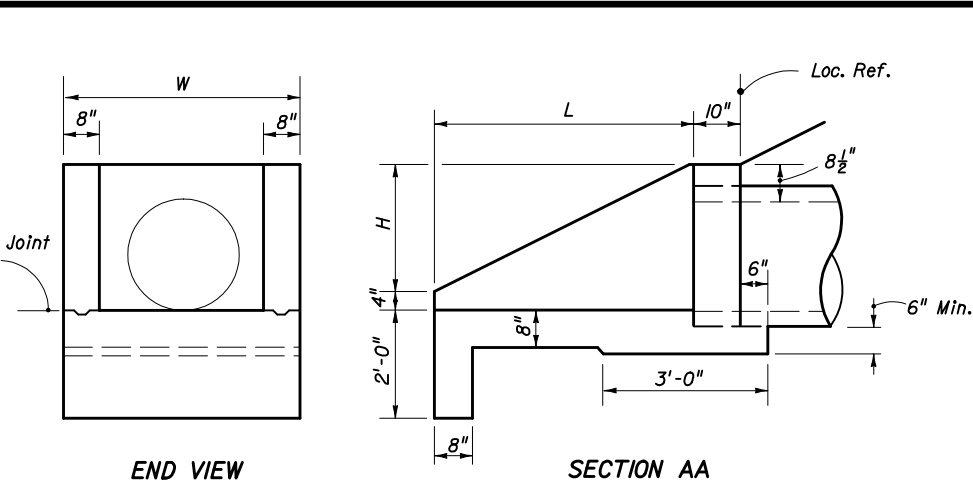


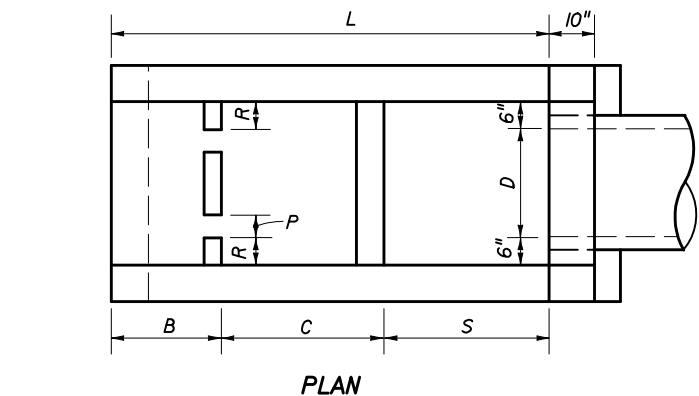
END VIEW

SECTION AA



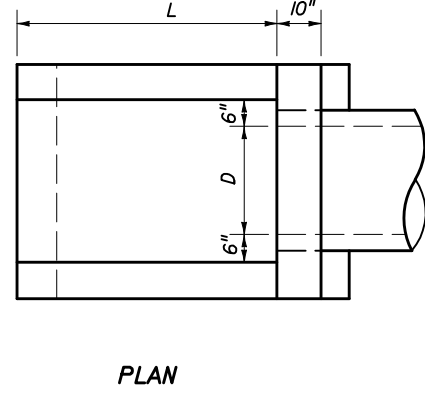
END VIEW

SECTION AA



PLAN

DIMENSIONAL DETAILS

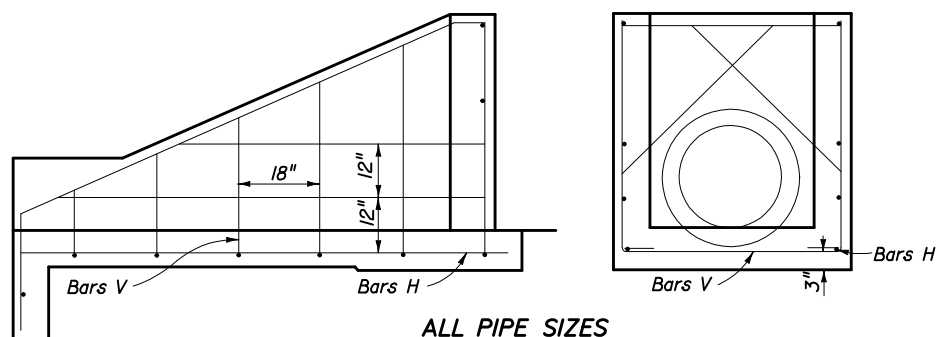


PLAN

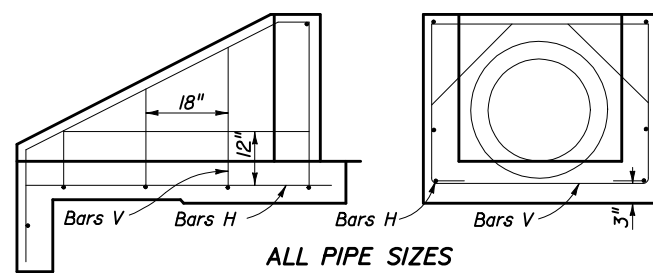
DIMENSIONAL DETAILS

GENERAL NOTES

1. Baffles to be constructed only when called for in plans.
2. When steel grating is required on endwall see Sheet 3 of 3 for details.
3. All reinforcing No. 4 bars with 2" clearance except as noted.
4. All angles, channels and bars shall be ASTM A242/A242M, A572/A572M or A588/A588M Grade 50 steel, when designated Alternate G in the plans galvanized in accordance with Section 962-7 of the Standard Specifications.
5. Channel section C 3 x 6 may be substituted for C 4 x 5.4 channel.
6. Precasting of this endwall will be permitted. Precast units shall conform to the dimensions shown or in accordance with approved shop drawings. Request for shop drawing approval shall be directed to the State Drainage Engineer. Use Index No. 201 for opening and grouting details.
7. Concrete meeting the requirements of ASTM C-478 (4000 psi) may be used in lieu of Class I concrete in precast units manufactured in plants which are under the Standard Operating Procedures for the inspection of precast drainage products.
8. Sodding shall be in accordance with Index No. 281, and paid for under the contract unit price for Sodding, SY.
9. Endwall to be paid for under the contract unit price for Class I Concrete (Endwalls), CY and Reinforcing Steel (Roadway), LB. Cost of grates to be paid for under the contract unit price for Endwall Grate, LB, plan quantity. Cost of galvanized bolts and nuts to be included in the bid price for the grate.



ALL PIPE SIZES
SIDE VIEW AND BACKWALL SECTION
REINFORCING DETAIL



ALL PIPE SIZES
SIDE VIEW AND BACKWALL SECTION
REINFORCING DETAIL

DIMENSIONS AND QUANTITIES FOR ONE U-ENDWALL														
Pipe Size		X Baffle							Y Baffle Reinf. Steel		Concrete Class I Cu. Yd.	Reinf. Steel Lbs.		
D	Area Sq. Ft.	L	H	W	S	B	C	P	Q	R			Bar M	Bar N
15"	1.23	5'-9"	2'-3 1/2"	3'-7"	2'-3"	1'-3"	2'-3"	4"	4"	4"	2 #4	1 #4	1.61	72
18"	1.77	6'-6"	2'-5"	3'-10"	2'-6"	1'-6"	2'-6"	4"	4"	5"	3 #4	2 #4	1.89	86
24"	3.14	8'-0"	2'-8"	4'-4"	3'-0"	2'-0"	3'-0"	5"	5"	6"	4 #4	3 #4	2.52	108
30"	4.91	9'-6"	2'-11"	4'-10"	3'-6"	2'-6"	3'-6"	5"	5"	7"	4 #4	4 #4	3.34	131

WITH BAFFLES

DIMENSIONS AND QUANTITIES FOR ONE U-ENDWALL						
Pipe Size		L	H	W	Concrete Class I Cu. Yd.	Reinf. Steel Lbs.
D	Area Sq. Ft.	L	H	W	Concrete Class I Cu. Yd.	Reinf. Steel Lbs.
15"	1.23	3'-3"	1'-7 1/2"	3'-7"	0.89	39
18"	1.77	3'-9"	1'-10 1/2"	3'-10"	1.05	43
24"	3.14	4'-9"	2'-4 1/2"	4'-4"	1.40	55
30"	4.91	5'-9"	2'-10 1/2"	4'-10"	1.88	64

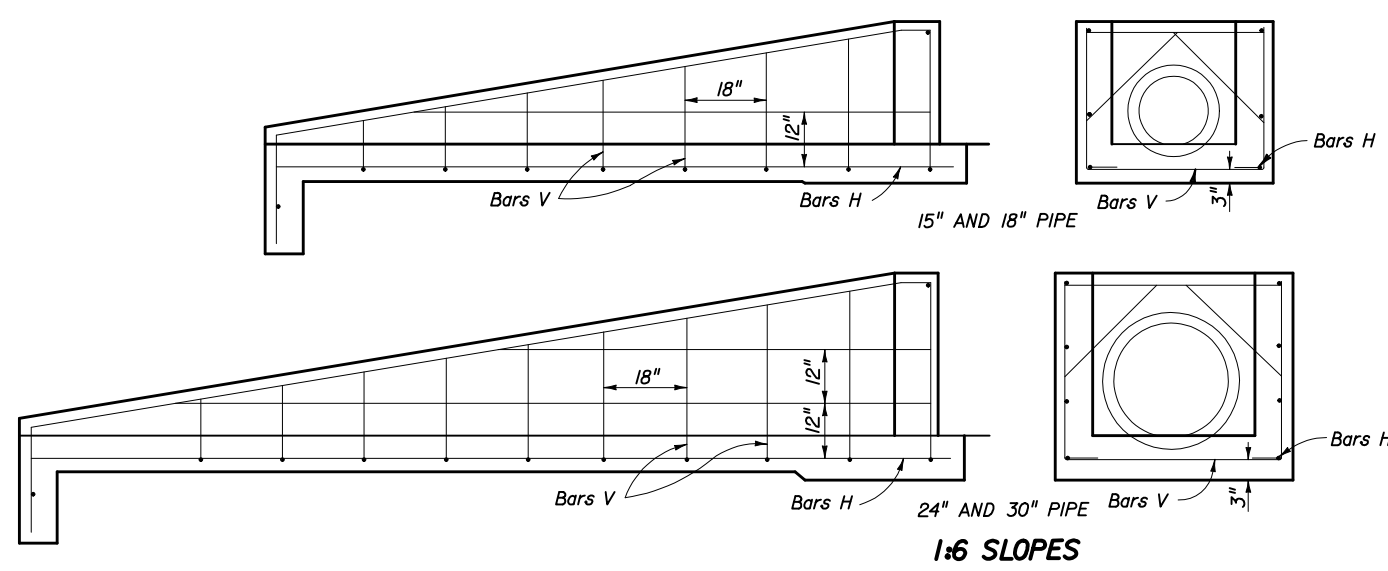
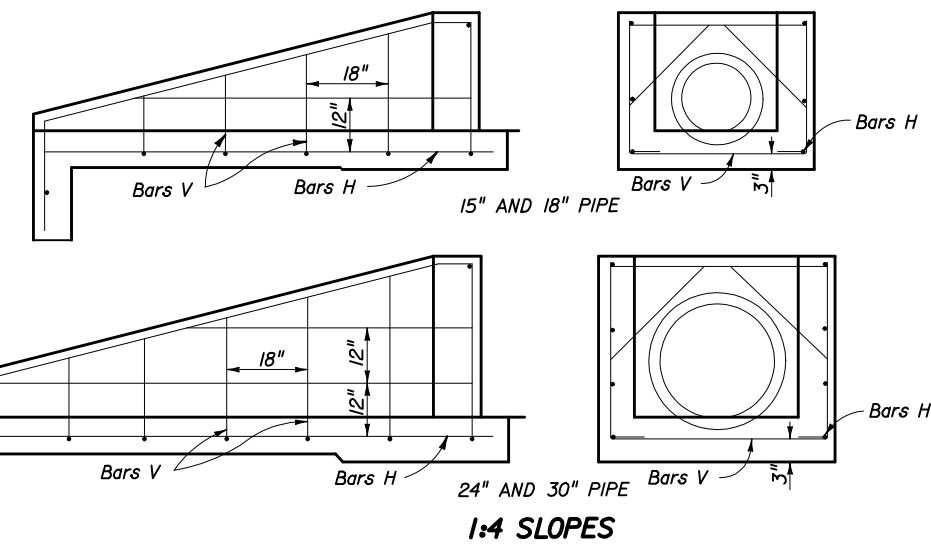
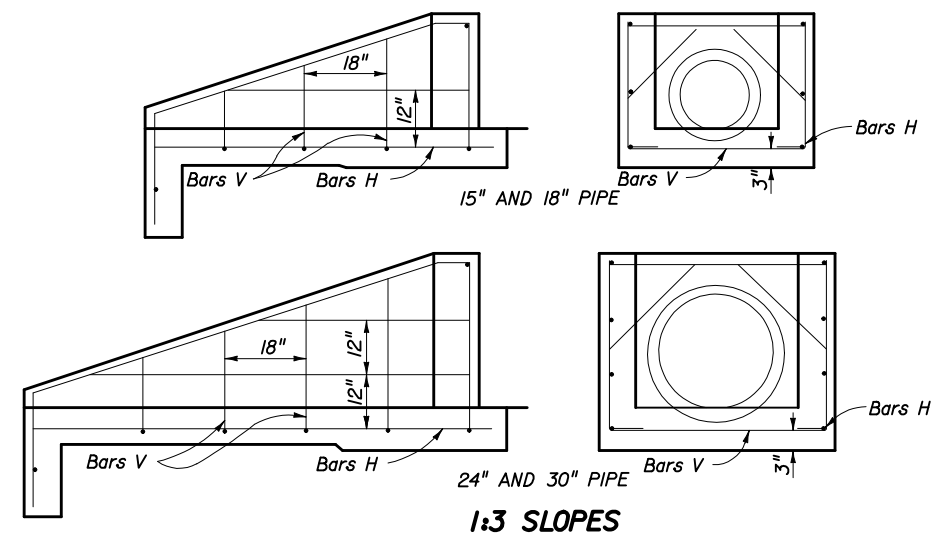
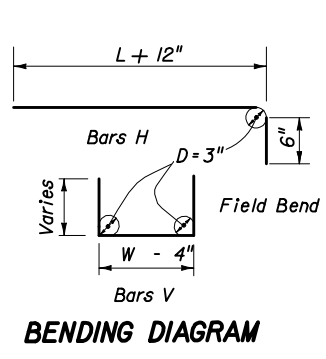
WITHOUT BAFFLES

ENDWALLS FOR 2:1 SLOPES

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

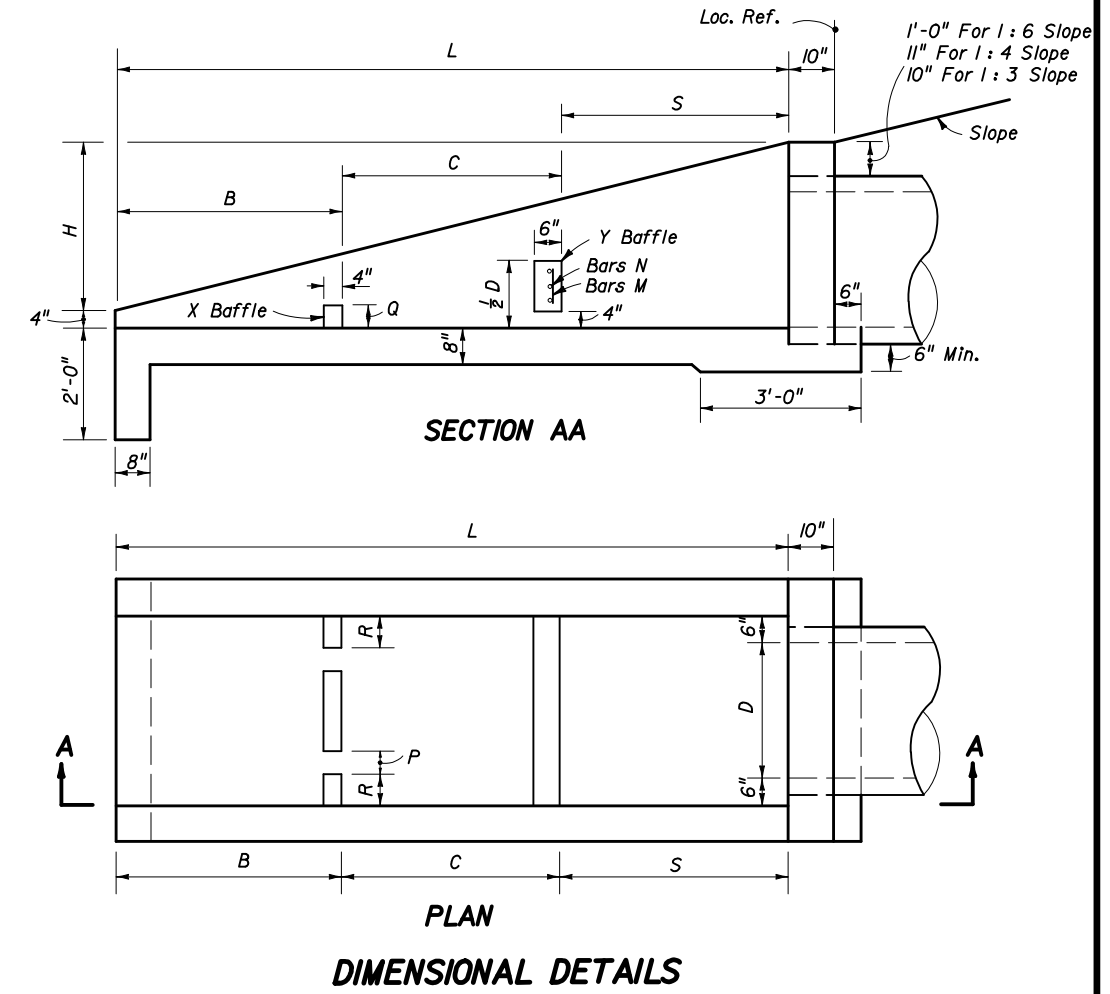
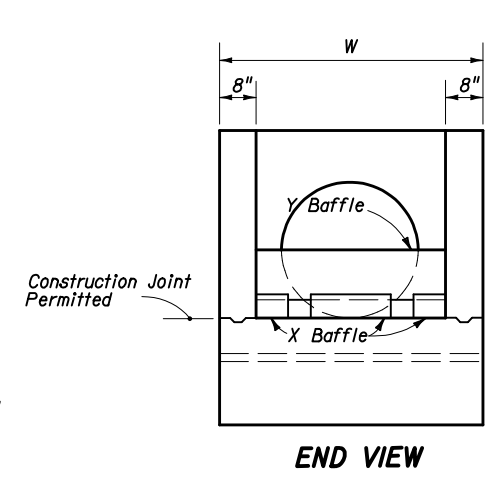
**U-TYPE CONCRETE ENDWALLS
BAFFLES AND GRATE OPTIONAL
15" TO 30" PIPE**

Names	Dates	Approved By	S. A. McHenry		
Designed By			State Drainage Engineer		
Drawn By	dde	09/85	Revision	Sheet No.	Index No.
Checked By			00	1 of 3	261



SIDE VIEWS AND BACKWALL SECTIONS REINFORCING DETAILS

ENDWALLS WITH AND WITHOUT BAFFLES FOR 1:3, 1:4 AND 1:6 SLOPES



DIMENSIONS AND QUANTITIES FOR ONE U-ENDWALL

Rate Of Slope	Pipe Size		Baffle Locations (When Required)			Concrete Class I Cu. Yd.	Reinf. Steel Lbs.	
	D	Area Sq. Ft.	L	H	W			
1:3	15"	1.23	5'-3"	1'-9"	3'-7"	1'-9" 1'-9" 1'-9"	1.19	51
	18"	1.77	6'-0"	2'-0"	3'-10"	2'-0" 2'-0" 2'-0"	1.42	56
	24"	3.14	7'-6"	2'-6"	4'-4"	2'-6" 2'-6" 2'-6"	1.94	77
	30"	4.91	9'-0"	3'-0"	4'-10"	3'-0" 3'-0" 3'-0"	2.54	96
1:4	15"	1.23	7'-4"	1'-10"	3'-7"	2'-6" 2'-6" 2'-4"	1.54	64
	18"	1.77	8'-4"	2'-1"	3'-10"	2'-10" 2'-10" 2'-8"	1.84	71
	24"	3.14	10'-4"	2'-7"	4'-4"	3'-6" 3'-6" 3'-4"	2.53	92
	30"	4.91	12'-4"	3'-1"	4'-10"	4'-2" 4'-2" 4'-0"	3.34	124
1:6	15"	1.23	11'-6"	1'-11"	3'-7"	3'-10" 3'-10" 3'-10"	2.19	89
	18"	1.77	13'-0"	2'-2"	3'-10"	4'-4" 4'-4" 4'-4"	2.63	103
	24"	3.14	16'-0"	2'-8"	4'-4"	5'-4" 5'-4" 5'-4"	3.59	143
	30"	4.91	19'-0"	3'-2"	4'-10"	6'-4" 6'-4" 6'-4"	4.81	180

DIMENSIONS AND QUANTITIES FOR BAFFLES

Pipe Size D	X Baffle			Y Baffle Reinf. Steel	Concrete Class I Cu. Yd.	Reinf. Steel Lbs.
	P Width	Q Height	R Length			
15"	4"	4"	4"	2-#4 1-#4	0.10	4
18"	4"	4"	5"	3-#4 2-#4		8
24"	5"	5"	6"	4-#4 3-#4		12
30"	5"	5"	7"	4-#4 4-#4		16

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

U-TYPE CONCRETE ENDWALLS BAFFLES AND GRATE OPTIONAL 15" TO 30" PIPE

Names	Dates	Approved By	State Drainage Engineer	
Designed By		<i>S. A. McHenry</i>	Sheet No.	Index No.
Drawn By	ddc 9/85	Revision	2 of 3	261
Checked By		00		

