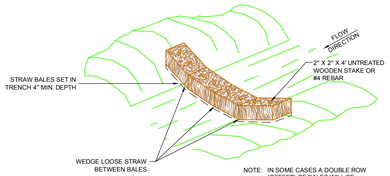
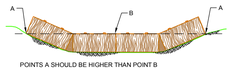


NOTE: IN SOME CASES A DOUBLE ROW (OFFSET) OF BALES WILL BE UTILIZED.

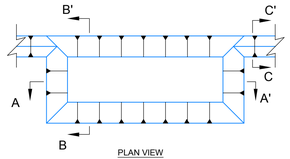
PERSPECTIVE



PROFILE

(ASCM TYPE 1) TYPICAL STRAW BALE CHECK DAM

NTS

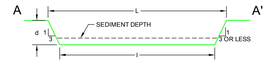


PLAN VIEW

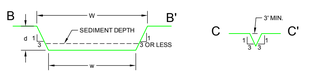
CAPACITY CALCULATIONS

PRISMOIDAL FORMULA
(NOT TO EXCEED 0.5 ac-ft)

CAPACITY (ac-ft) = 1/6d (A_{top} + 4A_{mid} + A_{bot}) (1/43560)
d = RESERVOIR DEPTH (ft)
$_{top}$A = TOP AREA = L*W (ft.)^2
$_{mid}$A = AREA AT MID DEPTH (ft.)^2
$_{bot}$A = BOTTOM AREA = l*w (ft.)^2



CROSS SECTION A - A'

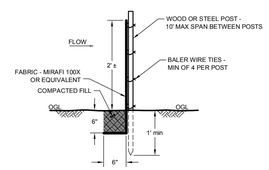


CROSS SECTION B - B'

CROSS SECTION C - C'

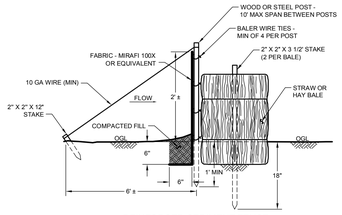
(ASCM TYPE 2) TYPICAL INCISED DETENTION BASIN

CAPACITY < 0.5 ac-ft
NTS



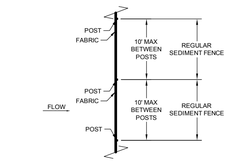
REGULAR SEDIMENT FENCE SECTION

NOT TO SCALE



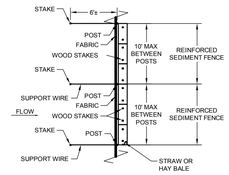
REINFORCED SEDIMENT FENCE SECTION

NOT TO SCALE



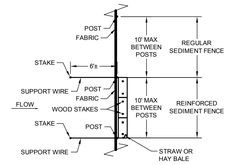
PLAN VIEW REGULAR

NOT TO SCALE



PLAN VIEW REINFORCED

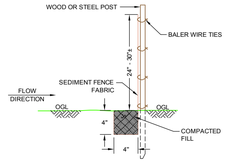
NOT TO SCALE



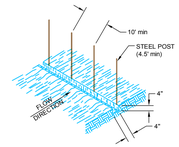
PLAN VIEW COMBINATION

NOT TO SCALE

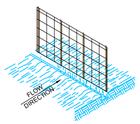
(ASCM TYPE 3) TYPICAL SINGLE FENCE STRAW BALE AND FABRIC CHECK DAM



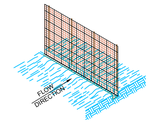
CROSS SECTION



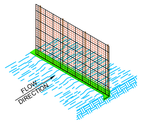
1. SET STEEL POSTS AND EXCAVATE A 4" X 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.



2. ATTACH WIRE FENCE (4" mesh - 12 ga min) TO FENCE POSTS.



3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH

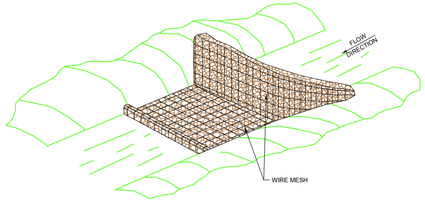


4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

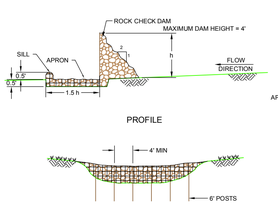
NOTE: PREASSEMBLED SILT FENCE SUCH AS MIRAFI ENVIROFENCE MAY BE SUBSTITUTED FOR THE FIELD - ASSEMBLED SEDIMENT FENCE SHOWN ABOVE.

(ASCM TYPE 4) TYPICAL SEDIMENT FENCE CHECK DAM

NTS



PERSPECTIVE



PROFILE

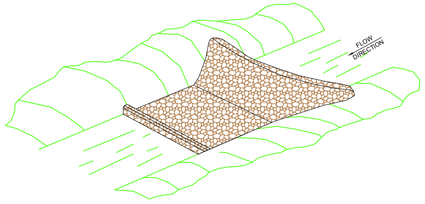
APPROXIMATE ROCK GRADATION FOR ROCK CHECK DAMS

4-5"	25%
6-7"	20%
8-12"	25%
12-18"	30%

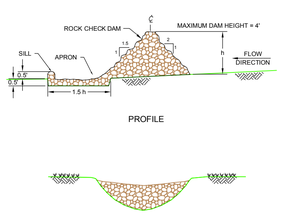
CROSS SECTION

(ASCM TYPE 5) TYPICAL SINGLE-FENCE ROCK CHECK DAM

NTS



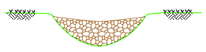
PERSPECTIVE



PROFILE

APPROXIMATE ROCK GRADATION FOR ROCK CHECK DAMS

4-5"	25%
6-7"	20%
8-12"	25%
12-18"	30%

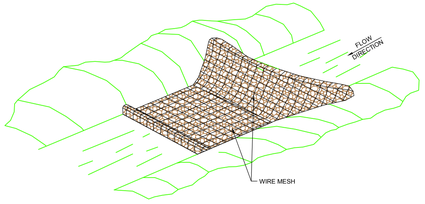


CROSS SECTION

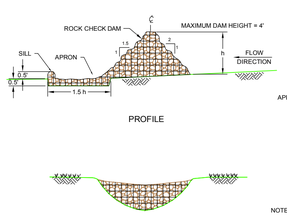
(ASCM TYPE 6) TYPICAL LOOSE ROCK CHECK DAM

NTS

NOTE: MAINTENANCE OF ALTERNATIVE SEDIMENT CONTROL MEASURES (ASCM) WILL BE PERFORMED AT A FREQUENCY APPROPRIATE FOR THE TYPE OF STRUCTURES UTILIZED. STRUCTURES WILL BE INSPECTED FOLLOWING SIGNIFICANT RUNOFF EVENTS. REPAIRS TO ASCM WILL BE INITIATED PROMPTLY FOLLOWING ANY INSPECTION WHERE PROBLEMS ARE NOTED.



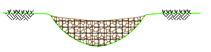
PERSPECTIVE



PROFILE

APPROXIMATE ROCK GRADATION FOR ROCK CHECK DAMS

4-5"	25%
6-7"	20%
8-12"	25%
12-18"	30%



CROSS SECTION

NOTE: ROCK GRADATIONS FOR WIRE-BOUND ROCK CHECK DAMS CAN INCLUDE SMALLER ROCKS IF MESH OPENING IS SMALLER THAN 4 INCHES. MINIMUM ROCK SIZE SHOULD NOT BE LESS THAN MAXIMUM WIRE OPENING.

(ASCM TYPE 7) TYPICAL WIRE-BOUND ROCK CHECK DAM

NTS

This plate is provided to fulfill the requirements of:
ARSD 74:29:02:11(9)

CONSULTANT
WWC ENGINEERING

REVISIONS

#	DRAWN	CHECKED	APPROVED	DATE

SIGNATURE OF PREPARER

REF

CHECK SCALES
If this bar does not measure 1 inch this map is not at its original scale

POWERTECH (USA) INC.

Plate 5.3-8

Alternative Sediment Control Measures

Dewey-Burdock Project

PLOT DATE	26 September 2012	DATE	26 September 2012
DRAWN	DAVE C. JOHNSON	PDF FILE	
PREPARER	DALE E. BROWN	CAD FILE	K:\Powertech\11270\DWGS\ASCM.dwg
		COORDS	NAD 27, South Dakota State Plane South (feet)

K:\Powertech\11270\DWGS\ASCM.dwg 9/26/2012 3:54:32 PM dojoh