

Designer Notes: FLH Standard Drawing 617-32 Last Updated: June 2022

MGS W-Beam Guardrail, Steel Posts

General Information

Appropriate Applications.

• The Midwest Guardrail System (MGS) is a non-proprietary w-beam guardrail system that meets the current crash testing requirements. MGS is used when w-beam guardrail is selected for barrier installation.

Crash Test Criteria	MASH
Test Level	TL-3
FHWA Eligibility Letter	B-212, B-240, B-261
TF 13 Designator	SGR20a-b
Crash Test Report	Multiple MwRSF reports available at
	https://mwrsf.unl.edu/mgs.php
	Multiple TTI reports available at
	https://www.roadsidepooledfund.org/mash-
	implementation/search/

Limitations. The drawing shows the various options for guardrail near slopes. The preferred option is to use 6' post with 2' between the back of post and the slope hinge point.

Layout Guidance.

- See AASHTO Roadside Design Guide
- Use the FLH Barrier Length of Need Calculator available at https://highways.dot.gov/federal-lands/safety/barrier-length-need
- See the FLH Midwest Guardrail System FAQ document for more information.

Typical Pay Item Used

- 61701-4500 Guardrail system MGS, type 2, class A steel posts [LNFT] for galvanized steel
- 61701-5100 Guardrail system MGS, type 4, class B steel posts [LNFT] for weathering steel

Updates

February 2019

New Detail drawing

June 2022

Converted from CFL Detail to FLH Standard

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