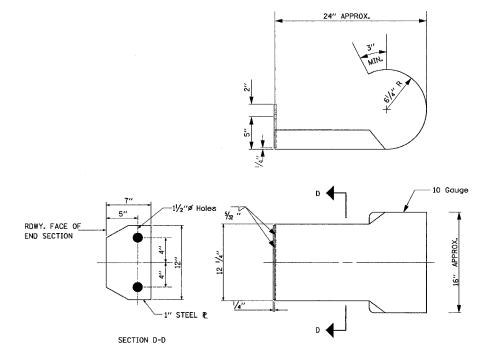
CURLED END SECTION DETAIL



ALL OTHER STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M-183 EXCEPT POSTS AND ANGLES SHALL CONFORM TO A.A.S.H.T.O. M-223, GRADE 50.

BOLTS, CAP SCREWS, AND NUTS SHALL CONFORM TO THE REQUIREMENT OF A.S.T.M. DESIGNATION A-307 EXCEPT FOR HIGH STRENGTH BOLTS, NUTS, AND WASHERS NOTED WHICH SHALL CONFORM TO A.A.S.H.T.O. DESIGNATION M-164.

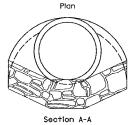
ALL BOLTS, NUTS, CAP SCREWS, WASHERS, AND LOCK WASHERS SHALL BE GALVINIZED IN ACCORDANCE WITH A.A.S.H.T.O. DESIGNATION M-232.

ALL FIELD DRILLED HOLES SHALL BE COATED WITH AN APPROVED ZINC RICH PAINT BEFORE ERRECTION.

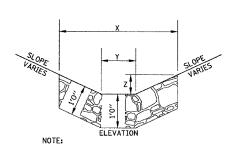
STONE RIPRAP DITCH DESIGN

T.R.	SECTION		COUNTY		TOTAL SHEETS	SHEET NO.
229	01-06128-0	O-BR H		HAMILTON	14	14
FED. RO	AD DIST. NO. 9	ILLINO	IS	FED. A	ID PROJ	ECT
PROJECT# BROS-065(37)			7)	CONTRACT# 99251		
JOB	NO. C-99-52	9-06		SULLIV	AN BRA	NCH
LEC IOD	# HOATLOUGH					

SLOPE VARIES WORLS SLOPE SLOPE AND SLOPE S



NOTE: FOR PLACEMENT, QUALITY GRADATION AND OTHER MISCELLANEOUS REQUIREMENTS FOR STONE RIPRAP DITCH-SEE SPECIAL PROVISIONS.

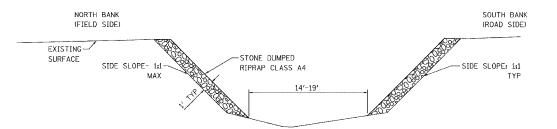


BOTTOM OF DITCH

	1 1/2:1	2:1	3:1	
2 FT	X= 5 FT	6 FT	8 FT	
	Y= 2 FT	2 FT	2 FT	
	Z= 1 FT	1 FT	1 FT	
	0.40	0.48	0.62 TON/LIN. FT	

	1 1/2:1	2:1	3:1	
3 FT	X= 6 FT	7 FT	9 FT	
	Y= 3 FT	3 FT	3 FT	
	Z= 1 FT	1 FT	1 FT	
	0.48	0.56	0.70	TON/LIN. FT
	1 1/2-1	2.1	7.1	
	1 1/2:1	2:1	3:1	
4 FT			3:1 10 FT	
4 FT	X= 7 FT	8 FT		
4 FT	X= 7 FT Y= 4 FT	8 FT	10 FT	
4 FT	X= 7 FT Y= 4 FT	8 FT 4 FT	10 FT 4 FT	TON/LIN. FT

TYPICAL DITCH CROSS SECTION



NOTE: PLACE STONE DUMPED RIPRAP CLASS A4

STA 4+63 TO STA 6+35 NORTH BANK STA 5+45 TO STA 6+60 SOUTH BANK