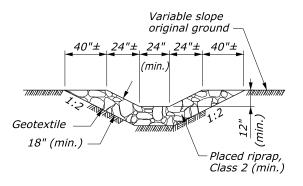
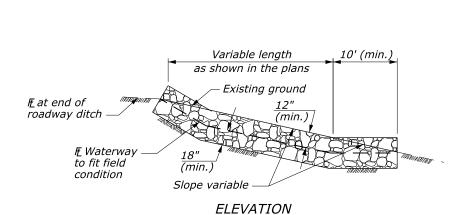
NOTE:

- 1. Excavation for placement of riprap will not be measured for payment.
- 2. Furnish geotextile materials conforming to Subsection 714.01 (a).



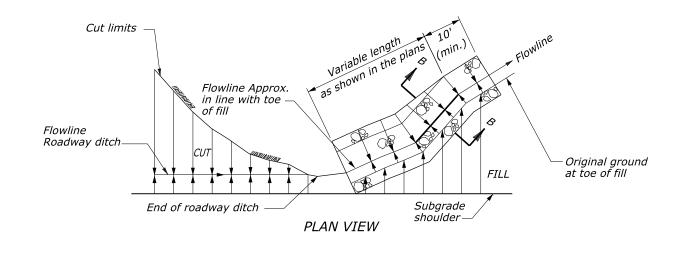
SECTION A-A



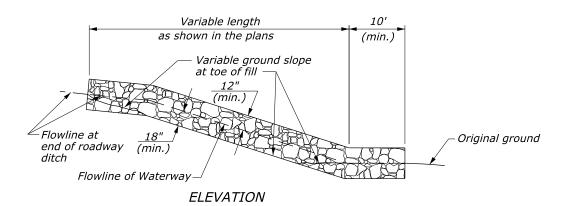
TYPE 1 - NOT CONTIGUOUS TO FILL SLOPE (Qmax = 5 cfs)

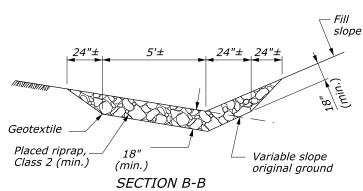
Flowline

Toe of /



PLAN VIEW





TYPE 2 - CONTIGUOUS TO FILL SLOPE (Qmax = 5 cfs)

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION

U.S. CUSTOMARY DETAIL

PLACED RIPRAP BETWEEN CUT AND FILL

DETAIL APPROVED FOR USE DETAIL REVISED: 08/2006 08/2014 C251-51

NO SCALE

Flowline Roadway ditch-

Subgrade

shoulder

End of roadway ditch



NOTES TO THE DESIGNER

Last Updated: August 2014

General Information

 Maximum Flow. Q_{max} = 5 cfs. For other flows, use the HEC15 spreadsheet to evaluate the riprap ditch (HEC15 spreadsheet located on RoadMap: http://roadmap/DocShare/GetFile.cfm?KEY_FM_FILE_MASTER_SEQ=989&KEY_FM_FILE_SEQ=1152

Applicable SCRs

1. Section 251:

 $\frac{http://www.cflhd.gov/resources/design/constructspecs/scr/fp14/documents/S}{251-14.docx}$

Typical Pay Items Used

- 25101-2200 Placed riprap, method B, class 2
- Geotextile quantity is shown for information only

Updates

March 2009

- Added Qmax
- Minor drafting edits

October 2000

• Updated border to FLH Standard

February 2005

Updated to MicroStation V8

August 2014

- Updated for FP-14
- Updated border