

**INTERMEDIATE ANCHOR FOR PIPE (CLASS "A" CONCRETE)**

		DIAMETER OF PIPE IN INCHES																
		% GRADE	12"	15"	18"	21"	24"	27"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"
VOLUME IN CU. YDS. OF CLASS "A" CONC. FOR ONE ANCHOR	0	0.68	0.86	1.07	1.31	1.59	1.90	2.25	3.06	5.91	7.41	9.30	11.28	14.99	18.34	22.15	25.64	
	10	0.72	0.91	1.13	1.38	1.68	2.01	2.38	3.24	6.23	7.83	9.70	11.79	15.77	19.27	23.24	26.88	
	20	0.75	0.96	1.19	1.44	1.78	2.14	2.52	3.43	6.59	8.28	10.07	12.24	16.48	20.11	24.22	27.98	
	30	0.79	1.01	1.26	1.53	1.88	2.27	2.67	3.65	6.97	8.78	10.40	12.64	17.12	20.87	25.10	28.95	
	40	0.84	1.07	1.33	1.62	1.99	2.41	2.83	3.88	7.39	9.31	10.69	12.99	17.70	21.53	25.88	29.79	
	50	0.88	1.13	1.41	1.72	2.11	2.56	3.01	4.12	7.83	9.87	10.95	13.30	18.22	22.13	26.55	30.51	
	60	0.93	1.19	1.49	1.82	2.24	2.71	3.19	4.38	8.29	10.47	11.12	13.57	18.69	22.66	27.15	31.15	
	70	0.98	1.25	1.57	1.94	2.37	2.87	3.38	4.65	8.77	11.10	11.40	13.81	19.12	23.14	27.69	31.70	
	80	1.03	1.32	1.66	2.08	2.50	3.07	3.58	4.93	9.28	11.58	11.74	14.02	19.51	23.57	28.16	32.17	
	90	1.08	1.39	1.75	2.19	2.64	3.25	3.79	5.22	9.79	11.75	12.41	14.21	19.79	23.87	28.46	32.42	
100	1.13	1.46	1.84	2.31	2.78	3.43	4.00	5.52	10.32	11.91	13.10	14.38	20.20	24.31	28.95	32.92		
DIMENSIONS	L	3'-4"	3'-7½"	3'-11"	4'-2½"	4'-6"	4'-9½"	5'-1"	5'-8"	6'-11"	7'-6"	8'-1"	8'-8"	9'-7"	10'-2"	10'-9"	11'-4"	
	W	2'-4"	2'-7½"	2'-11"	3'-2½"	3'-6"	3'-9½"	4'-1"	4'-8"	5'-7"	6'-2"	6'-9"	7'-4"	8'-1"	8'-8"	9'-3"	9'-10"	
	H	1'-8"	1'-11¼"	2'-2½"	2'-5¾"	2'-9"	3'-0¼"	3'-3½"	3'-10"	4'-6½"	5'-1"	5'-7½"	6'-2"	6'-9½"	7'-4"	7'-10½"	8'-5"	
	D	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-6"	1'-6"	1'-6"	1'-8"	1'-8"	1'-8"	2'-0"	2'-0"	
	T	6"	6"	6"	6"	6"	6"	6"	6"	6"	8"	8"	8"	8"	9"	9"	9"	9"

**END ANCHOR FOR PIPE OUTLET (CLASS "A" CONCRETE)**

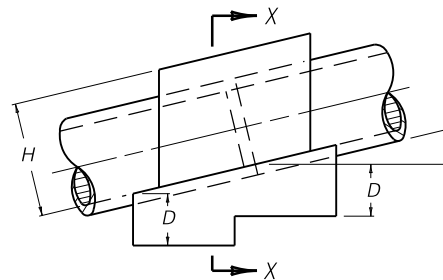
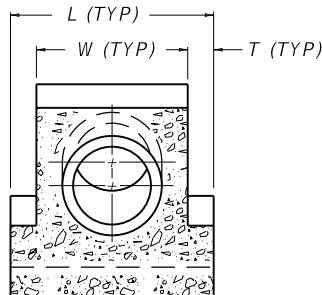
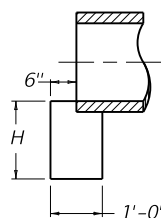
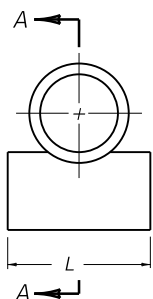
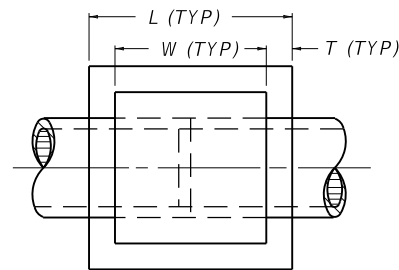
DIMENSIONS	L	2'-4"	2'-8"	2'-9"	3'-3"	3'-6"	3'-10"	4'-1"	4'-0"	5'-3"	5'-10"	6'-5"	7'-0"	7'-7"	8'-2"	8'-9"	9'-4"
	H ON EARTH	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	1'-6"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"
	H ON ROCK	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
VOLUME CU. YDS.	ON EARTH	0.13	0.15	0.16	0.18	0.19	0.21	0.23	0.26	0.39	0.43	0.48	0.52	0.56	0.61	0.65	0.69
	ON ROCK	0.09	0.10	0.10	0.12	0.13	0.14	0.15	0.17	0.19	0.22	0.24	0.26	0.28	0.31	0.33	0.35

~ NOTES ~

BID ITEM AND UNIT TO BID  
CONCRETE-CLASS "A"

CUYD

1. CIRCULAR PIPE INCLUDES SLIGHTLY ELLIPTICAL CONCRETE PIPE WITH CIRCULAR REINFORCEMENT.
2. THE VOLUME DISPLACED BY BARREL OF PIPE HAS BEEN COMPUTED USING INSIDE DIMENSION OF PIPE.
3. THE UNIT PRICE BID PER CU. YD. FOR CLASS "A" CONCRETE SHALL INCLUDE ALL FORMS, MATERIAL, LABOR, ETC. INCIDENTAL TO CONSTRUCTION.
4. FOR GRADE BREAKS IN PIPE, USE AVERAGE GRADE TO CALCULATE VOLUMES.



END ELEVATION

SECTION A-A

SECTION X-X

ELEVATION VIEW

END ANCHOR FOR PIPE OUTLET

INTERMEDIATE ANCHOR

KENTUCKY  
DEPARTMENT OF HIGHWAYS

INTERMEDIATE  
AND END ANCHORS  
FOR CIRCULAR PIPE

STANDARD DRAWING NO. RDX-060-04

SUBMITTED	<i>[Signature]</i>	12-01-15
DESIGNED BY	DATE OF DESIGN	DATE
APPROVED	<i>[Signature]</i>	12-01-15
STATE HIGHWAY ENGINEER		DATE