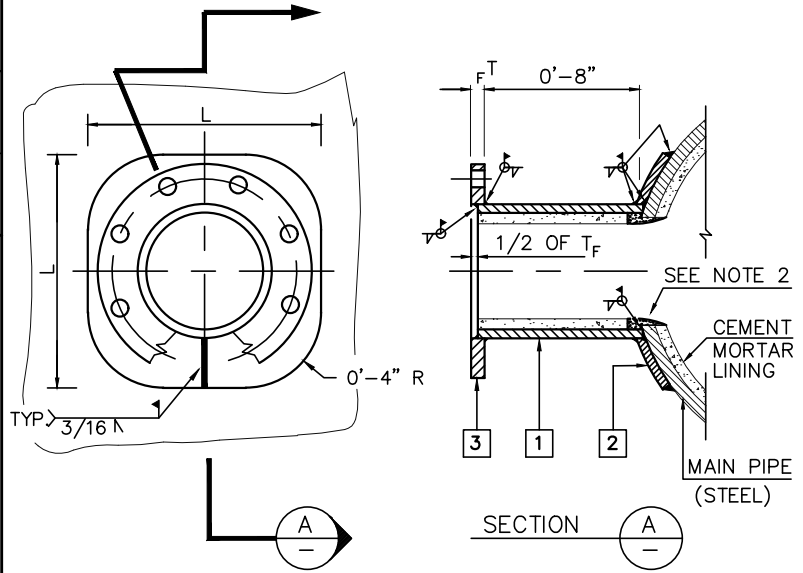


MAIN PIPE NOMINAL SIZE	4	6	8	10	12	14	16	18	20	24	30
OD	4.500	6.625	8.625	10.750	12.750	14.000	16.000	18.000	20.000	24.000	30.000
WALL THICKNESS	0.237	0.280	0.322	0.365	0.406	0.1345	0.1345	0.1345	0.1345	0.1875	0.1875

1 BRANCH PIPE				2 WRAPPER/COLLAR PLATE																						
NOMINAL SIZE	OD	WALL THICKNESS	PLATE THICKNESS	LENGTH (L)																						
				4	6	8	10	12	14	16	18	20	24	30												
4	4.500	0.237	0.1875	8	8	8	8	8	8	8	8	9	8	9												
6	6.625	0.280	0.1875		12	12	12	12	12	12	12	13	12	13												
8	8.625	0.322	0.1875			15	15	15	15	15	15	17	15	17												
10	10.750	0.365	0.1875				18	18	18	18	18	21	18	21												
12	12.750	0.406	0.1875					22	22	22	22	25	22	25												
14	14.000	0.1345	0.1875						W	W	W	24	28	28	28											
16	16.000	0.1345	0.1875							W	W	W	W	32	32											
18	18.000	0.1345	0.1875	THIS STANDARD NOT APPLICABLE FOR OUTLETS a) WHERE BRANCH PIPE SIZE > MAIN PIPE SIZE b) WHERE WRAPPER REQUIRED (W)																						
20	20.000	0.1345	0.1875																							
24	24.000	0.1875	0.1875																							
30	30.000	0.1875	0.1875																							

NOTE: ALL TABLE VALUES ARE IN INCHES



NOTES:

- 1) WELDING SHOWN MAY EITHER BE SHOP OR FIELD PERFORMED. ALL WELDING SHALL BE PER AWWA C206.
- 2) CEMENT MORTAR LINING SHALL BE EXTENDED INTO THE INTERIOR OF THE BRANCH PIPE AND SHALL BE COMPLETELY AND SMOOTHLY FINISHED BY HAND.

PARTS LIST:

1	BRANCH PIPE (STEEL PIPE, CEMENT LINED, COAL TAR WRAPPED.)
2	WRAPPER/COLLAR PLATE (STEEL TO BE ASTM A36)
3	SLIP-ON WELD FLANGE (STEEL, AWWA C207 CLASS D, 150 PSI)



STANDARD FLANGE OUTLET WITH COLLAR PLATE REINFORCEMENT

APPROVED	DATE	REV	STD NO
<i>[Signature]</i>	5\16\02	1	9