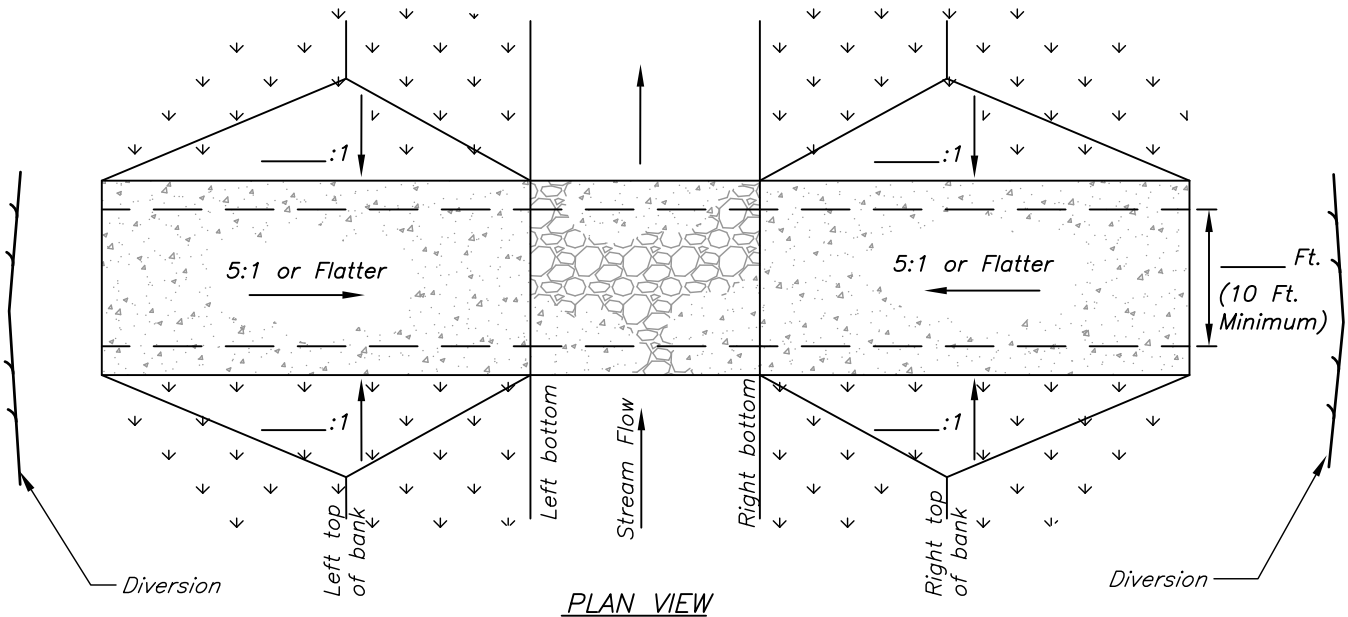
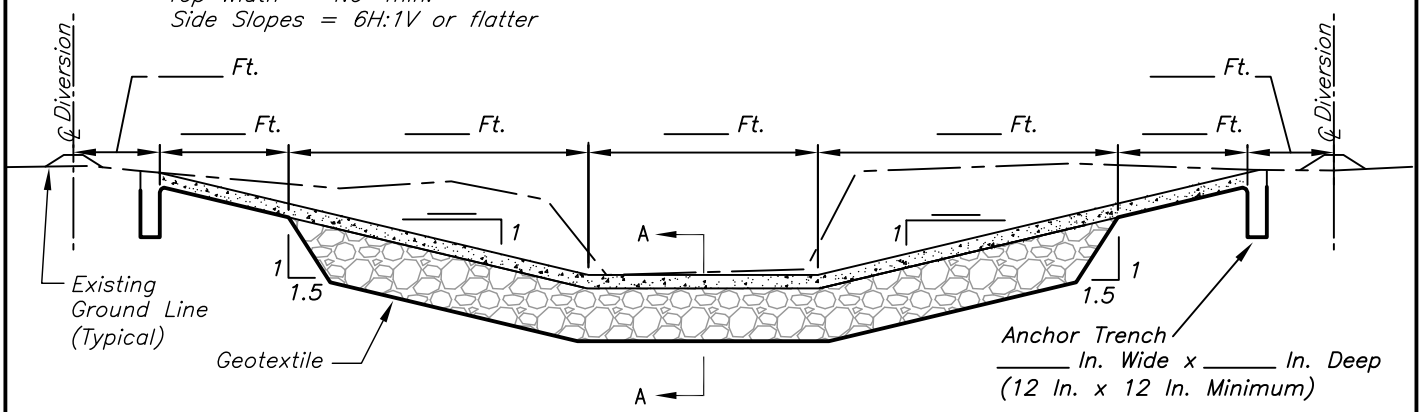
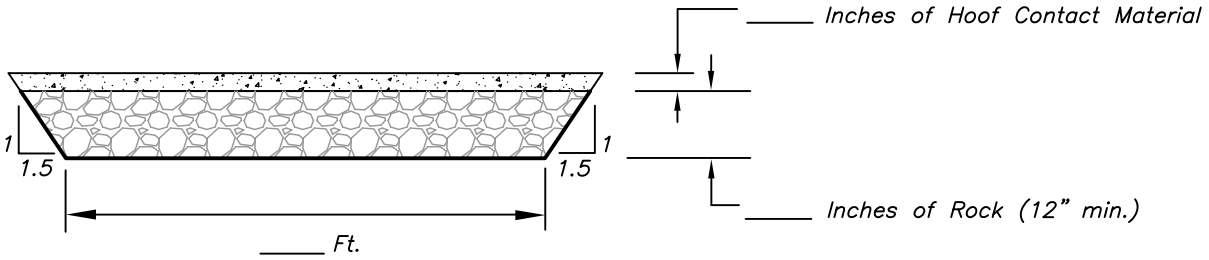


PLAN VIEW
(NOT TO SCALE)

Diversion Details
Height = 1.0'
Top Width = 4.0' min.
Side Slopes = 6H:1V or flatter



PROFILE ALONG CENTERLINE OF CROSSING
(NOT TO SCALE)



SECTION A–A
(NOT TO SCALE)

BENCH MARK		
NO.	ELEV.	DESCRIPTION

STANDARD DWG. NO. IA–1451

DATE June 2010 | PAGE 1 OF 2

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

ROCK FORD CROSSING

Owner: _____

Location: Sec._____, T_____N R_____ W

_____ Township

_____ County, Iowa

	Date	File Name
Designed		
Drawn		Drawing Name
Checked		
Approved		Sheet of

ROCK GRADATION*	
Percent Passing	Size (Inches)
100	9
60–85	7.8
25–50	6
2–20	3

*Iowa DOT Erosion Stone (IDOT 4130) or equivalent

HOOF CONTACT MATERIAL GRADATION**	
Percent Passing	Size
100	3" nominal maximum size
0–10	3/4" Standard Sieve

**Iowa DOT Macadam Stone Base (IDOT 4122.02) or equivalent

TABLE OF QUANTITIES		
Item	Quantity	Units
Excavation		Cu. Yd.
Rock		Cu. Yd.
Hoof Contact Material		Cu. Yd.
Geotextile, no overlap		Sq. Yd.
Seeding		Acres

NRCS SPECIFICATIONS

Site Preparation IA–1

Pollution Control IA–5

Seeding IA–6

Excavation IA–21

Riprap IA–61

Geotextile IA–95

NOTES

1. Compact surfacing material by equipment travel. The finished top surface of the rock in the bottom of the channel shall be no higher than the original stream bottom at the upstream edge of the crossing. It is expected that surfacing material will have to be replaced following high flow events.
2. Blend approaches with existing site conditions.
3. Excavated material shall be removed from the site or placed at least 12 feet from top of bank, spread to a height of 2 feet or less, and be free draining. The final surface of spoil mounds shall be smooth enough for operation of tillage and seeding equipment.
4. All disturbed areas, including excavated materials left on site, shall be seeded according to the seeding plan.
5. Runoff shall be diverted from the approach. The minimum length of each diversion is the distance to extend beyond the width of the crossing ramp plus the width of any adjacent cutslopes draining towards the crossing ramp. Excavated material may be used to construct the diversions.
6. Geotextile shall be Class I non–woven fabric. Geotextile shall be anchored in a trench at the top of the ramp slope. The trench shall be a minimum of 12 inches deep and 12 inches wide and be backfilled with compacted soil.
7. This standard drawing is intended for use when the bed slope of the channel is 16H:1V or flatter and the maximum velocity of the channel is 7.6 fps for angular rock and 6.3 fps for rounded rock.

STANDARD DWG. NO. IA–1451

DATE June 2010 | PAGE 2 OF 2

NRCS
Natural Resources Conservation Service
United States Department of Agriculture

ROCK FORD CROSSING

Owner: _____

Location: Sec.____, T____N R____ W

_____ Township

_____ County, Iowa

Date

Designed _____

Drawn _____

Checked _____

Approved _____

File Name

Drawing Name

Sheet of