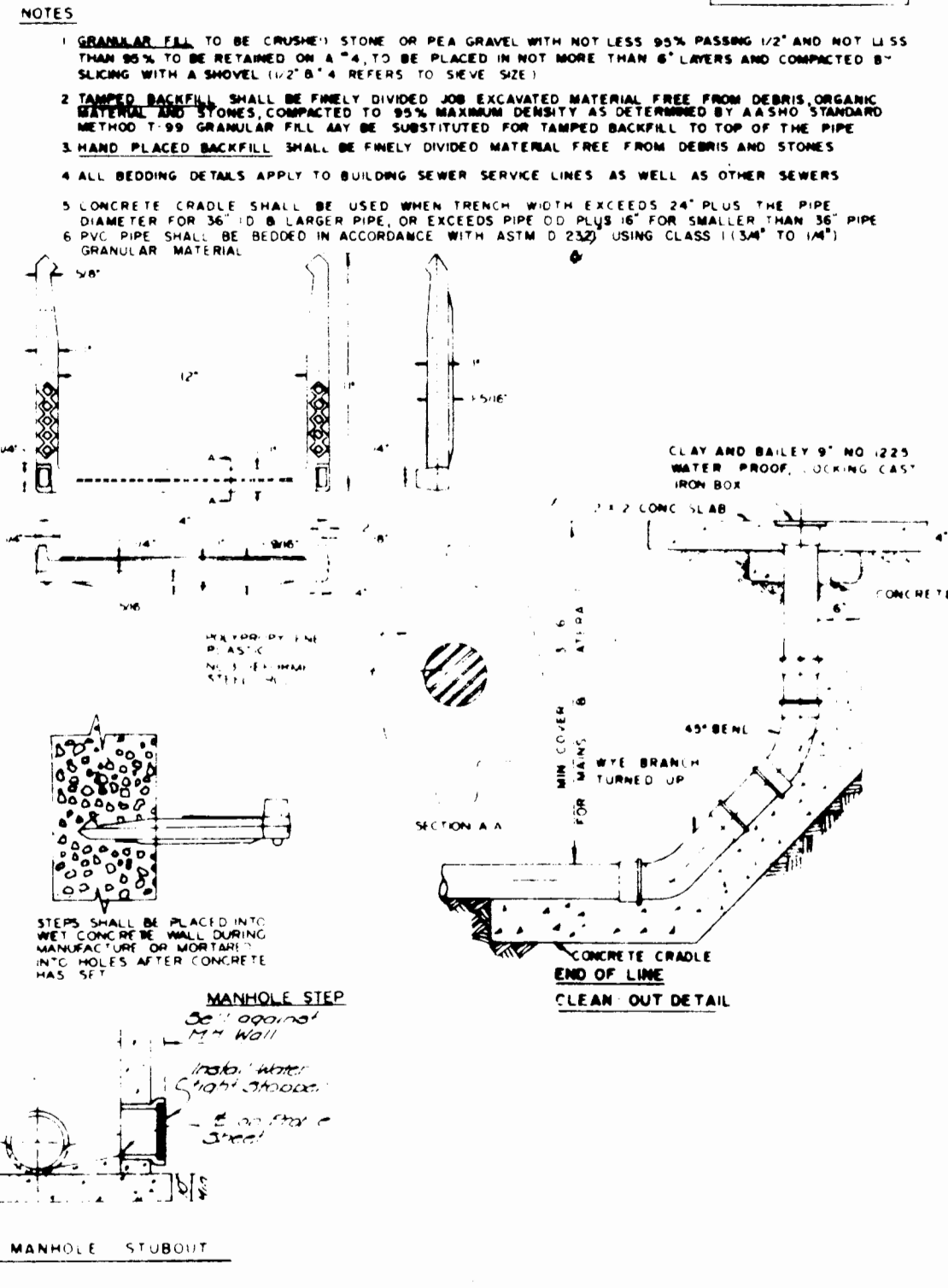
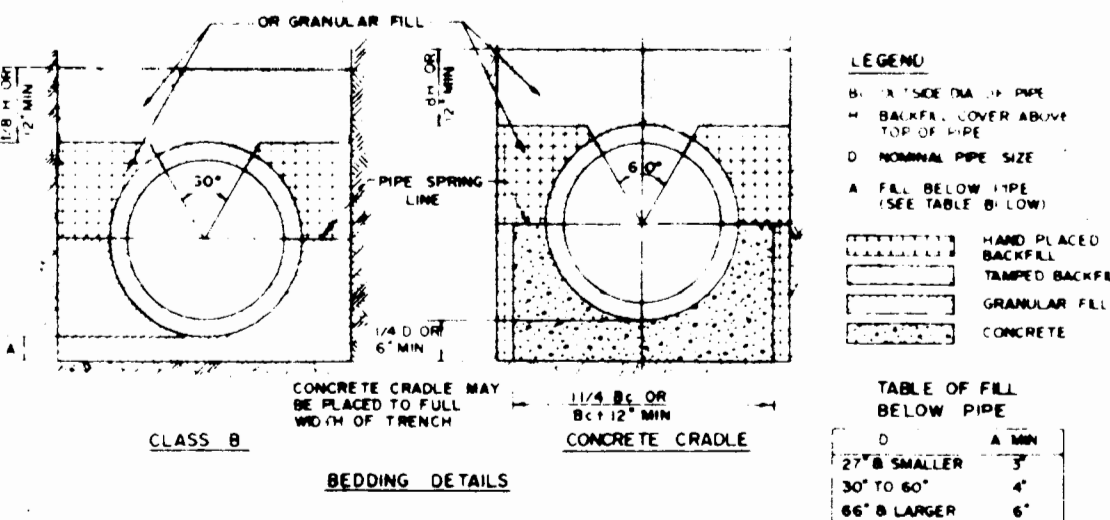
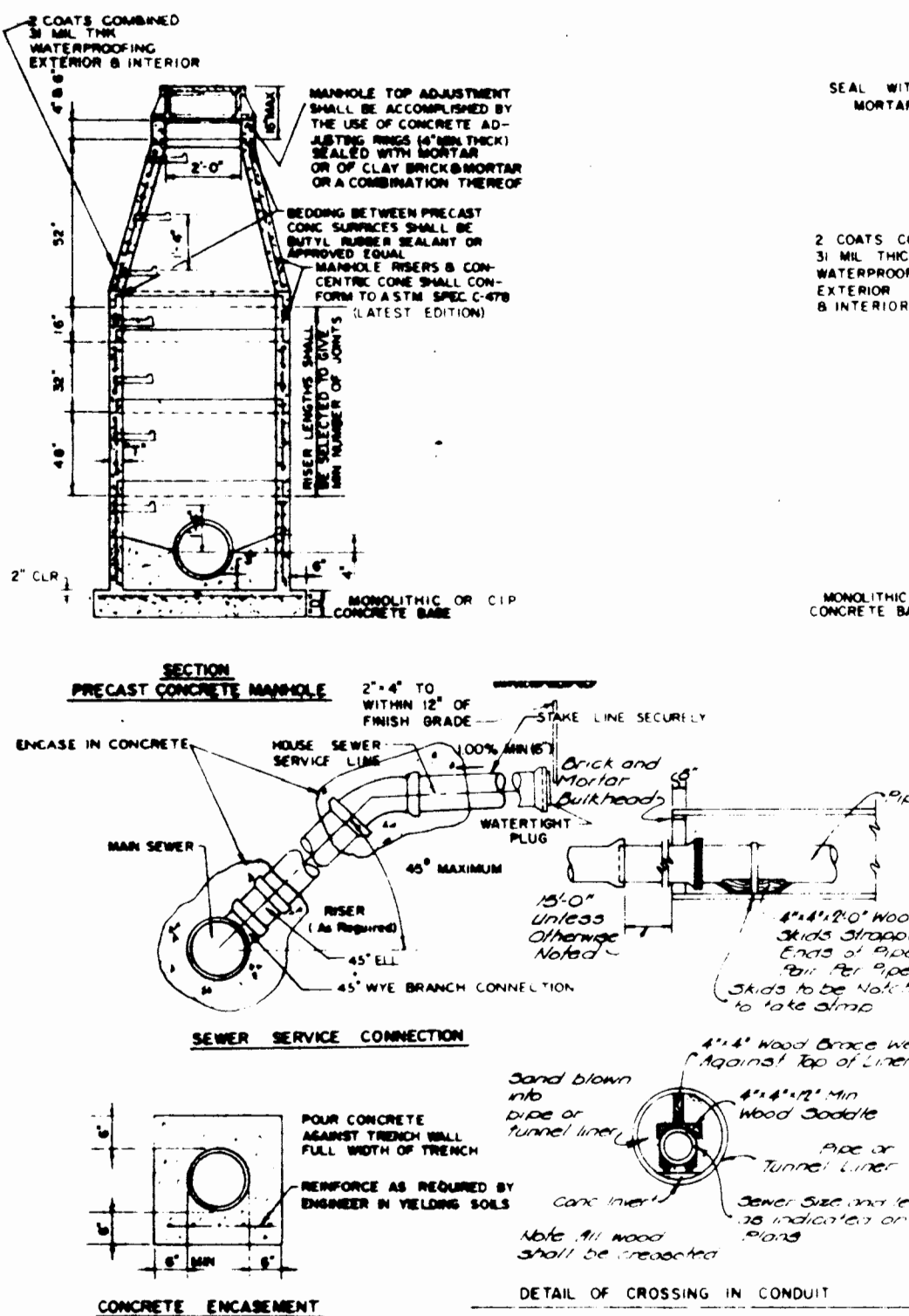
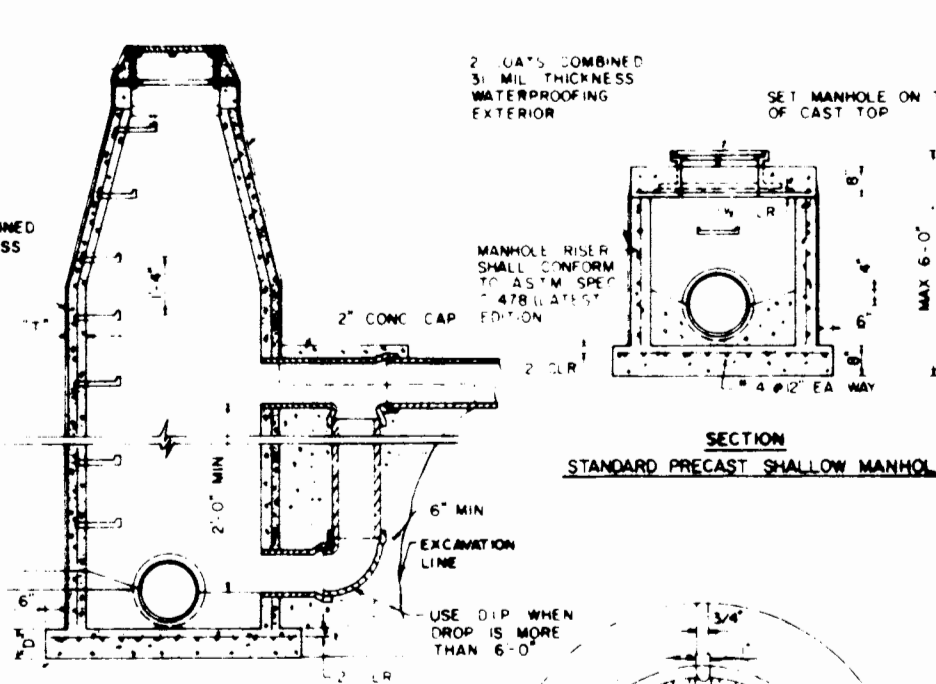
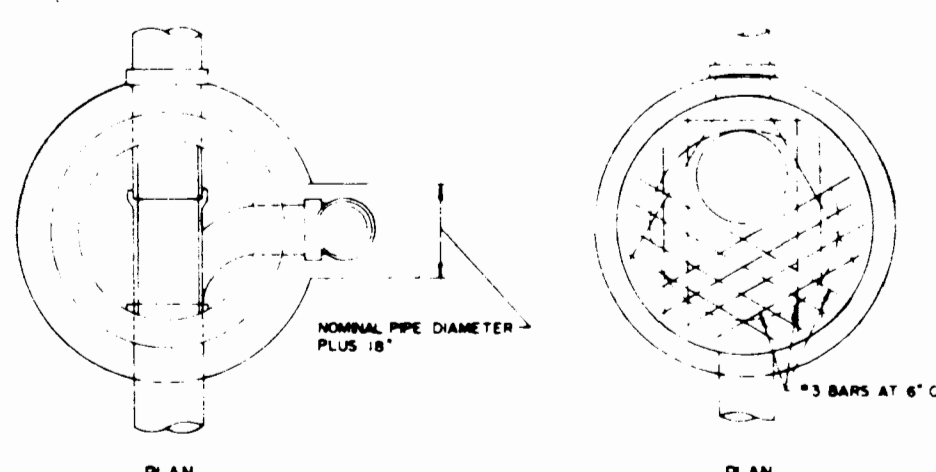
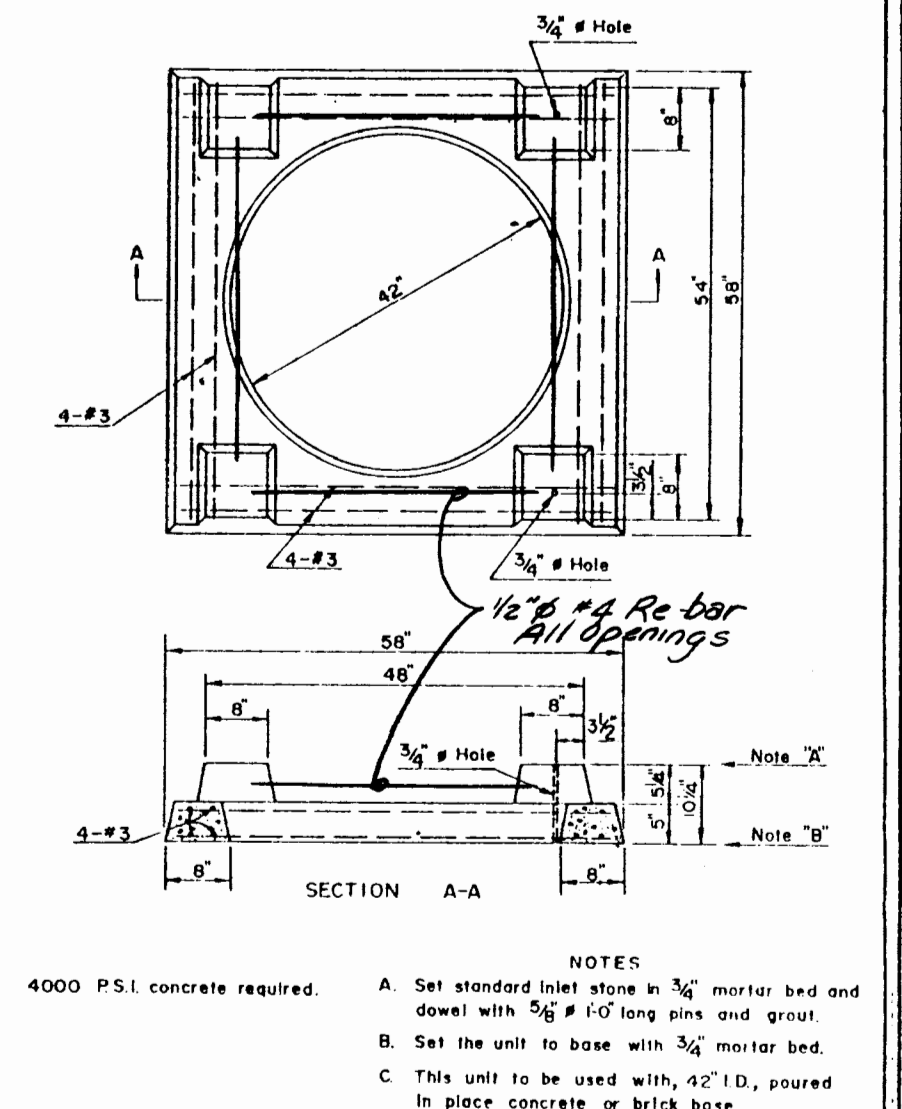
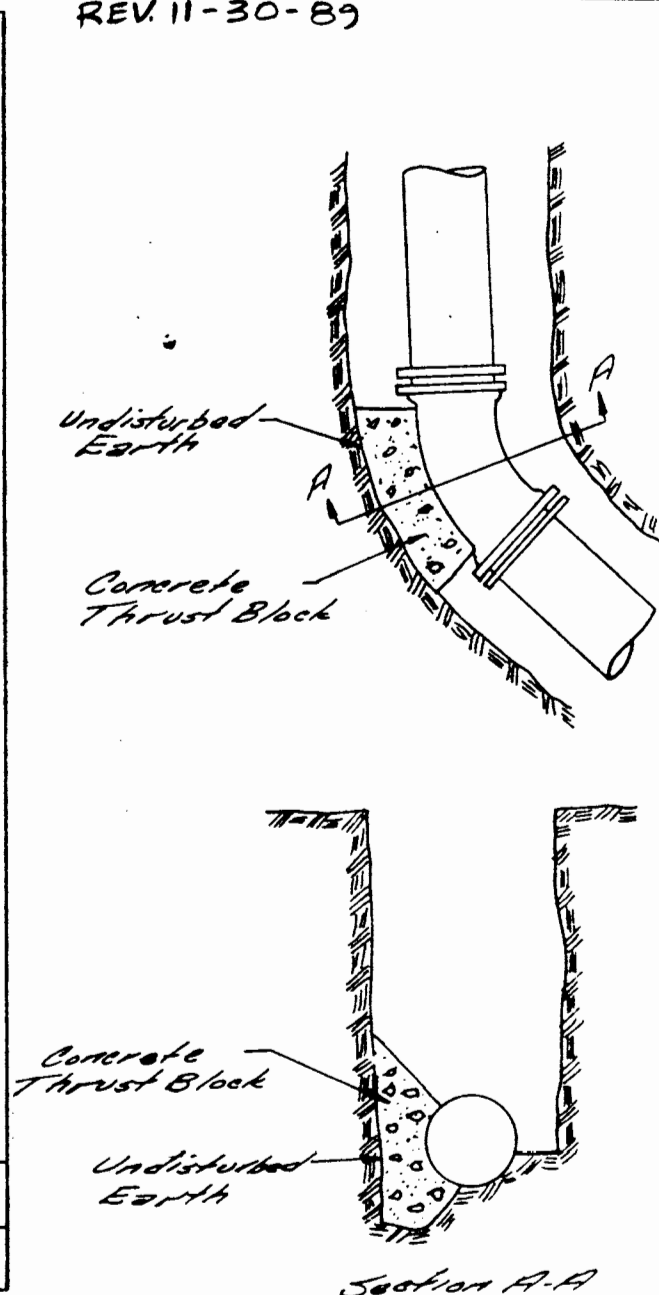
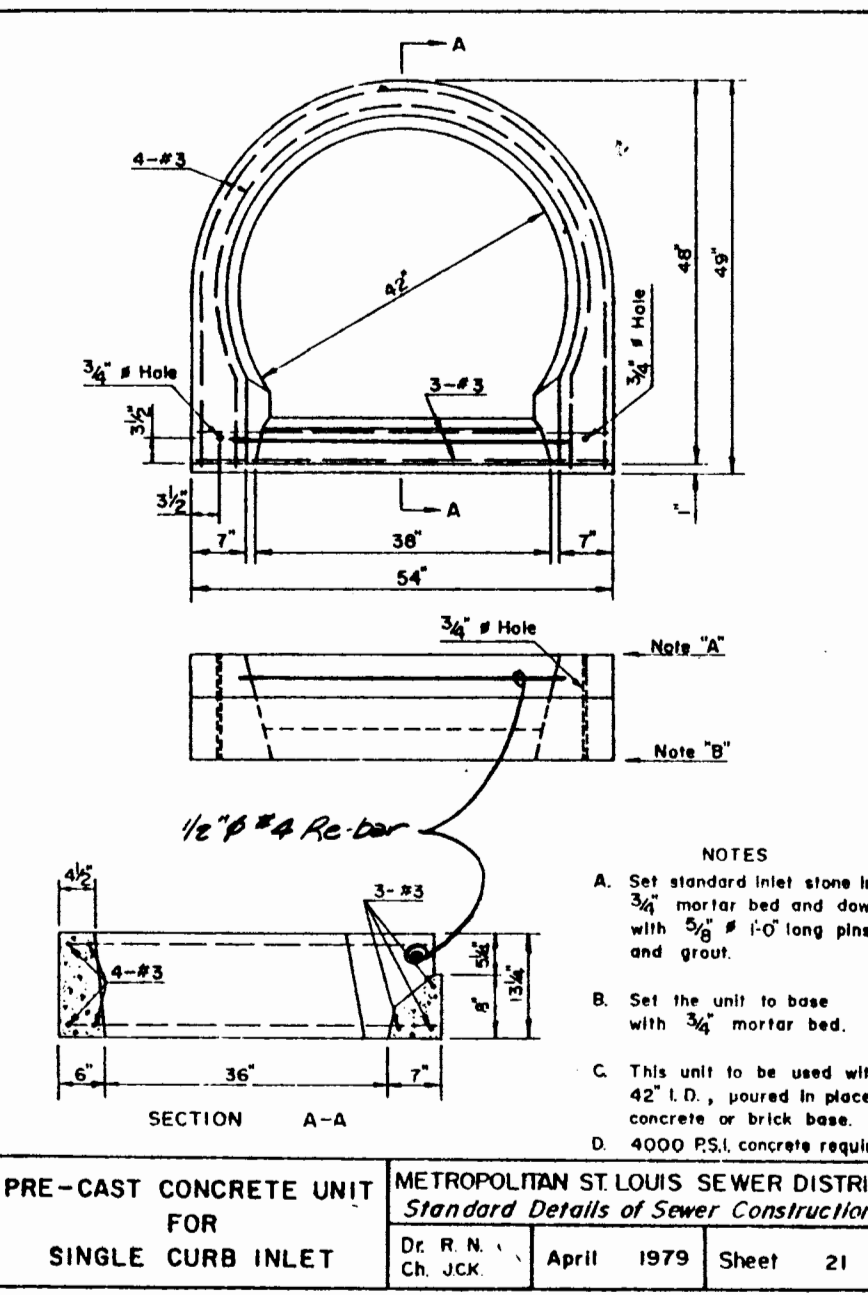
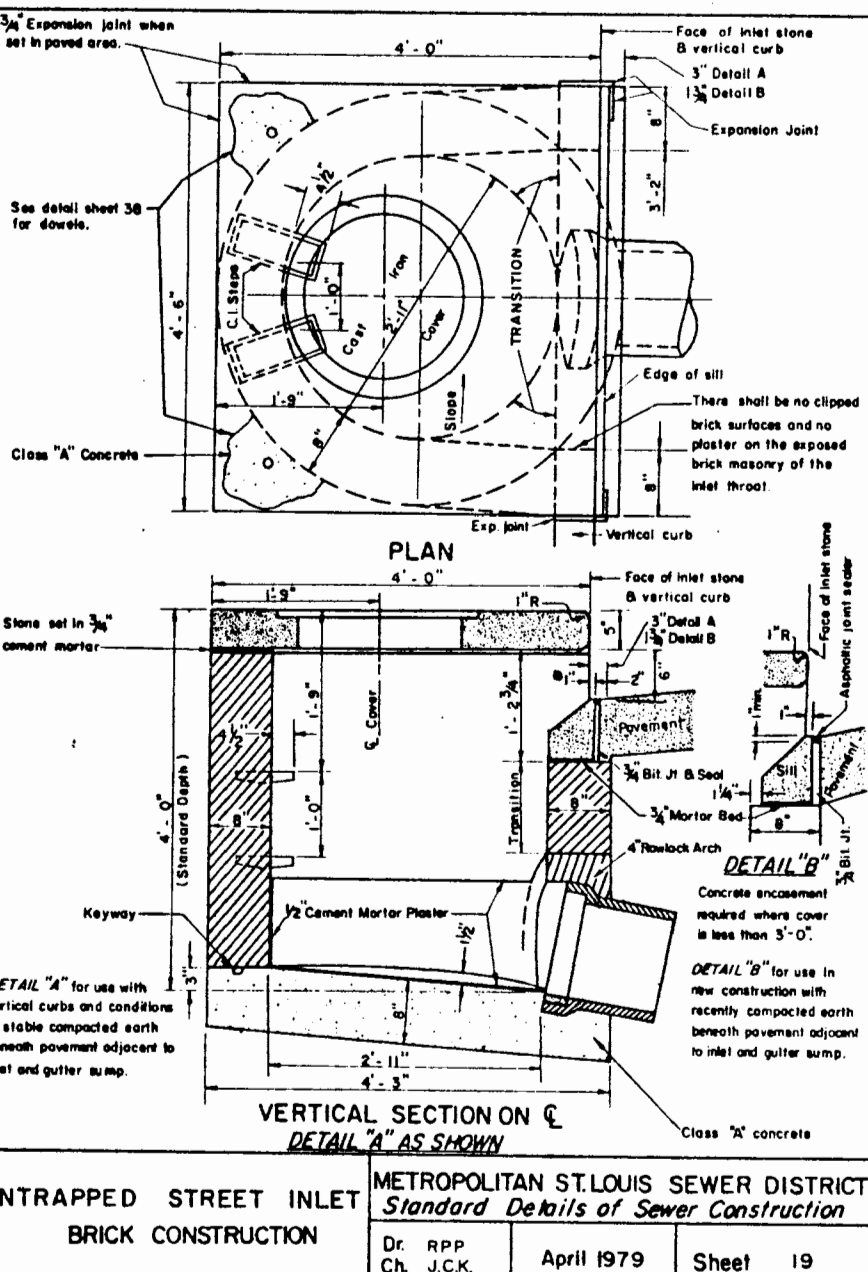
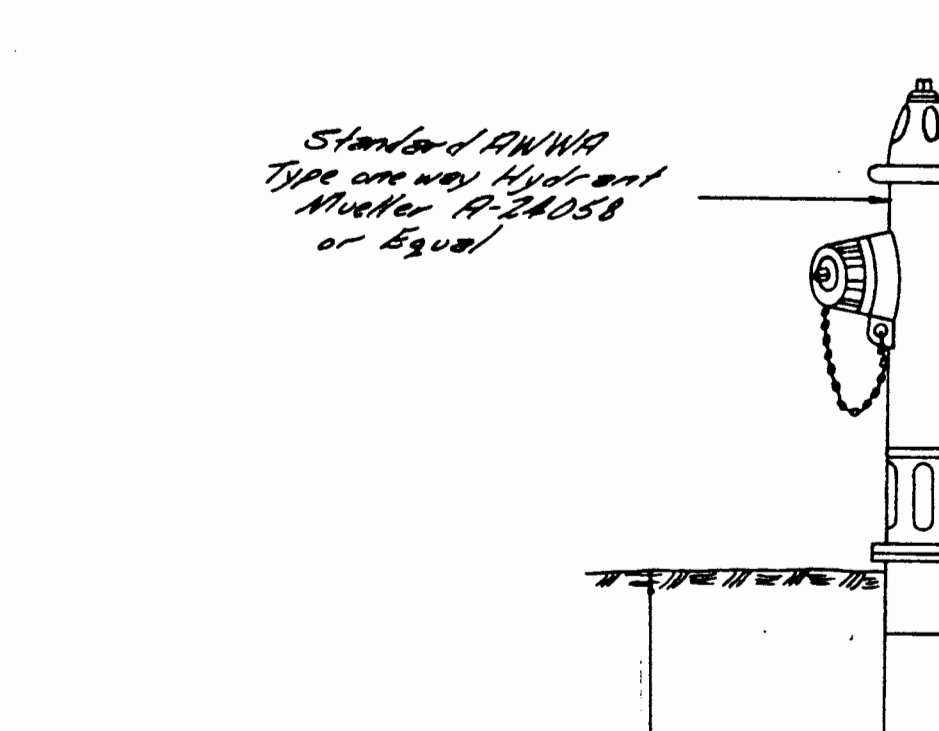


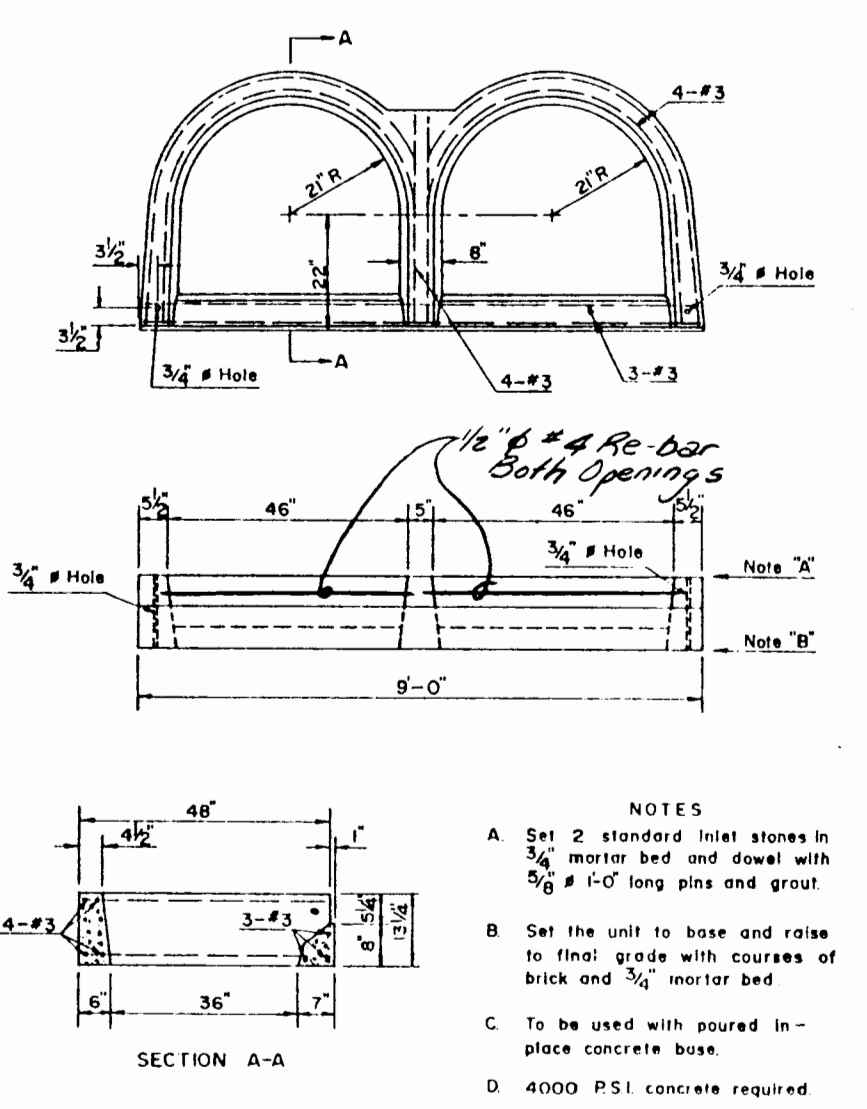
WALL THICKNESS	MANHOLE BASE THICKNESS
4" MIN	12" MIN
6"	18"
8"	24"
10"	30"
12"	36"
14"	42"
16"	48"
18"	54"
20"	60"
22"	66"
24"	72"
26"	78"
28"	84"
30"	90"
32"	96"
34"	102"
36"	108"
38"	114"
40"	120"
42"	126"
44"	132"
46"	138"
48"	144"
50"	150"
52"	156"
54"	162"
56"	168"
58"	174"
60"	180"
62"	186"
64"	192"
66"	198"
68"	204"
70"	210"
72"	216"
74"	222"
76"	228"
78"	234"
80"	240"
82"	246"
84"	252"
86"	258"
88"	264"
90"	270"
92"	276"
94"	282"
96"	288"
98"	294"
100"	300"



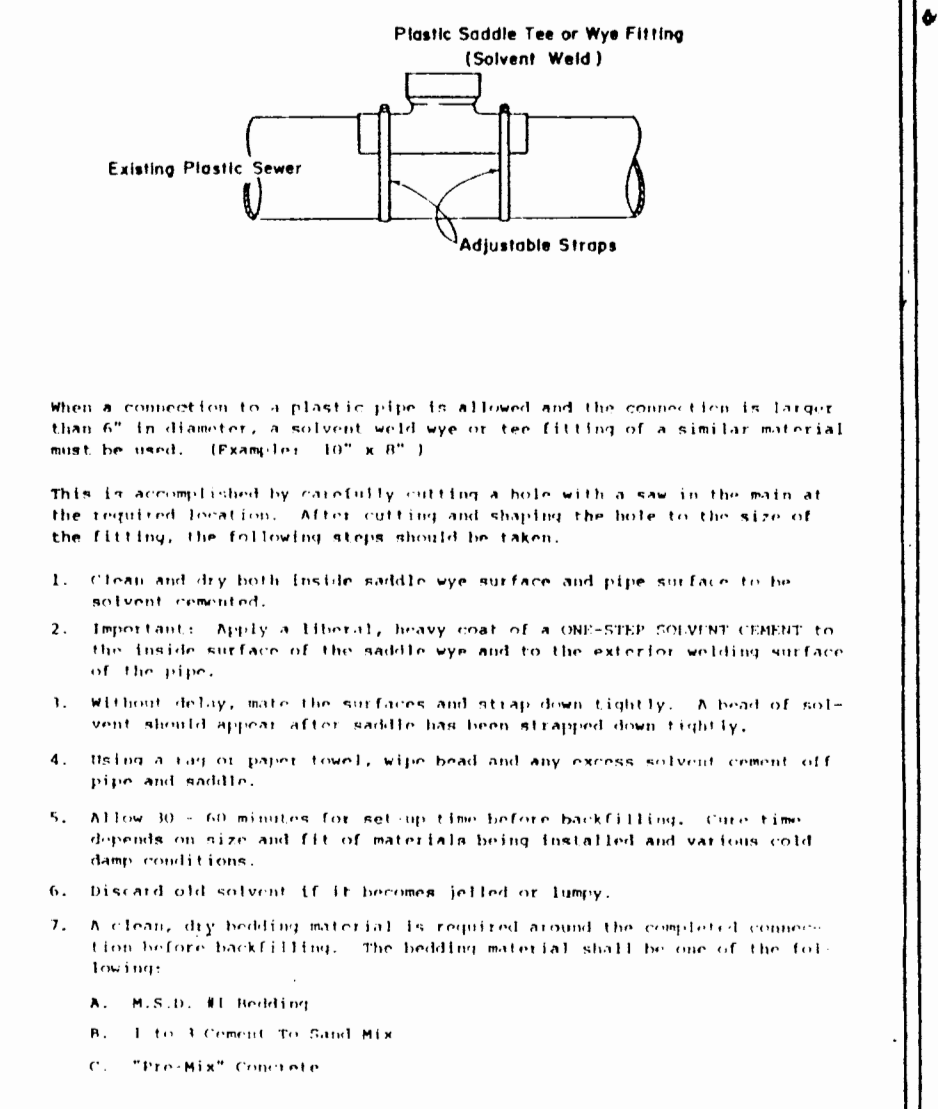
ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
Inside Diameter of Pipe (Inches)	Payline Width of Trench (Inches)	Payline Width of Trench (Feet)	Payline Volume cu ft per ft of Trench	Inside Dimension of Pipe (Inches)	Payline Width of Trench (Inches)	Payline Width of Trench (Feet)	Payline Volume cu ft per ft of Trench
4	28	2.33	3.20				
6	28	2.33	3.46				
8	28	2.33	3.70				
10	28	2.33	3.86				
12	28	2.33	3.98				
15	32	2.67	4.89				
18	35	2.92	5.63	14 x 23	41	3.42	5.91
21	39	3.25	6.61				
24	42	3.50	7.39	19 x 30	49	4.08	7.68
27	45	3.75	8.18	22 x 34	53	4.42	8.61
30	49	4.08	9.30	24 x 38	58	4.83	9.70
33	53	4.42	10.53	27 x 42	62	5.17	10.71
36	56	4.67	11.43	29 x 45	66	5.50	11.72
39				32 x 49	71	5.92	13.14
42	63	5.25	13.38	34 x 53	75	6.25	14.00
48	70	5.83	15.67	38 x 60	83	6.92	16.18
54	77	6.42	18.15	43 x 68	92	7.67	18.81
60	84	7.00	20.73	48 x 76	101	8.42	21.59
66	91	7.58	23.45	53 x 83	109	9.00	24.35
72	98	8.17	26.37	58 x 91	118	9.83	27.45
78	105	8.75	29.39	63 x 98	126	10.50	30.50
84	112	9.33	32.57	68 x 106	135	11.25	33.91
90	118	9.82	35.90	72 x 115	143	11.92	36.99
96	126	10.50	39.37	77 x 121	152	12.67	40.69
102	133	11.08	42.99	82 x 128	160	13.33	44.45
108	140	11.67	46.75	87 x 136	168	14.00	47.79
114	147	12.25	50.66	92 x 143	176	14.67	51.70
120	154	12.83	54.72	97 x 151	185	15.42	56.01
126	161	13.42	58.92				
132	168	14.00	63.27	106 x 166	202	16.83	64.44
144	182	15.17	72.40	116 x 180	218	18.17	73.59



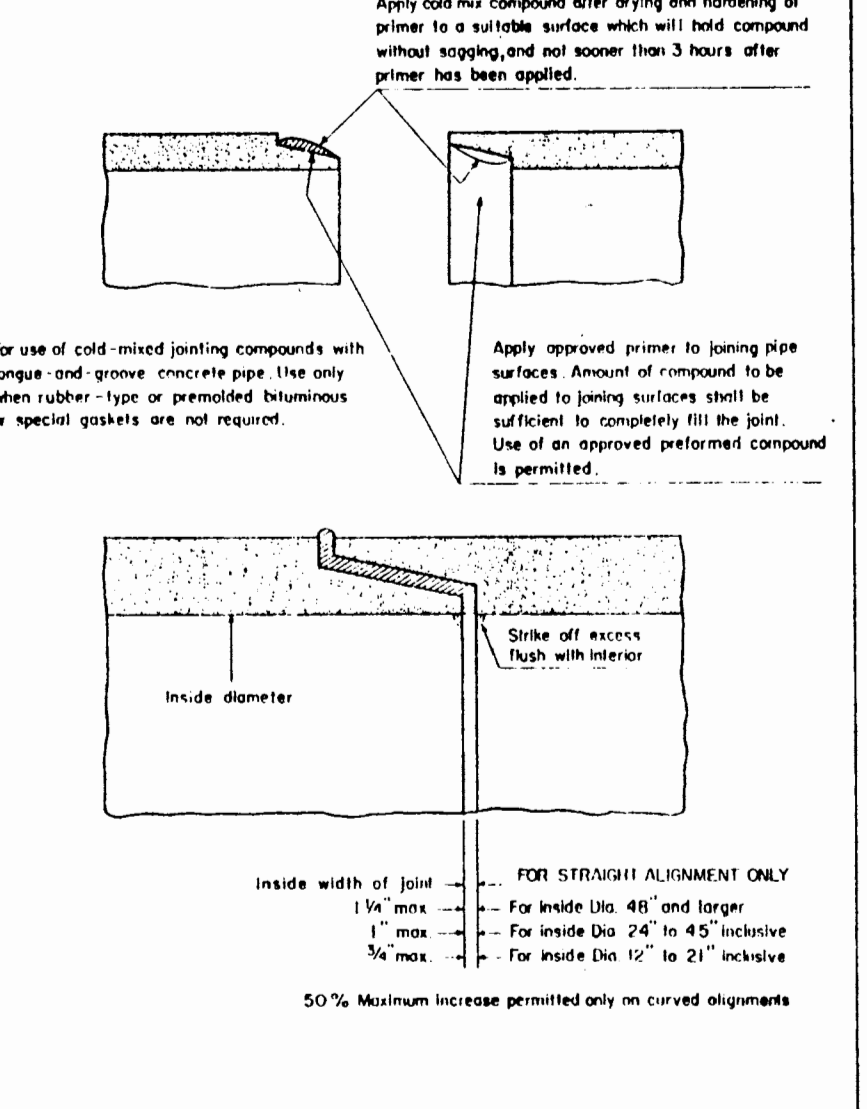
PRE-CAST CONCRETE UNIT FOR 4 WAY AREA INLET
 METROPOLITAN ST LOUIS SEWER DISTRICT
 Standard Details of Sewer Construction
 Dr. R. N. Ch. JCK April 1979 Sheet 25



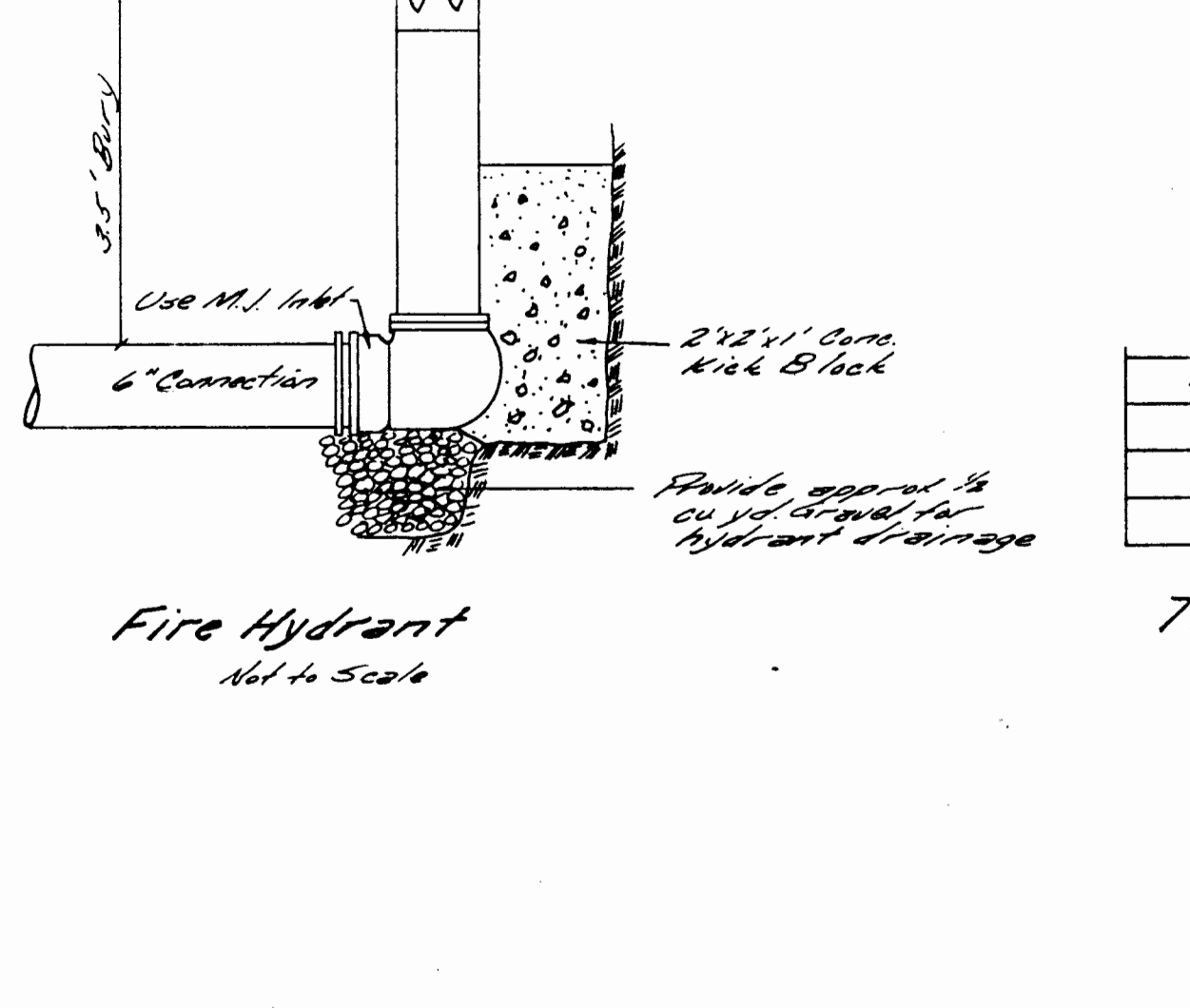
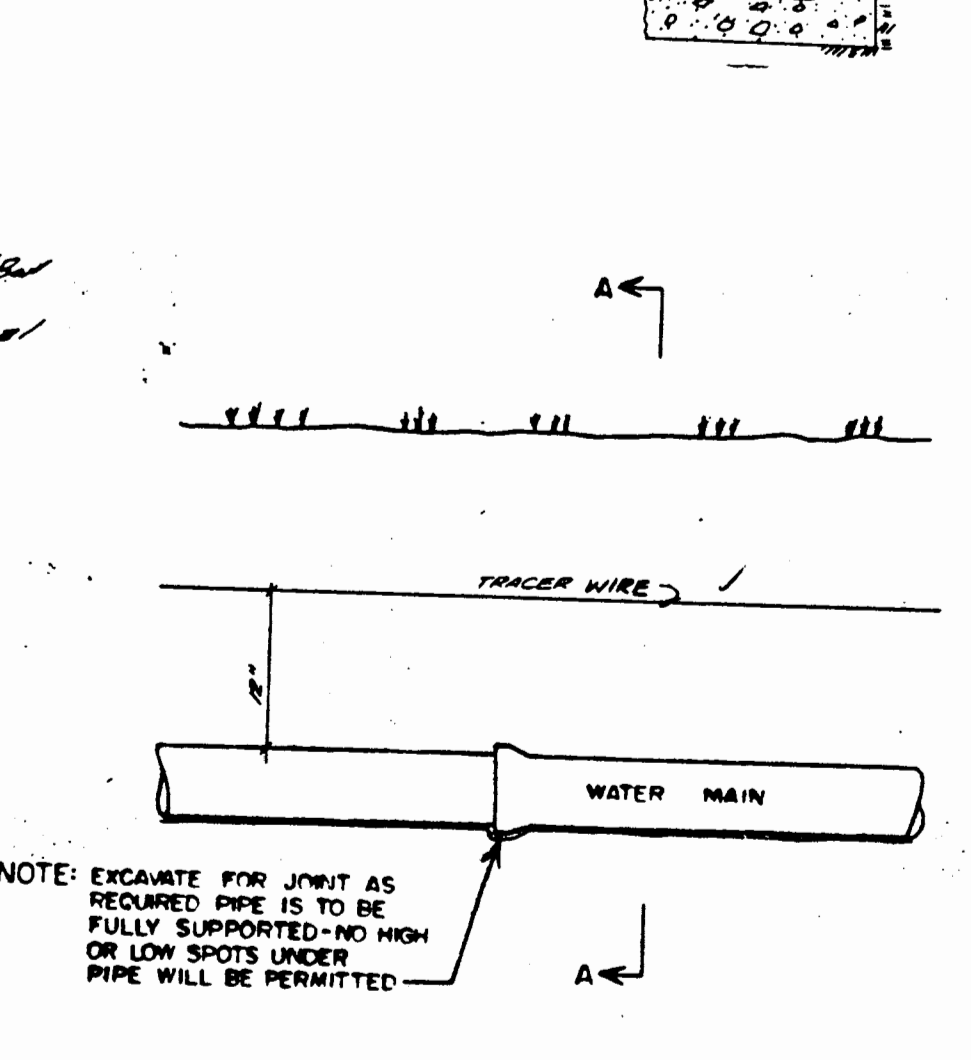
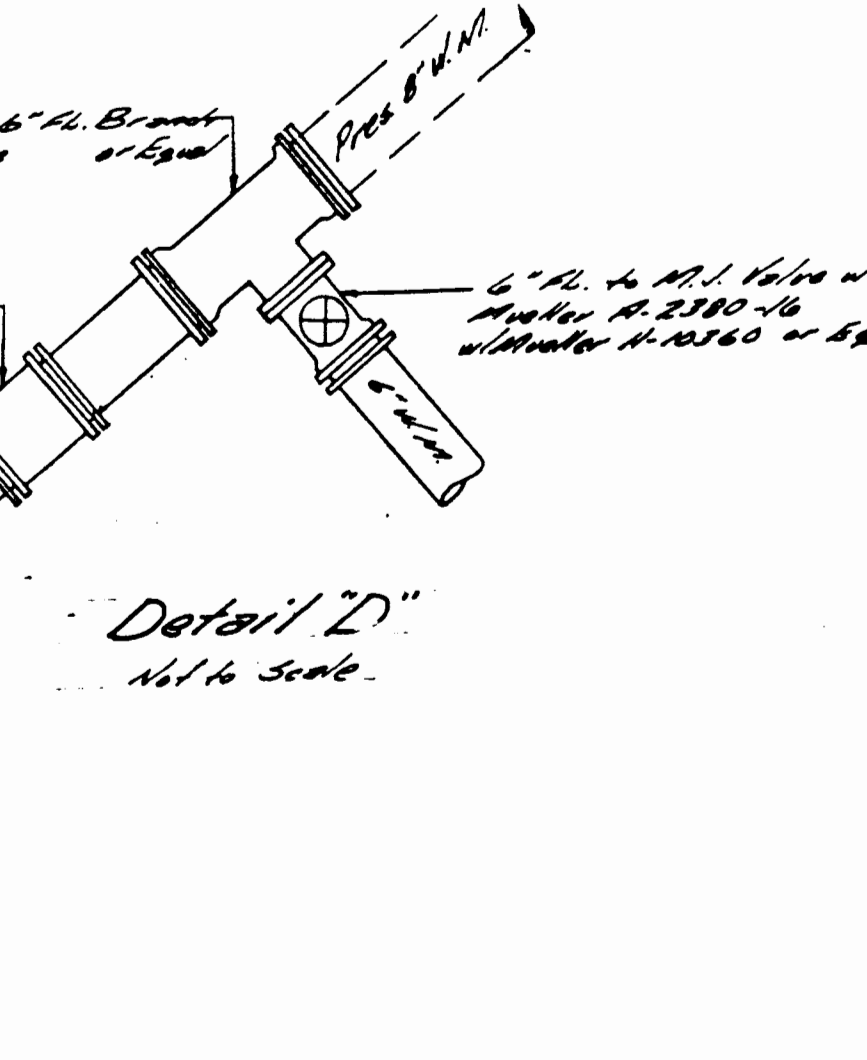
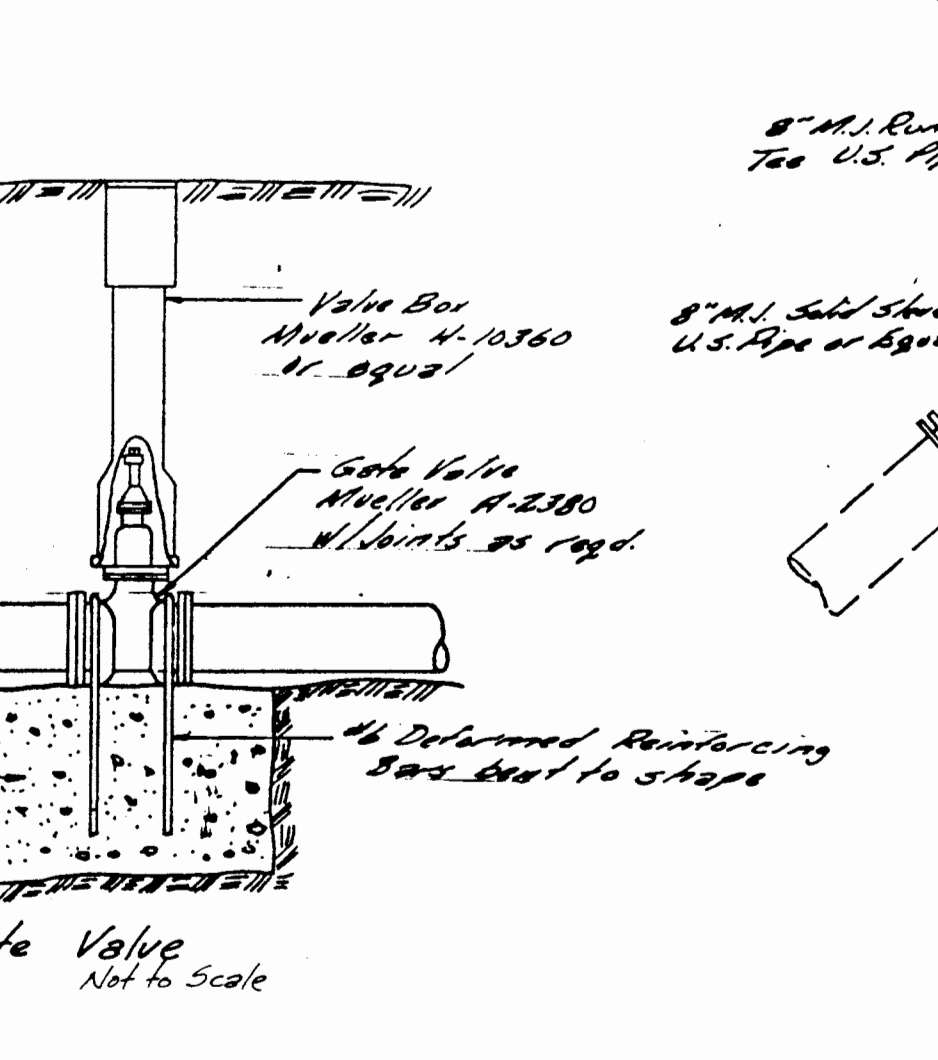
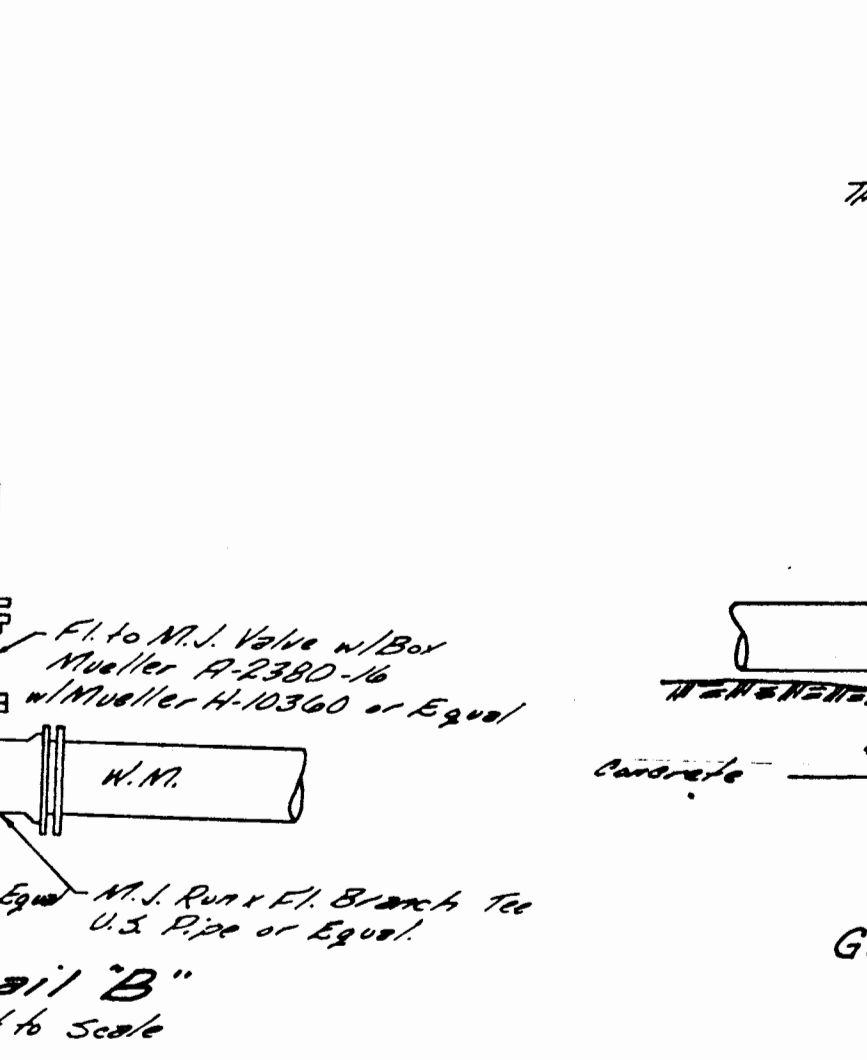
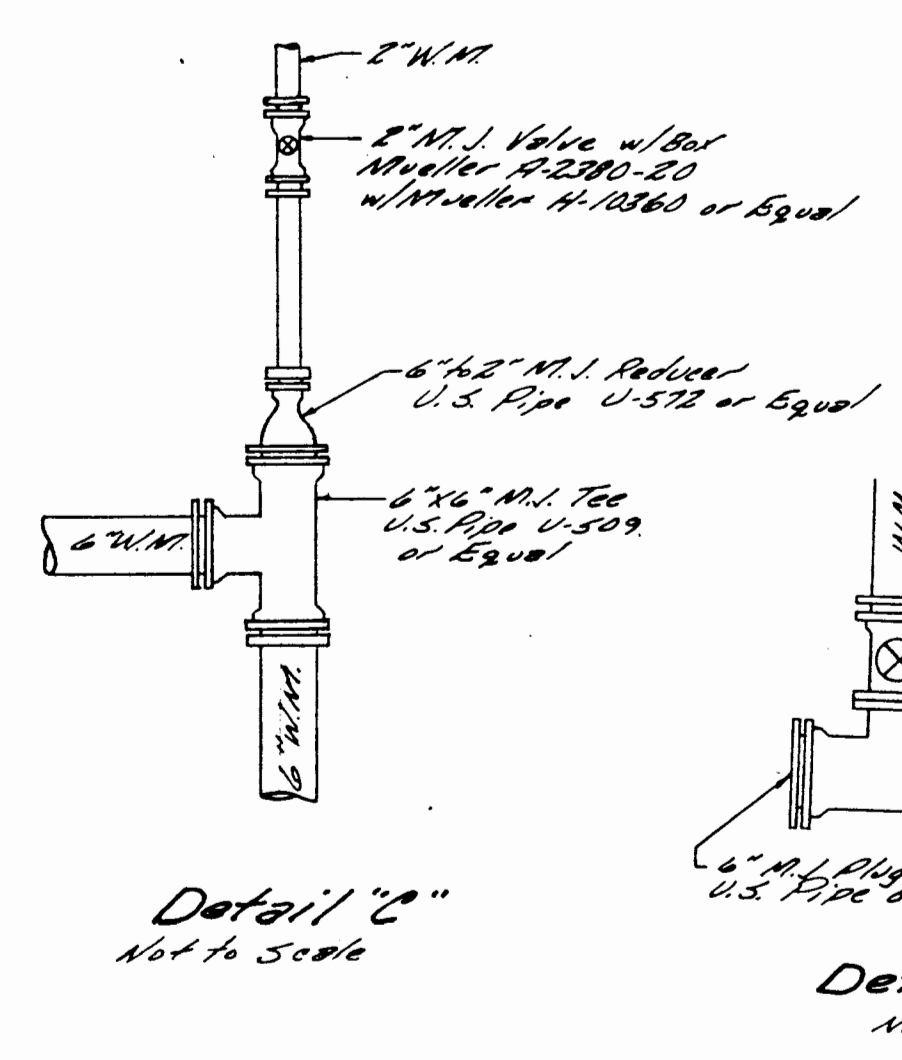
PRE-CAST CONCRETE UNIT FOR DOUBLE CURB INLET (WITH CONCRETE BASE)
 METROPOLITAN ST LOUIS SEWER DISTRICT
 Standard Details of Sewer Construction
 Dr. R. N. Ch. JCK April 1979 Sheet 29



B(8) LARGER CONNECTION TO PLASTIC MAIN
 METROPOLITAN ST LOUIS SEWER DISTRICT
 Standard Details of Sewer Construction
 Dr. R. N. Ch. JCK JUNE, 1978 Sheet 53



TONGUE AND GROOVE CONCRETE PIPE JOINTS
 METROPOLITAN ST LOUIS SEWER DISTRICT
 Standard Details of Sewer Construction
 Dr. A. S. Ch. JCK November 1966 Sheet 57



Thrustblock Size	Dimension	Spaced	Unspaced
2"	5 1/2"	1 1/2"	4 1/2"
4"	7 1/2"	2 1/2"	6 1/2"
6"	9 1/2"	3 1/2"	8 1/2"
8"	11 1/2"	4 1/2"	10 1/2"

Thrustblock Schedule