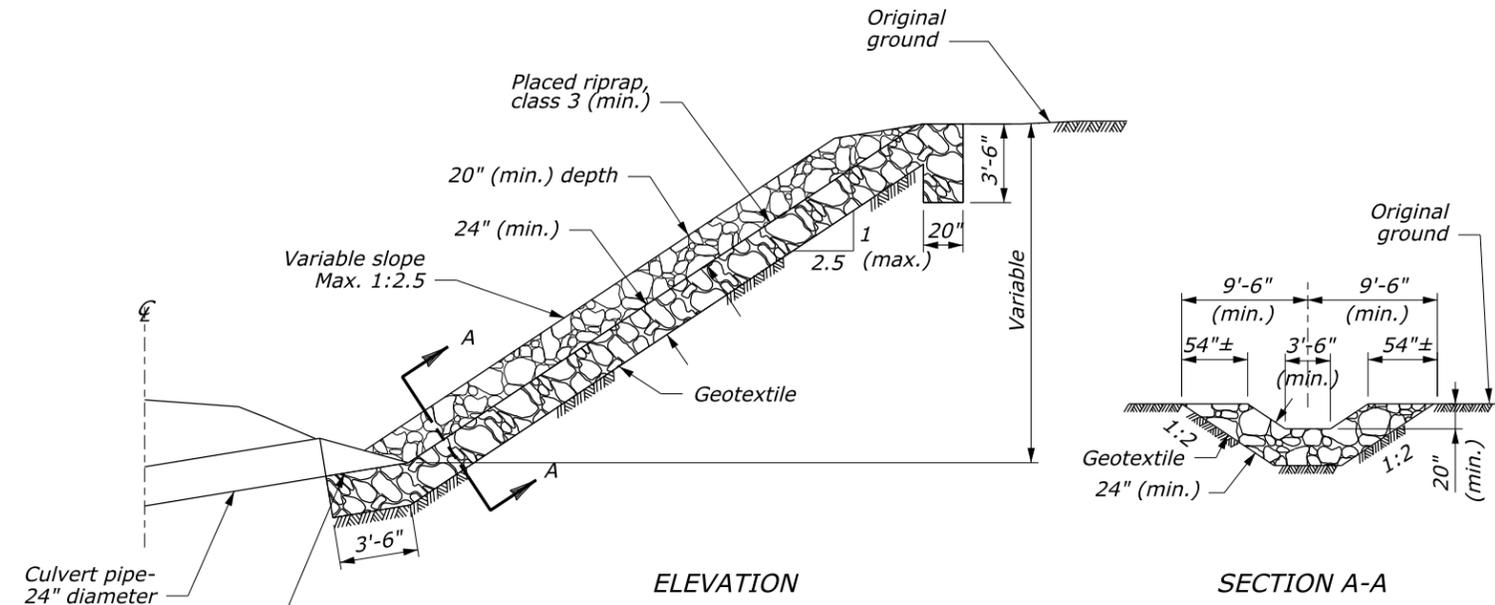


STATE	PROJECT	SHEET NO.

NOTE:

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



**RIPRAP RUNDOWN AT 24" CULVERT INLET
($Q_{max} = 17$ cfs)**

NO SCALE

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

U.S. CUSTOMARY SPECIAL

**RIPRAP RUNDOWN
AT CULVERT INLET**

SPECIAL
251-A



NOTES TO THE DESIGNER

Last Updated: August 2014

General Information

1. **Maximum Flow.** $Q_{max} = 17$ cfs for a 24" culvert. 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:
<http://www.cflhd.gov/resources/design/constructspecs/scr/fp14/documents/S251-14.docx>

Typical Pay Items Used

- 25101-2300 Placed riprap, method B, class 2
- 60201-0800 24-inch pipe culvert
- 60210-0800 End section for 24-inch pipe culvert
- Geotextile quantity is shown for information only

Updates

March 2009

- Moved this drawing from CFL Detail 251-50

August 2014

- Updated for FP-14, new border