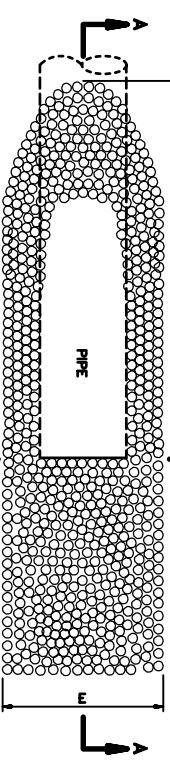
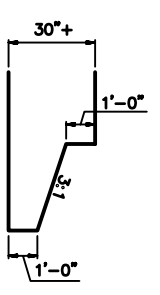


STRUCTURE	PIPE		RISER		EL. "A"	EL. "B"	EL. "C"	EL. "D"	EL. "E"	L1	L2	OS	H	NO. OF STOPPLUGS
	SIZE	GA.	SIZE	GA.										
STR-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STR-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-

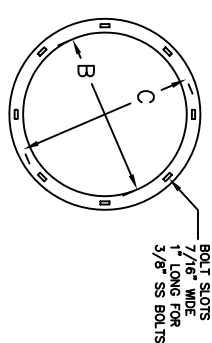
- NOTES:
- "H" INCLUDES 0.5' OF RISER EMBEDDED IN CONCRETE
 - ALL METAL PIPE SHALL BE CONNECTED WITH FLANGE COUPLERS
 - DOWNSTREAM PIPE OUTLET SHALL CONFORM TO SLOPE FOR PIPE DIAMETERS 30" AND LARGER
 - INLET AND/OR OUTLET PIPES GREATER THAN 20 LF. SHALL BE FABRICATED USING MULTIPLE SECTIONS NOT TO EXCEED 20 LF. CONNECTED W/ FLANGE COUPLERS. A FULL 20' SECTION MUST BE UTILIZED AS THE END SECTION OF PIPE.



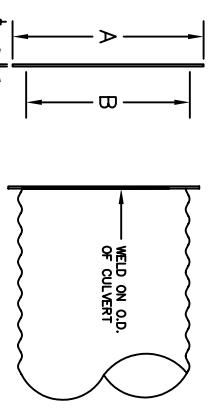
PIPE ENDING DETAIL FOR 30" PIPE AND LARGER
NOT TO SCALE



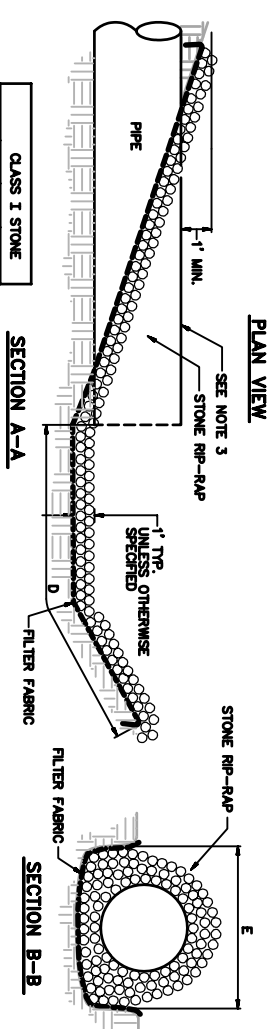
PIPE INSTALLATION & REMOVAL DETAIL
NOT TO SCALE



- NOTES:
- 6" - 36" FLANGES CUT FROM 3/16 ALUMINUM PLATE
 - GASKETS ARE CUT FROM 1/8" PVC TRIBLE FROM ENSURE AND MATCHED TO CORRESPONDING FLANGE DIMENSIONS (GND/1) & NO HOLES.



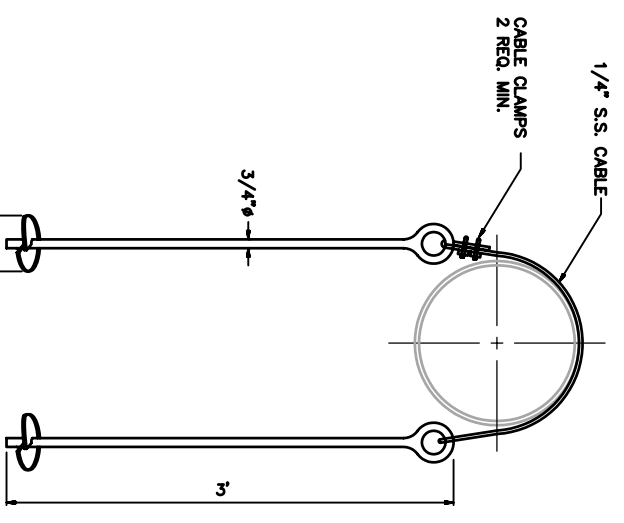
FLANGE COUPLER DETAIL
NOT TO SCALE



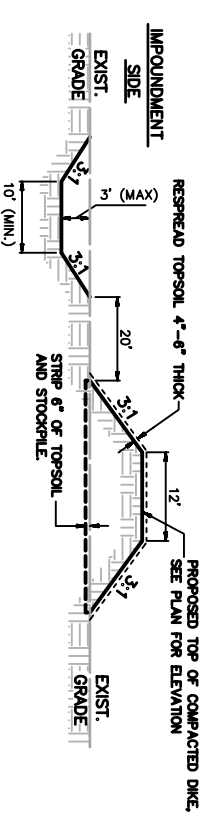
CLASS I STONE			
PIPE DIA.	D	E	Sq. Yds.
12"	5'	4'	4.2
15"	5'	4.25'	4.8
18"	5'	4.5'	5.1
21"	5.5'	5.75'	7.3
24"	6'	6'	8.1
27"	6.5'	6.25'	9.1
30"	7'	6.5'	10
36"	8'	7'	12
42"	9'	7.5'	14.1
48"	10'	8'	16.5
54"	12'	8.5'	19.5
60"	12.5'	9'	21.5

- NOTES:
- IF THE RIP-RAP CLASS DESIGNATION IS NOT SPECIFIED ON THE CONSTRUCTION PLANS, CLASS 1 RIP-RAP SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
 - UNLESS OTHERWISE SPECIFIED, FILTER FABRIC SHALL BE UTILIZED IN THE INSTALLATION OF RIP-RAP.
 - DOWNSTREAM PIPE OUTLET SHALL CONFORM TO SLOPE FOR PIPE DIAMETERS 30" AND LARGER

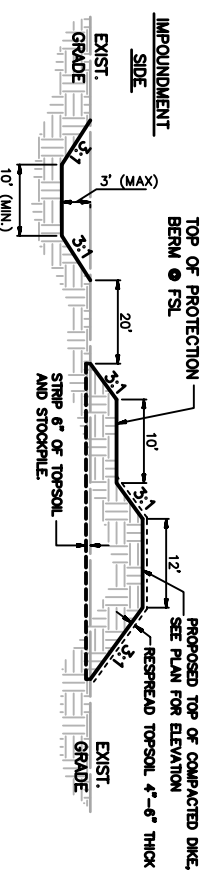
OUTLET AND STONE RIP-RAP DETAIL
NOT TO SCALE



CULVERT ANCHOR
NO SCALE



TYPICAL SECTION OF DIKE 3' HIGH AND LESS
NO SCALE



TYPICAL SECTION OF DIKE GREATER THAN 3' HIGH
NO SCALE

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