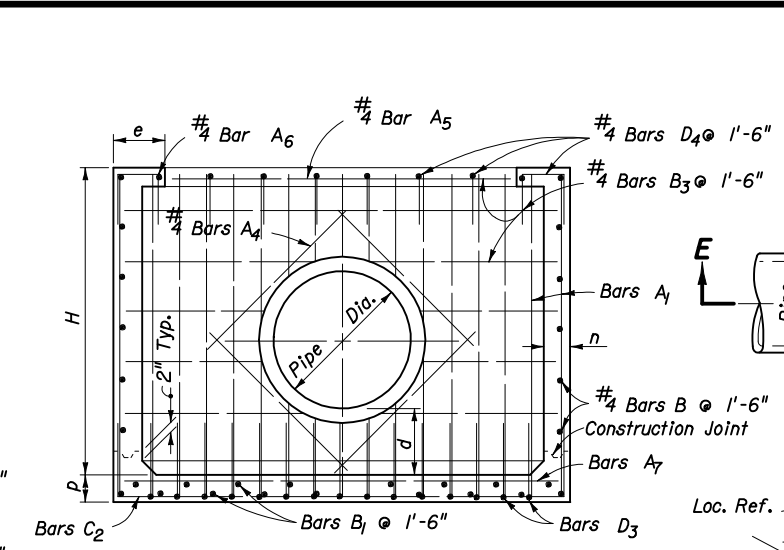
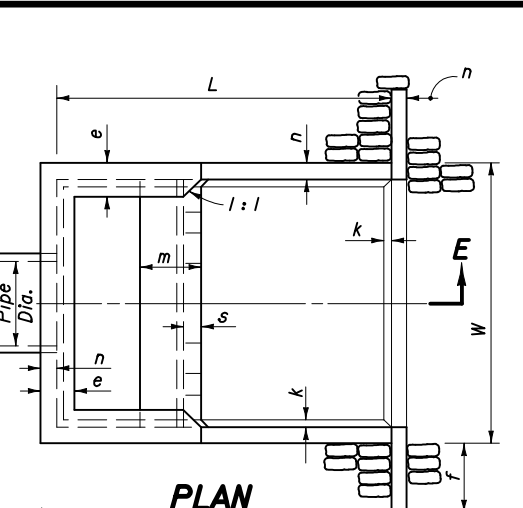


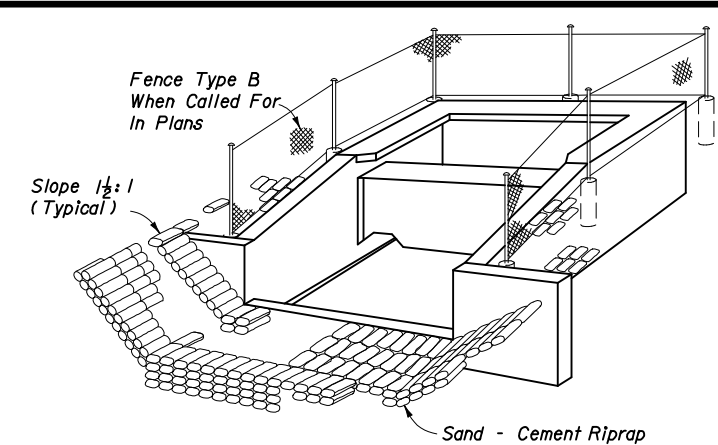
PLAN



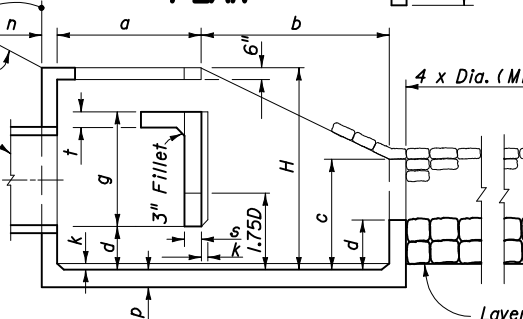
SECTION CC



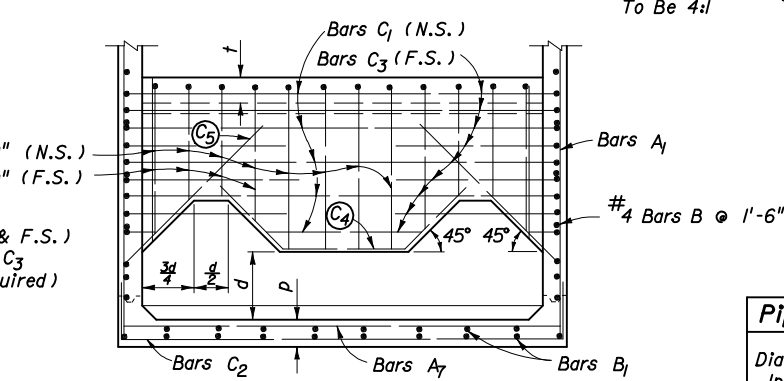
PLAN



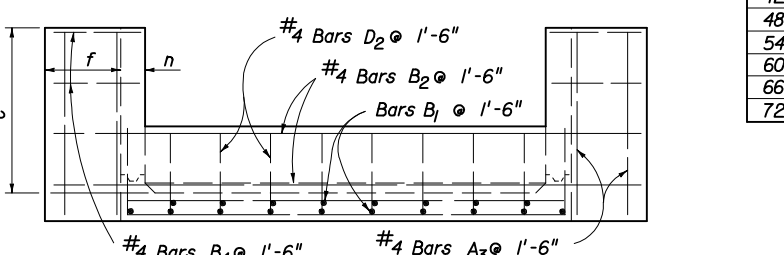
PERSPECTIVE



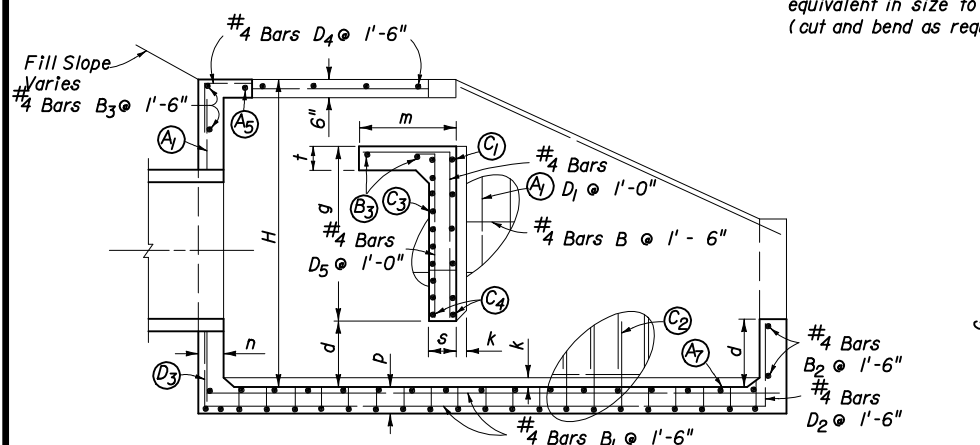
SECTION EE



SECTION DD



VIEW AA



SECTION BB

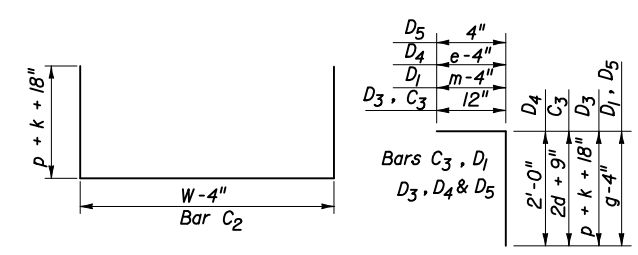
Note: Bars C4 & C5 (N.S. & F.S.) equivalent in size to C3 (cut and bend as required)

Pipe Size	Q (Max.) (cfs)	Dimensions															Concrete Class I C.Y.	Reinf. Steel Lbs.	Sand Cement Riprap C.Y. (Nom.)		
		Ft. - In.																			
		W	H	L	a	b	c	d	e	f	g	m	n	p	s	t				k	
30	4.91	59	9-0	6-3	10-8	4-7	6-1	3-4	1-4	1-2	2-6	3-0	1-11	6	6½	7	7	3	6.72	736	10.6
36	7.07	85	10-5	7-3	12-4	5-3	7-1	3-10	1-7	1-3	3-0	3-6	2-3	7	7½	8	8	3	10.34	1,072	13.6
42	9.62	115	11-10	8-0	14-0	6-0	8-0	4-5	1-9	1-6	3-0	3-11	2-6	8	8½	9	8	4	14.82	1,429	17.5
48	12.57	151	13-3	9-0	15-8	6-9	8-11	4-11	2-0	1-7	3-0	4-5	2-10	9	9½	10	8	4	20.36	2,000	22.1
54	15.90	191	14-8	9-9	17-4	7-4	10-0	5-5	2-2	1-10	3-0	4-11	3-0	10	10½	10	8	4	27.19	2,659	27.2
60	13.63	236	16-1	10-9	19-0	8-0	11-0	5-11	2-5	1-11	3-0	5-4	3-4	11	11½	11	8	6	34.49	3,552	32.5
66	23.76	285	17-3	11-6	20-6	8-8	11-10	6-5	2-7	2-1	3-0	5-9	3-7	12	12½	12	8	6	42.82	4,472	38.3
72	28.27	339	18-6	12-3	22-0	9-3	12-9	6-11	2-9	2-3	3-0	6-2	3-9	12	12½	12	8	6	50.68	5,426	44.5

GENERAL NOTES

- U-type concrete endwall energy dissipators are intended for use outside the clear zone.
- Chamfer all exposed edges 3/4"
- Concrete meeting the requirements of ASTM C478 (4000 psi) may be used in lieu of Class I Concrete in precast items manufactured in plants which are under the Standard Operating Procedures for the inspection of precast drainage products.
- Reinforcing steel shall have 2" min. cover.
- Endwall to be paid for under the contract unit price for Class I Concrete (Endwalls), CY and Reinforcing Steel (Roadway), LB. Riprap to be paid for under the contract unit price for Riprap (Sand-Cement) (Roadway), CY. Cost of plastic filter fabric to be included in the contract unit price for riprap.
- Fencing, when called for in the plans, to be paid for under the contract unit price for Fencing, Type B, LF. Corner posts and end posts to be paid for under the contract unit price for Corner Post Assembly (Type B Fence), EA, and End Post Assembly (Type B Fence), EA, respectively. See Index No. 452 for details of Type B fencing.

Pipe Size	A1		A7		C1		C2		C3		D3	
	Size (No.)	Spacing (Ft.-In.)	Size (No.)	Spacing (Ft.-In.)	Size (No.)	Spacing (Ft.-In.)	Size (No.)	Spacing (Ft.-In.)	Size (No.)	Spacing (Ft.-In.)	Size (No.)	Spacing (Ft.-In.)
30"	4	0-9½	4	1-6	5	0-11	4	0-9½	5	0-5½	4	0-9½
36"	5	1-0	4	1-6	5	0-10	5	1-0	5	0-5	5	1-0
42"	5	0-11	4	1-6	6	1-1	5	0-11	6	0-6½	5	0-11
48"	5	0-9½	4	1-0	6	1-0	5	0-9½	6	0-6	5	0-9½
54"	5	0-8½	4	0-10	7	1-1	5	0-8½	7	0-6½	5	0-8½
60"	6	0-10	5	1-1	7	1-0	6	0-10	7	0-6	6	0-10
66"	6	0-8½	5	0-11½	7	0-11	6	0-8½	7	0-5½	6	0-8½
72"	6	0-7½	5	0-10	7	0-10	6	0-7½	7	0-5	6	0-7½



Note: All bar dimensions are out to out.

BENDING DIAGRAM

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

## U-TYPE CONCRETE ENDWALL ENERGY DISSIPATOR

### 30" TO 72" PIPE

Designed By	HAB	10/69	Approved By	<i>S. A. McHenry</i> State Drainage Engineer	
Drawn By	RWR	02/84	Revision	Sheet No.	Index No.
Checked By	JVG	02/84	00	1 of 1	264