



TRAPEZOIDAL CROSS SECTION

NOTES:

1. PLACE SPOIL WHERE IT WILL NOT INTERFERE WITH SURFACE WATER FLOW INTO THE WATERWAY.
2. DO NOT USE THE WATERWAY FOR A TRAVEL LANE.
3. B IS DESIGN BOTTOM WIDTH. B' IS REQUIRED CONSTRUCTED WIDTH OF FOUNDATION BEFORE PLACEMENT OF GEOTEXTILE AND ROCK.
 $B' = B + (Tr/Z)$ WHERE Tr = THICKNESS OF ROCK IN FEET.

CONSTRUCTION DETAILS

WATERWAY NUMBER	REACH		CHANNEL SLOPE(%)	BOTTOM WIDTH(B) FEET	DEPTH(D) FEET	SIDE SLOPE(Z)	LENGTH FEET
	FROM	TO					

ROCK GRADATION	
PERCENT PASSING	SIZE ¹ (in.)
100	1.5xD ₅₀ – 2.0xD ₅₀
85	1.3xD ₅₀ – 1.8xD ₅₀
50	1.0xD ₅₀ – 1.5xD ₅₀
10	0.8xD ₅₀ – 1.3xD ₅₀

¹ ROUND UP TO NEAREST INCH.

QUANTITIES*	
EXCAVATION (W.C.S.* 2)	CU. YD.
ROCK RIPRAP (W.C.S. 9)	CU. YD.
GEOTEXTILE (W.C.S. 13) CLASS (WOVEN) (NONWOVEN)	SQ. FT.
SEEDING	ACRES

* ESTIMATED TO THE NEAT LINES AND GRADE
 * WIS. CONSTRUCTION SPECIFICATION



United States Department of Agriculture

Natural Resources Conservation Service

ROCK RIPRAP LINED WATERWAY

CLIENT: _____
 COUNTY: _____

Date _____
 Designed _____
 Drawn _____
 Checked _____
 Approved _____

Drawing Name
 WI-402E
 Date
 07/14
 Sheet of