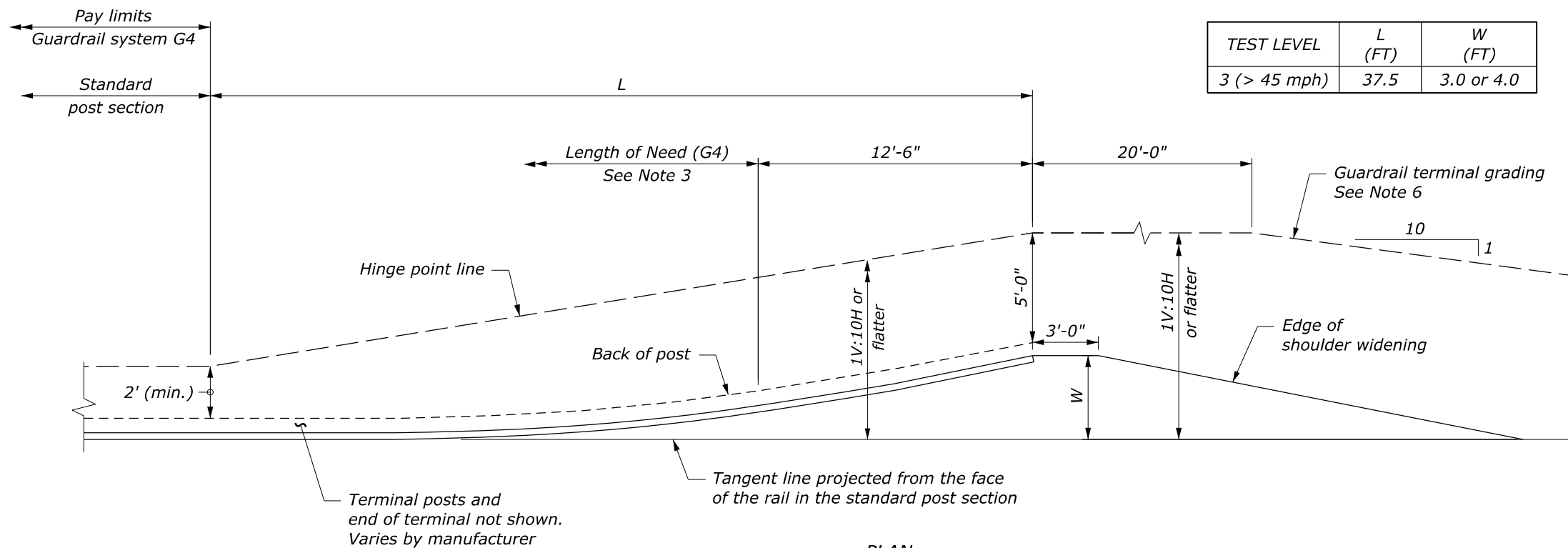


TEST LEVEL	L (FT)	W (FT)
2 (≤ 45 mph)	25.0	1.67 - 2.67
3 (> 45 mph)	37.5 (for G4)	2.5 - 4.0
	39.6 (for MGS)	3.0

NOTE:

1. Install a flared W-beam guardrail terminal according to the manufacturer's recommendations. See manufacturer's drawings for other details.
2. Construct the terminal grading as shown in the staking notes or model. If no staking notes or model is provided, construct grading as shown on this sheet and as recommended by the manufacturer.
3. For design purposes, the length of need is assumed to begin as shown on the drawing. Verify the length of need with the manufacturer of a specific product. Adjust grading as necessary to install the flared terminal according to the manufacturer's recommendations.
4. Pave widened shoulder on both ends of guardrail runs when indicated on the plans.
5. Install a reflectorized object marker on the end of the terminal.
6. Construct a 1V:4H or flatter slope outside of the guardrail terminal grading extents where practical.

PLAN
STRAIGHT FLARED OPTION
MGS AND G4 W-BEAM GUARDRAIL



TEST LEVEL	L (FT)	W (FT)
3 (> 45 mph)	37.5	3.0 or 4.0

PLAN
PARABOLIC FLARED OPTION
G4 W-BEAM GUARDRAIL

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION OFFICE OF FEDERAL LANDS HIGHWAY	
FLH STANDARD MGS AND G4 W-BEAM GUARDRAIL TYPE FLARED TERMINAL AND GRADING	
STANDARD APPROVED FOR USE 6/2005 REVISED: 6/2022	STANDARD 617-19

Designer Notes: FLH Standard Drawing 617-19
Last Updated: August 2021

MGS and G4 W-Beam Guardrail, Type Flared Terminal and Grading

General Information

Appropriate Applications.

- Many flared terminals are proprietary systems. Manufacturers of common flared terminal systems include Energy Absorption Systems, Trinity Highway LLC, Road Systems, Inc., and Barrier Systems, Inc. Refer to the manufacturer's recommendations for information on specific flared terminals.

Limitations.

- Site grading in the area of the terminal is an important consideration. Verify that the required grading is included in the project design.

Layout Guidance.

- See AASHTO *Roadside Design Guide* Section 8.3.3.
- See the FLH *Midwest Guardrail System FAQ* document for more information.

Typical Pay Item Used

- 61702-0600 Terminal section, type flared [EA] for G4
- 61702-1600 Terminal section, type MGS flared [EA] for MGS

Updates

February 2019

- New Detail drawing

April 2020

- Updated notes and straight flare option detail. Updated MGS drawing.

August 2021

- Converted from CFL Detail to FLH Standard