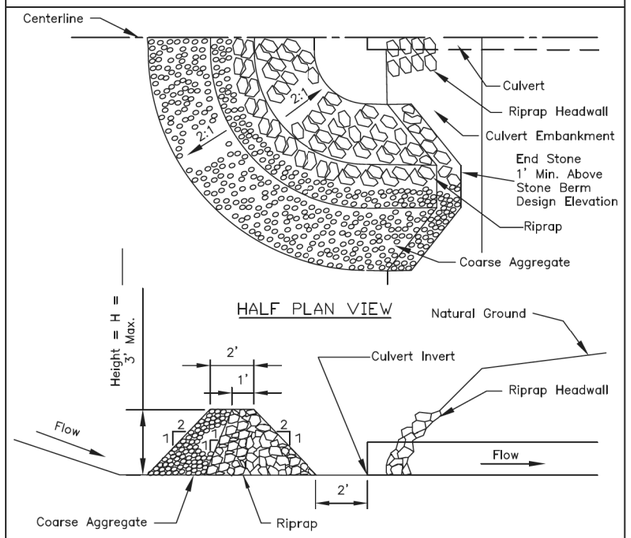
CULVERT INLET PROTECTION - STONE



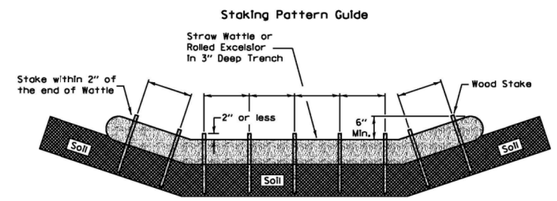
CENTERLINE CROSS SECTION

Notes:
1. Sediment shall be removed when the sediment has accumulated to one-half the height of the stone berm.
2. Coarse aggregate shall meet one of the following IDOT coarse aggregate gradations, CA-1, CA-2, CA-3 or CA-4.
3. Riprap shall meet IDOT gradation RR-3 or RR-4. Any permanent riprap, such as for the culvert headwall, shall meet IDOT Quality Designation A.
4. Coarse aggregate and riprap shall be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
5. The maximum drainage area to the culvert being protected is 3 acres.
6. See plans for H dimension.
7. Tie the stone berm into the culvert embankment a minimum of 1 foot above the design elevation of the stone berm.

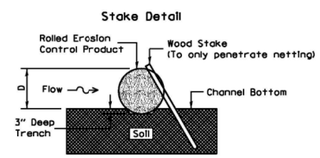
REFERENCE		STANDARD DWG. NO.
Project	NRCS Natural Resources Conservation Service	IL-508ST
Designed ____ Date ____		SHEET 1 OF 1
Checked ____ Date ____		DATE 1-29-99
Approved ____ Date ____		

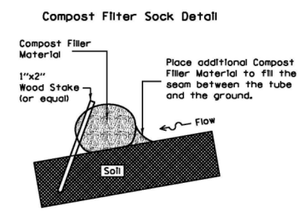
NOTE:
CULVERT INLET PROTECTION-STONE SHALL BE PAID FOR AS AGGREGATE DITCH CHECK

ROLLED EROSION CONTROL PRODUCTS



Notes:
1. Overlap minimum is the diameter of the roll.
2. 4' spacing for wattles.
3. 2' spacing for rolled excelsior.
4. Or space according to manufacturer's specifications.



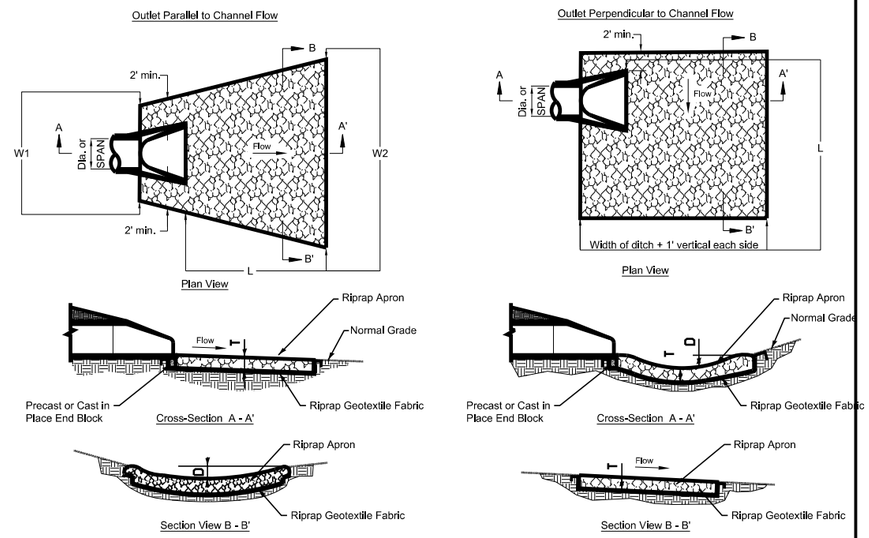


When compost filter sock ditch check is used, place a compost berm upstream of the filter sock (see IUM 805). A trench is not required.

Notes:
1. Drawings are not to scale.
2. Ends of wattles or rolled excelsior shall be turned at least 6" upslope.
3. Recommended stakes are 1 1/8" wide x 1 1/8" thick x 30" long
4. Stakes shall not extend above the straw wattle more than 2".
5. Spacing: The toe of the upstream ditch check shall create a horizontal line with the top of the downstream ditch check.
6. When compost filter sock ditch check is used, place a compost berm upstream of the filter sock (see IUM 805). A trench is not required.

REFERENCE		STANDARD DWG. NO.
Project		IUM-514
Designed ____ Date ____		SHEET 1 OF 1
Checked ____ Date ____		DATE 8-19-11
Approved ____ Date ____		

NOTE:
ROLLED EROSION CONTROL PRODUCTS SHALL BE PAID FOR AS PERIMETER EROSION BARRIER (ROLLED EXCELSIOR)



ROCK OUTLET PROTECTION DETAIL
N.T.S.

DIA. OF ROUND INLET PIPE (in)	IDOT RIPRAP GRADATION (RR)	RIPRAP BED THICKNESS (in)	APRON LEGNTH (ft)	APRON WIDTH UPSTREAM (ft)	APRON WIDTH DOWNSTREAM (ft)	DEPTH BELOW NORMAL GRADE
		T	L	W1	W2	D
12	RR-3	15.0	12.0	5.0	11.0	6.0
15	RR-3	15.0	14.0	5.0	12.0	6.0
18	RR-3	15.0	16.0	5.5	13.5	7.0
24	RR-4	15.0	20.0	6.0	16.0	10.0
30	RR-4	20.0	22.0	6.0	17.0	11.0
36	RR-4	20.0	24.0	7.0	19.0	11.0