

# INDIANA DEPARTMENT OF TRANSPORTATION



INTER-DEPARTMENT COMMUNICATION  
Standards Section C Room N642



Writer's Direct Line  
232-6775

October 6, 2000

## **DESIGN MEMORANDUM No. 00-16 TECHNICAL ADVISORY**

**TO: All Design, Operations, District Personnel, and Consultants**

**FROM: /s/ Anthony L. Uremovich  
Anthony L. Uremovich  
Acting Design Policy Engineer  
Contracts and Construction Division**

**SUBJECT: Riprap Ditches**

**EFFECTIVE: Immediately**

Design Manual Section 30-3.03(02) item 4 shows that riprap should be used on ditches with grades of 3% or steeper, and 10% or flatter. However, riprap should be used on slopes steeper than 10% at bridge cones. It is also appropriate to use riprap in a ditch where the grade is flatter than 3%. For example, if there is a hill in the watershed of the ditch, riprap should be placed to dissipate energy and minimize ditch erosion.

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