



Montana Department of Transportation
PO Box 201001
Helena, MT 59620-1001

Memorandum

To: Distribution

From: Paul Ferry, P.E.
Highways Engineer

Date: November 30, 2009

Subject: Furrow Ditches

The practice of including furrow ditches (or interceptor ditches) in the plans was essentially eliminated when the December 2004 version of the Road Design Manual was distributed. The removal of furrow ditches was due to the Geotechnical Section's concern with potential saturation of cut slopes. Since that time we have determined that there is a benefit in providing furrow ditches at the top of most cuts. They act to reduce erosion and enhance the establishment of vegetation. A discussion of the appropriate uses of furrow ditches is contained in the *Permanent Erosion and Sediment Control Guidelines*.

Situations do exist where furrow ditches should not be utilized because of a slope's susceptibility to saturation and potential for sliding. The Geotechnical Section will identify these sites during the project development process.

The following notes should be included in plans that involve major grading:

“Construct furrow ditches at the top of all cut sections unless specified otherwise in the plans or directed by the Engineering Project Manager.”

This note must be included in all appropriate projects that have not had a Plan-in-Hand as of December 2, 2009. This will give the Geotechnical Section time to review cut slopes and make recommendations. The decision to remove furrow ditches from the top of cuts and the supporting rationale must be documented in the Plan-in-Hand Report.

If you have questions concerning this, please contact me at 444-6244.

Pf.

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