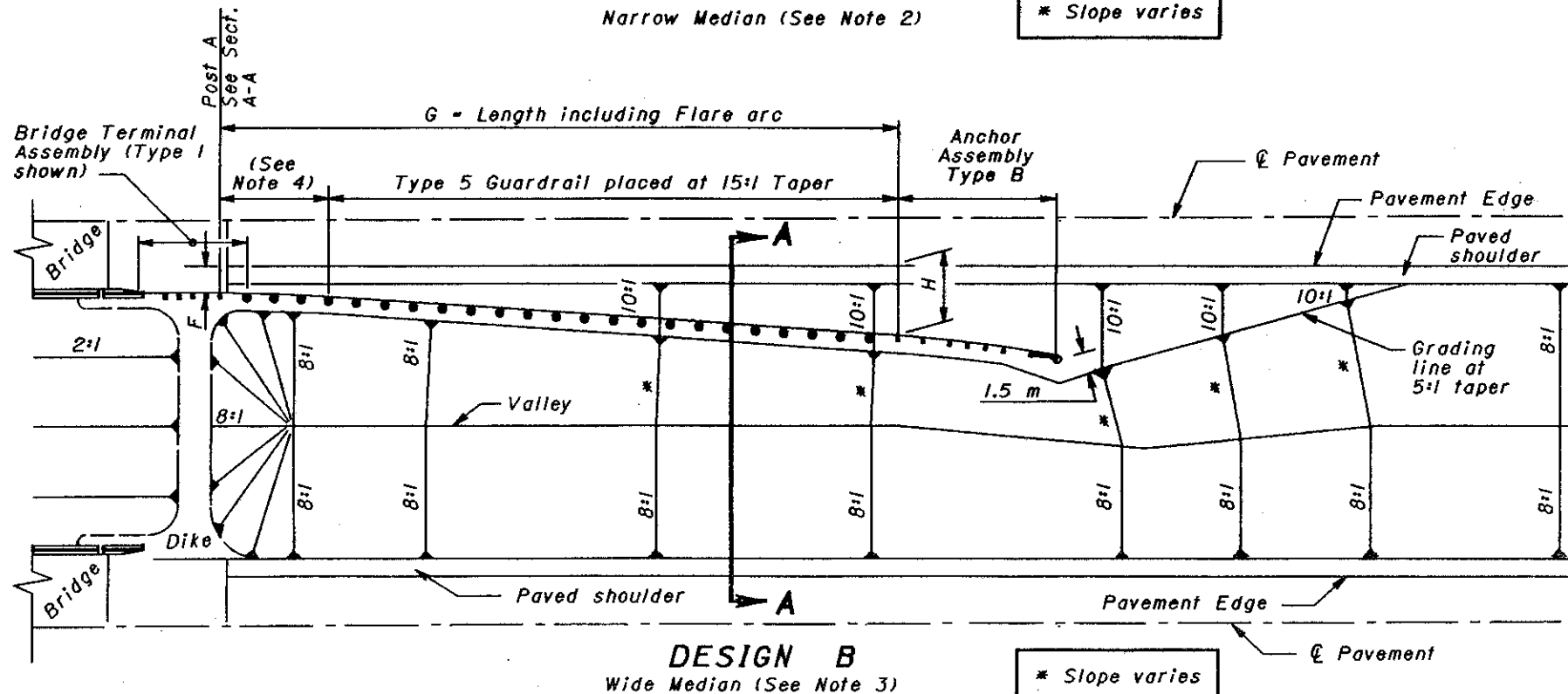


DESIGN A
Narrow Median (See Note 2)

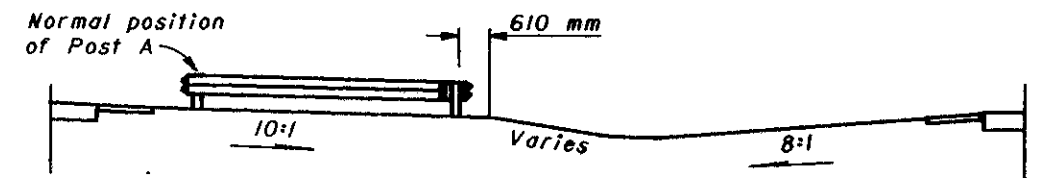
Recommended Lengths ⁽¹⁾ For Guardrail Flares at Bridge Approaches ⁽²⁾		
F	G	H
Guardrail Offset at Bridge	Length of Need ⁽³⁾	Offset at End of Run
1.2	64.77	5.26
1.8	60.96	5.61
2.4	53.34	5.70
3.0	49.53	6.05
3.6	45.72	6.39
4.2	41.91	6.74
4.8	38.10	7.09

Table Notes

- 1 Including the 7.62 m flare arc coming off the bridge, but excluding the anchor assembly/attenuator device.
- 2 For use with a Design "B" median or on the outside shoulder approach to the bridge.
- 3 Lengths are based on using whole numbers of guardrail panels (3.81 m long).



DESIGN B
Wide Median (See Note 3)



SECTION A-A

INTRODUCED GUARDRAIL APPROACH INSTALLATIONS

This Drawing Replaces GR-6.

OFFICE OF ROADWAY ENGINEERING
OHIO DEPARTMENT OF TRANSPORTATION

GUARDRAIL AT BRIDGES

DATE
1-3-96

STANDARD CONSTRUCTION DRAWING
GR-6.1M

APPROVED R.K. Hullman, P.E.
ADMINISTRATOR

