

Design Standards Letter

Letter Number: G-2000-12

Letter Date: 08/14/2000

Effective Date: 08/14/2000

Section/Plan No.: None

Subject: New Guardrail Post Criteria

Body

Effective immediately, when a 2' offset for embankments behind the guardrail is not available, 9' guardrail posts at 3' 1-1/2" spacing with a minimum 66" embedment will be required for jobs that have not been let. Change orders should not be made unless warranted

It should be noted that the standard plans for many two-lane and dual-lane facilities constructed in the 1960s and early 1970s show an additional 2' offset for embankments placed in front of or behind the guardrail. A field review by General Headquarter personnel of selected projects constructed in the 1960s and early 1970s revealed that in most cases the edge of the traveled way and the embankment were separated by 12', at least 10' of which was a paved shoulder. This additional width, or 2' offset, which was usually unpaved, is present even though the typical sections for these projects do not show it.

Because of this, designers should conduct a field check to determine whether additional width is available for projects involving extending or replacing guardrail. This field check should include the District Soils and Geology Technician to determine whether the embankment has eroded or if a slide has occurred. If the original 12' width has significantly eroded, it should also be determined whether the 2' offset can be restored without causing additional failure.

If it is determined that the 2' offset was not originally constructed at the location, a cost analysis should be conducted to determine whether to add a 2' offset to the slope or use 9' posts with a 3' 1½" spacing. If it is determined to use the 9' posts with a 3' 1½" spacing, the district needs to submit a design exception to General Headquarters for placement of guardrail without a 2' offset behind the guardrail.

If the design exception for 9' posts is approved, the district will need to request the Special Sheet drawing from General Headquarters.

If you have any questions, please refer them to Pat McDaniel, (573) 526-2903 or Keith L. Smith, (573) 751-4659.

Attached is the 9' posts with a 3' 1 ½" spacing Special Sheet drawing.

ks/sb

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