

ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
HOSE DIAMETER OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"M" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES CU. FT. PER FT. OF TRENCH CONCRETE ENCASUREMENT	INSIDE DIMENSIONS OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"M" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES CU. FT. PER FT. OF TRENCH CONCRETE ENCASUREMENT
4	30	2.50	3.28				
6	30	2.50	3.59				
8	30	2.50	3.87				
10	30	2.50	4.09				
12	30	2.50	4.25				
15	36	3.00	5.55				
18	36	3.00	5.77	14 x 23	41	3.42	5.94
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	55	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	11.73
39	60	5.00	12.40	32 x 49	71	5.92	13.14
42	63	5.25	13.38	34 x 53	75	6.25	14.05
45	66	5.50	14.37	36 x 56	80	6.58	14.98
48	70	5.83	15.47	38 x 60	83	6.92	15.92
51	74	6.17	16.58	40 x 64	87	7.27	16.87
54	78	6.50	17.73	42 x 68	91	7.62	17.84
57	81	6.83	18.90	44 x 72	95	7.98	18.82
60	84	7.17	20.10	46 x 76	100	8.42	19.82
63	87	7.50	21.35	48 x 80	104	8.88	20.84
66	90	7.83	22.63	50 x 84	108	9.33	21.88
69	93	8.17	23.95	52 x 88	112	9.79	22.94
72	96	8.50	25.30	54 x 92	116	10.26	24.02
75	99	8.83	26.69	56 x 96	120	10.74	25.12
78	102	9.17	28.10	58 x 100	124	11.22	26.24
81	105	9.50	29.55	60 x 104	128	11.71	27.38
84	108	9.83	31.03	62 x 108	132	12.20	28.54
87	111	10.17	32.54	64 x 112	136	12.70	29.72
90	114	10.50	34.08	66 x 116	140	13.20	30.92
93	117	10.83	35.65	68 x 120	144	13.71	32.14
96	120	11.17	37.25	70 x 124	148	14.22	33.38
99	123	11.50	38.88	72 x 128	152	14.74	34.64
102	126	11.83	40.54	74 x 132	156	15.26	35.92
105	129	12.17	42.23	76 x 136	160	15.79	37.22
108	132	12.50	43.95	78 x 140	164	16.32	38.54
111	135	12.83	45.70	80 x 144	168	16.86	39.88
114	138	13.17	47.48	82 x 148	172	17.40	41.24
117	141	13.50	49.29	84 x 152	176	17.95	42.62
120	144	13.83	51.13	86 x 156	180	18.50	44.02
123	147	14.17	53.00	88 x 160	184	19.06	45.44
126	150	14.50	54.90	90 x 164	188	19.62	46.88
129	153	14.83	56.83	92 x 168	192	20.19	48.34
132	156	15.17	58.79	94 x 172	196	20.76	49.82
135	159	15.50	60.78	96 x 176	200	21.34	51.32
138	162	15.83	62.80	98 x 180	204	21.92	52.84
141	165	16.17	64.85	100 x 184	208	22.51	54.38
144	168	16.50	66.93	102 x 188	212	23.11	55.94

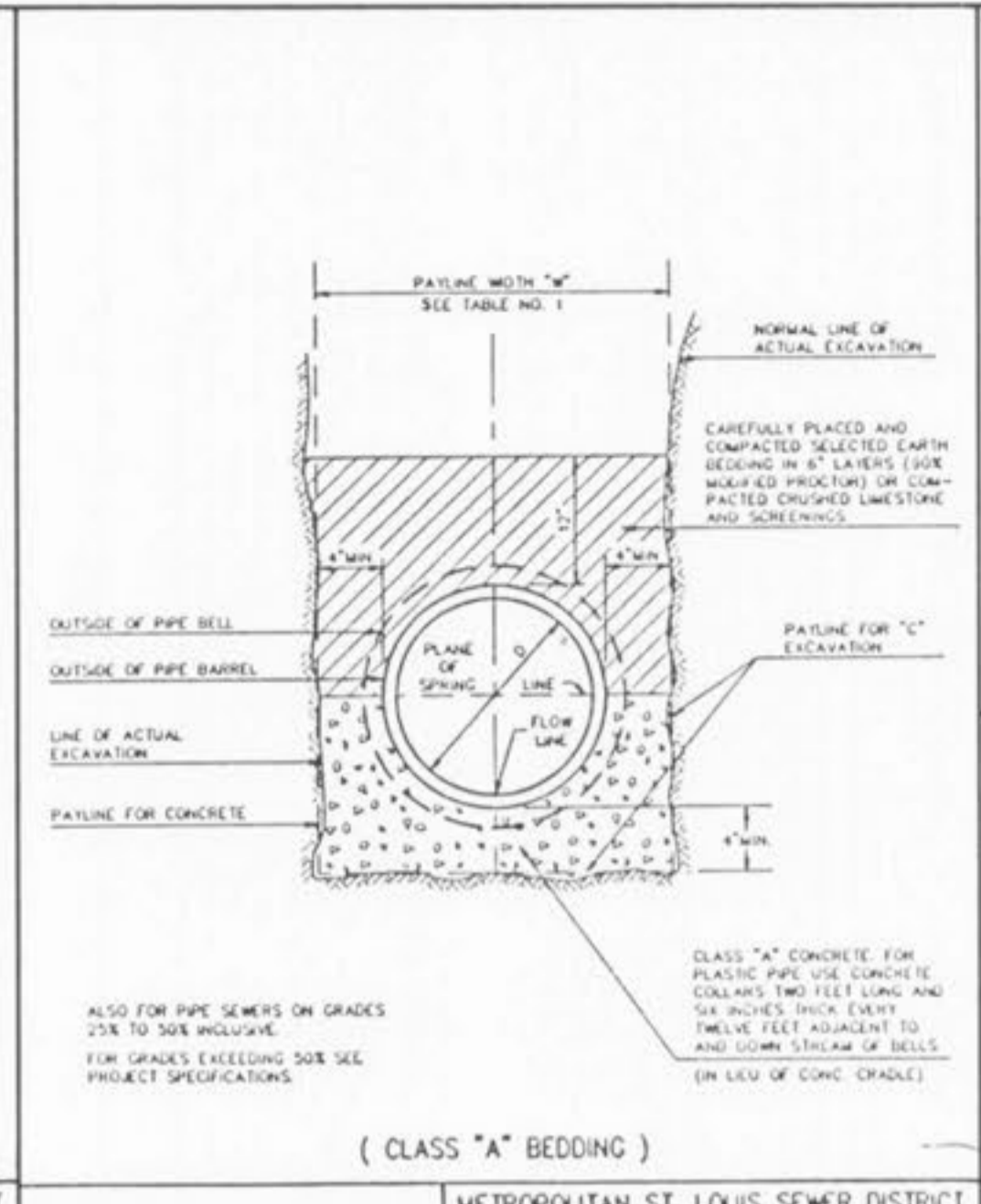
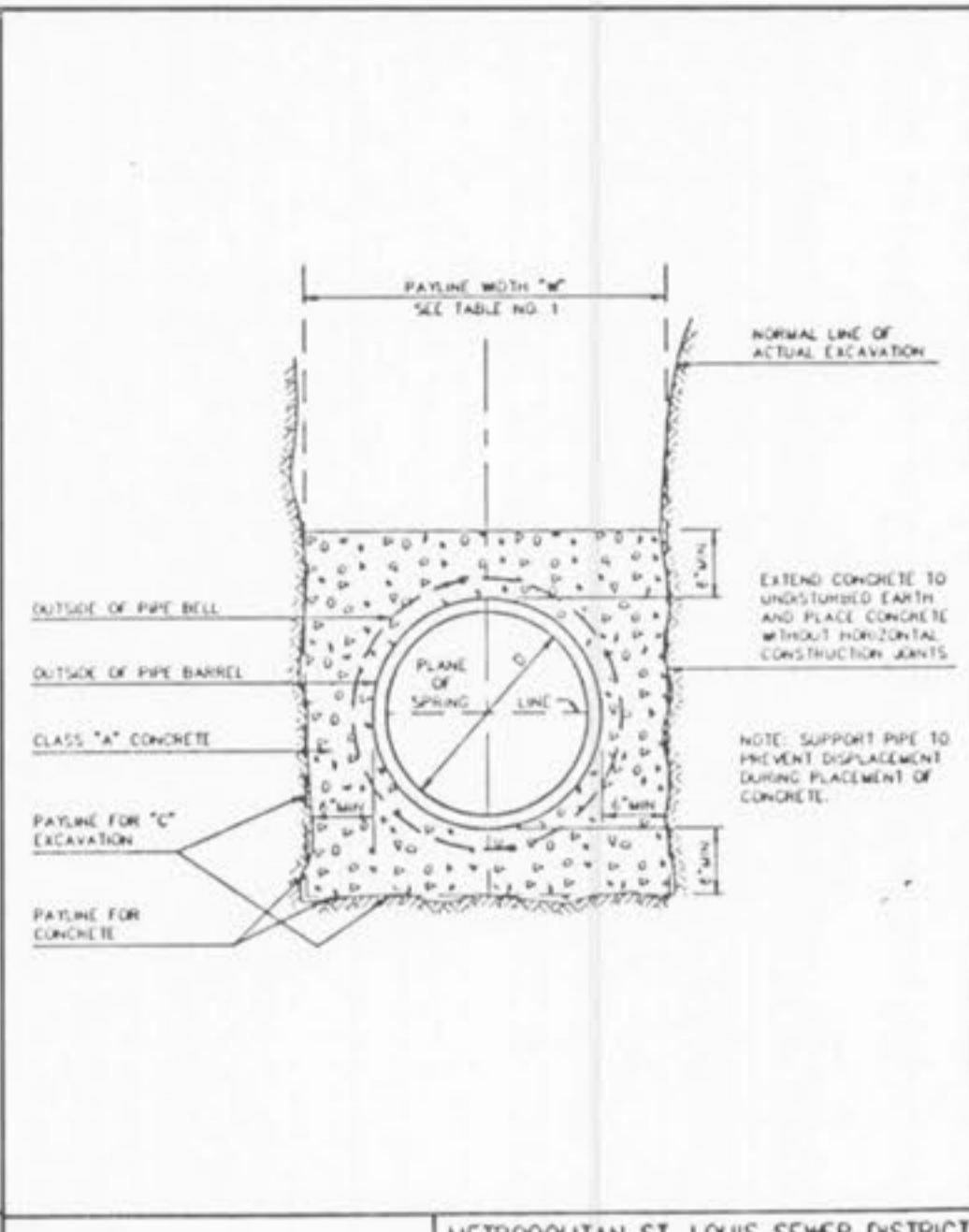
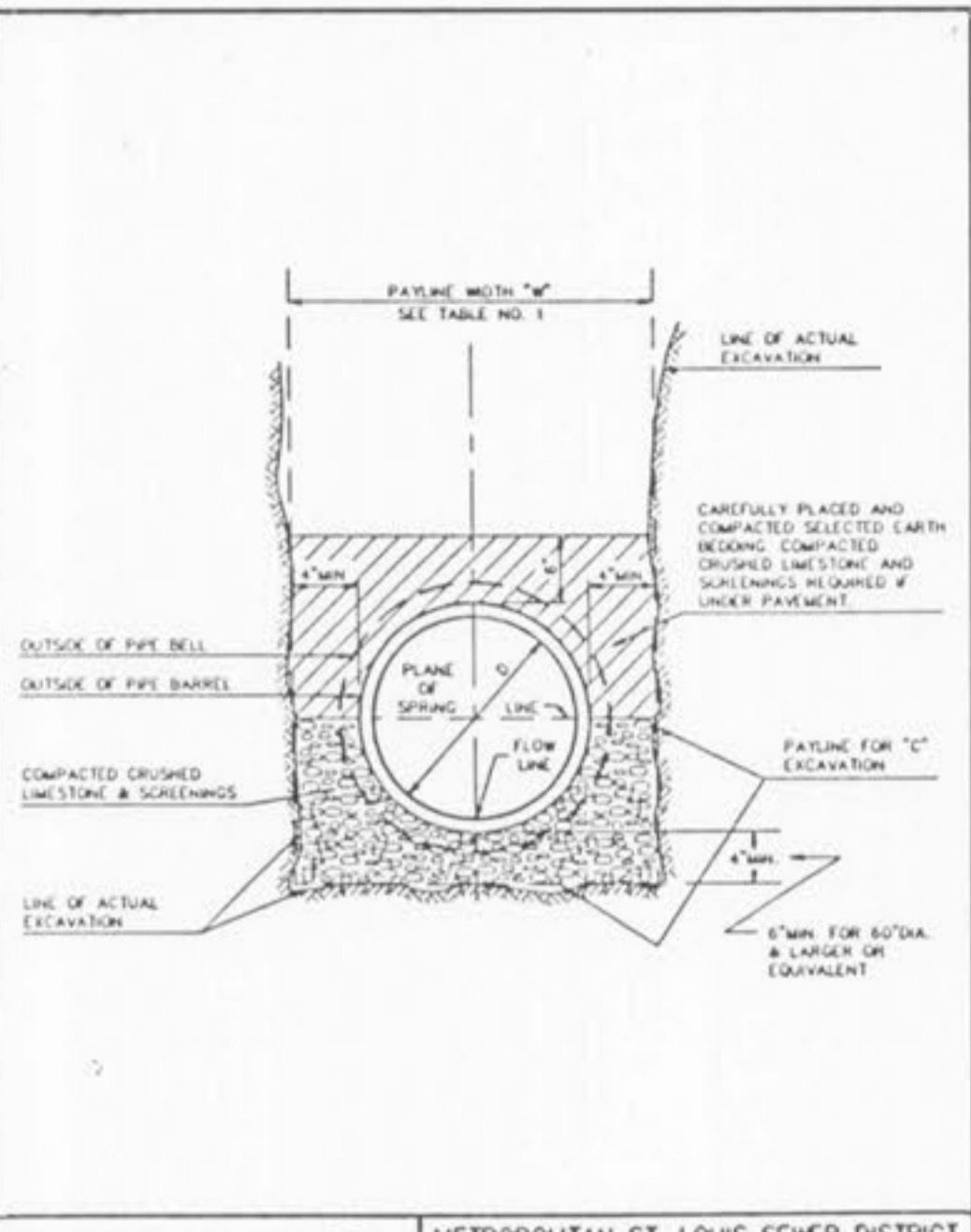
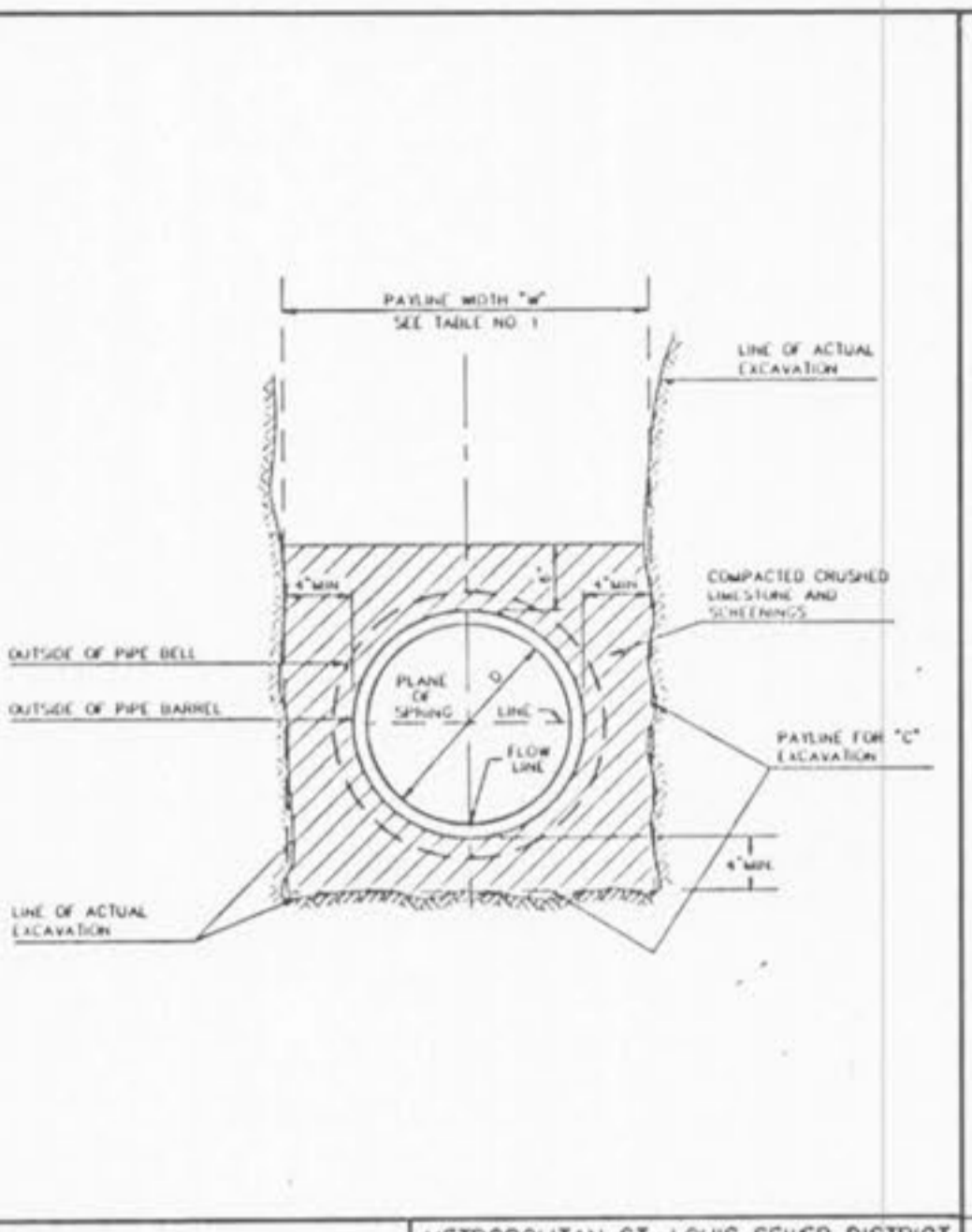
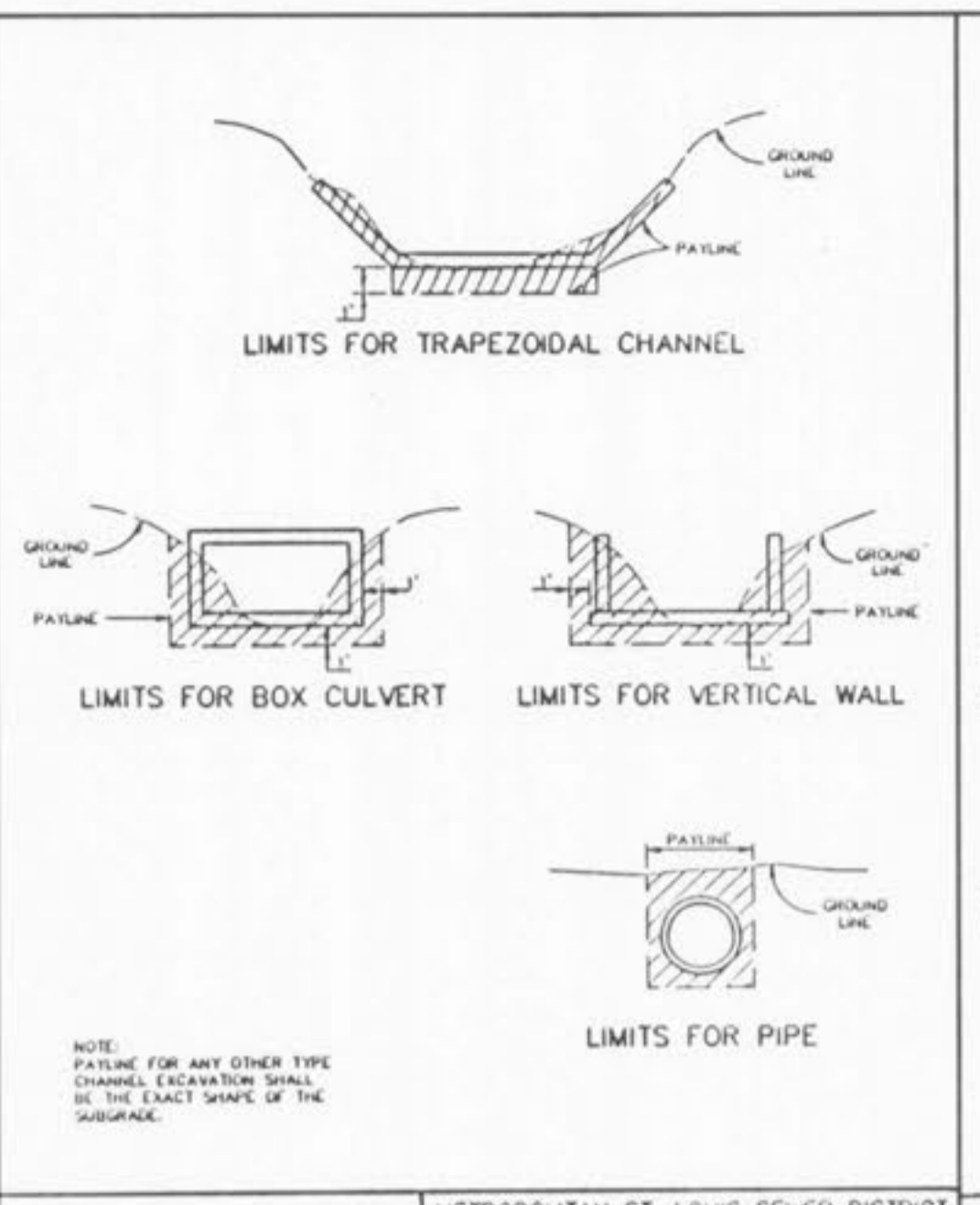


TABLE 1 PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. B.E.B. Ch. J.C.K. 1992 SHEET 1

PAYLINE LIMITS FOR EXCAVATION METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. W.S.H. Ch. J.C.K. 1992 SHEET 2

PIPE BEDDING CLASS "C" (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE) METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. W.S.H. Ch. J.C.K. 1992 SHEET 3

PIPE BEDDING CLASS "C" (MODIFIED FOR REINFORCED CONCRETE PIPE) METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. W.S.H. Ch. J.C.K. 1992 SHEET 4

CONCRETE ENCASUREMENT METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. W.S.H. Ch. J.C.K. 1992 SHEET 5

CONCRETE CRADLE METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. W.S.H. Ch. J.C.K. 1992 SHEET 6

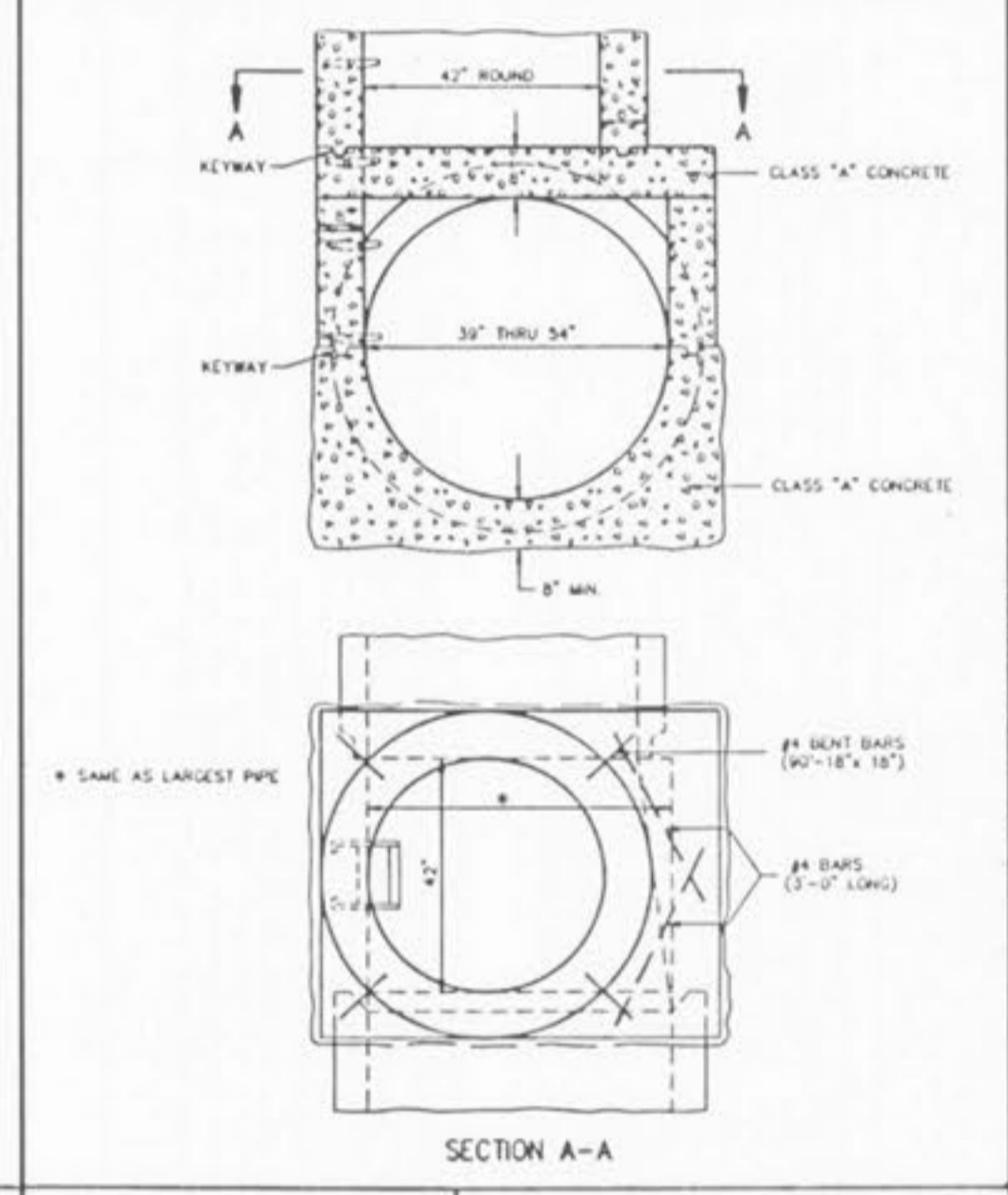
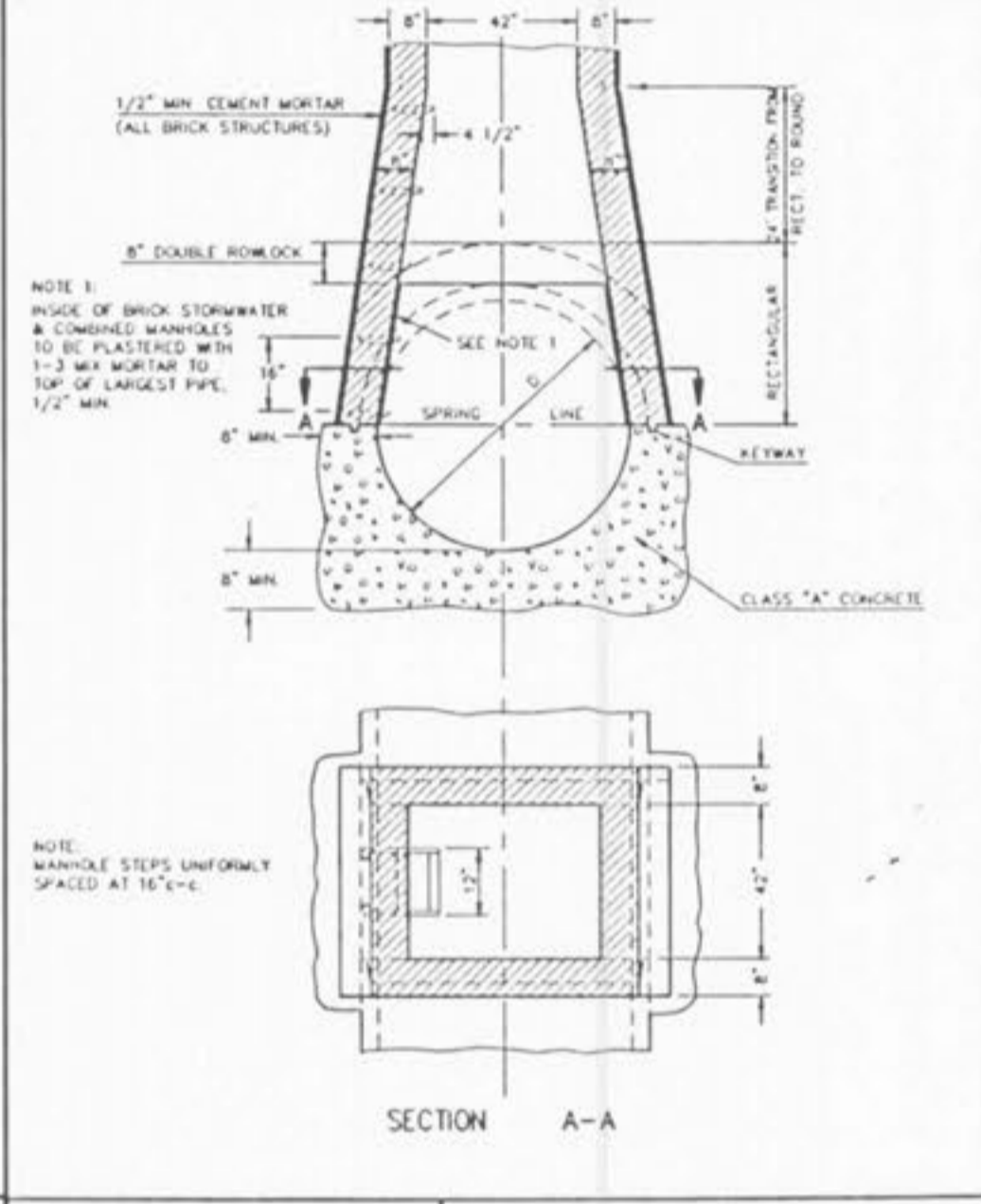
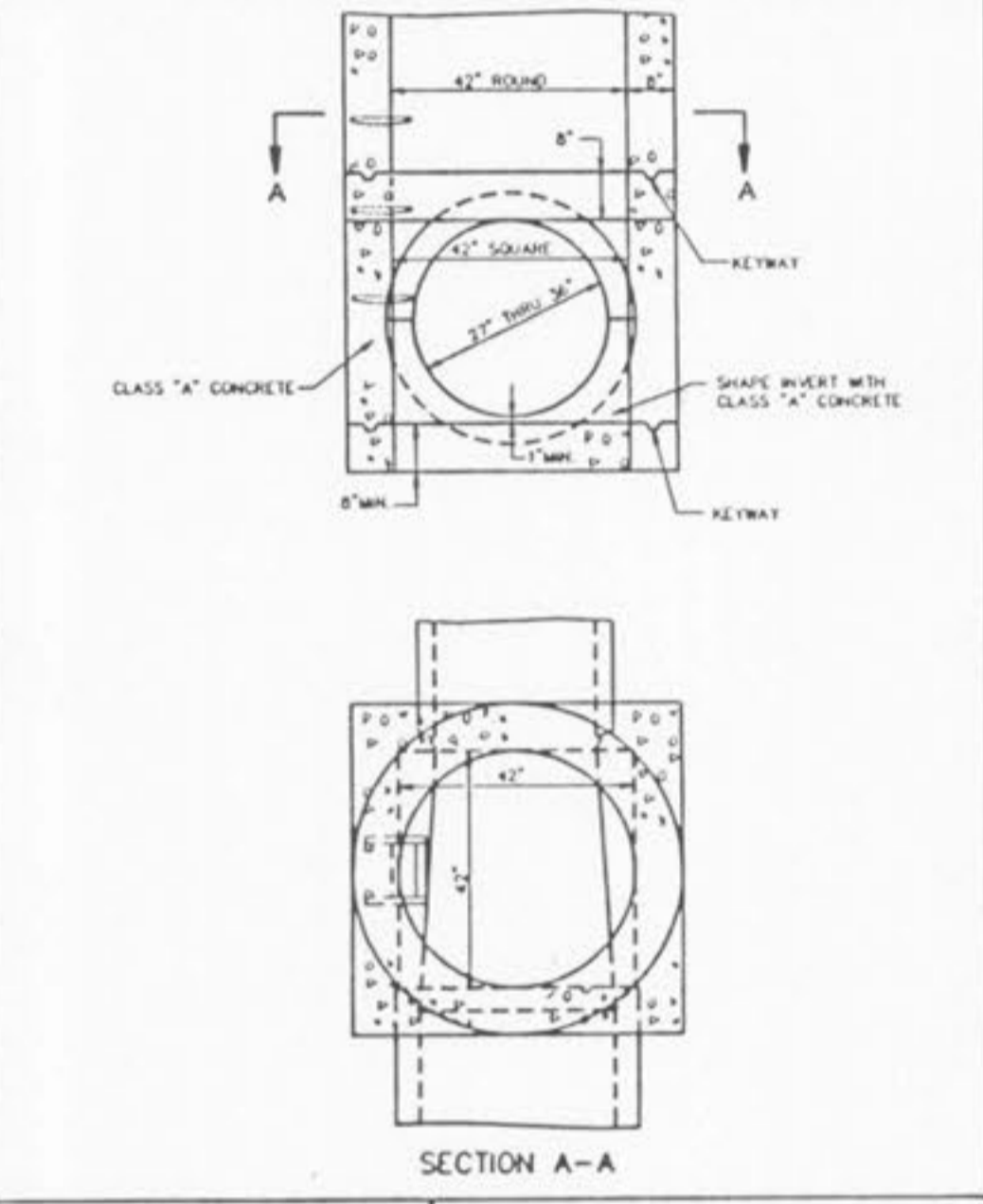
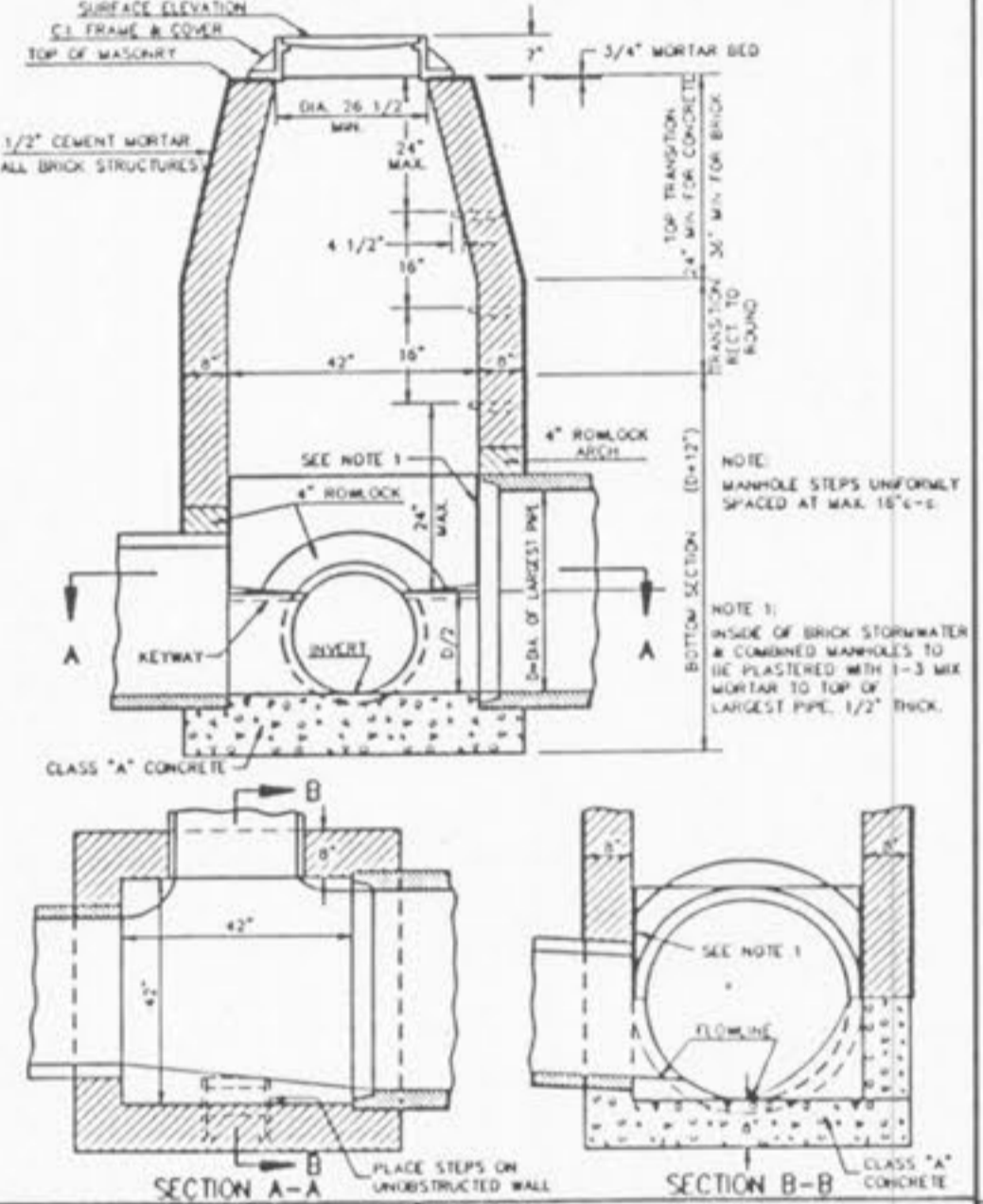
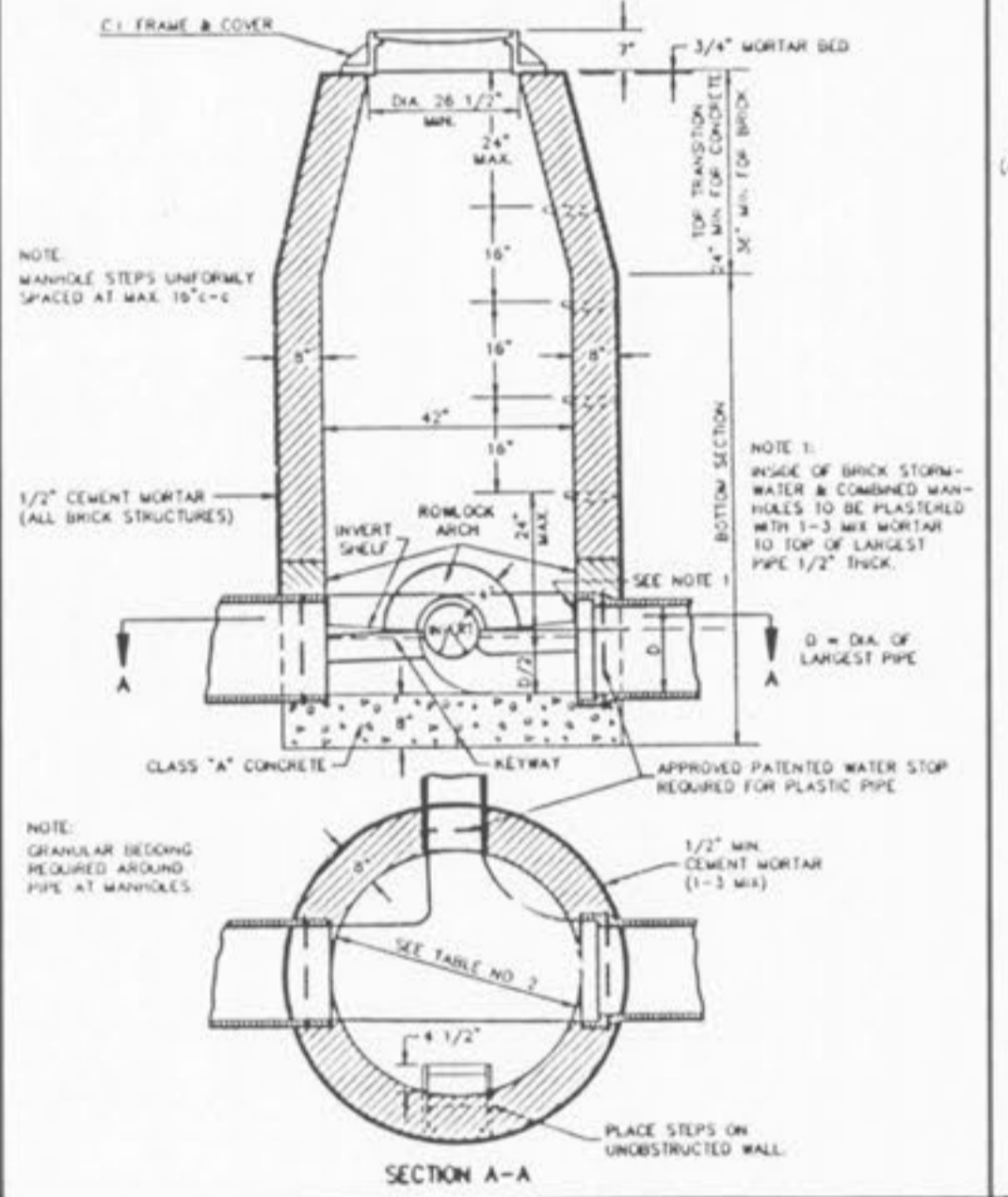
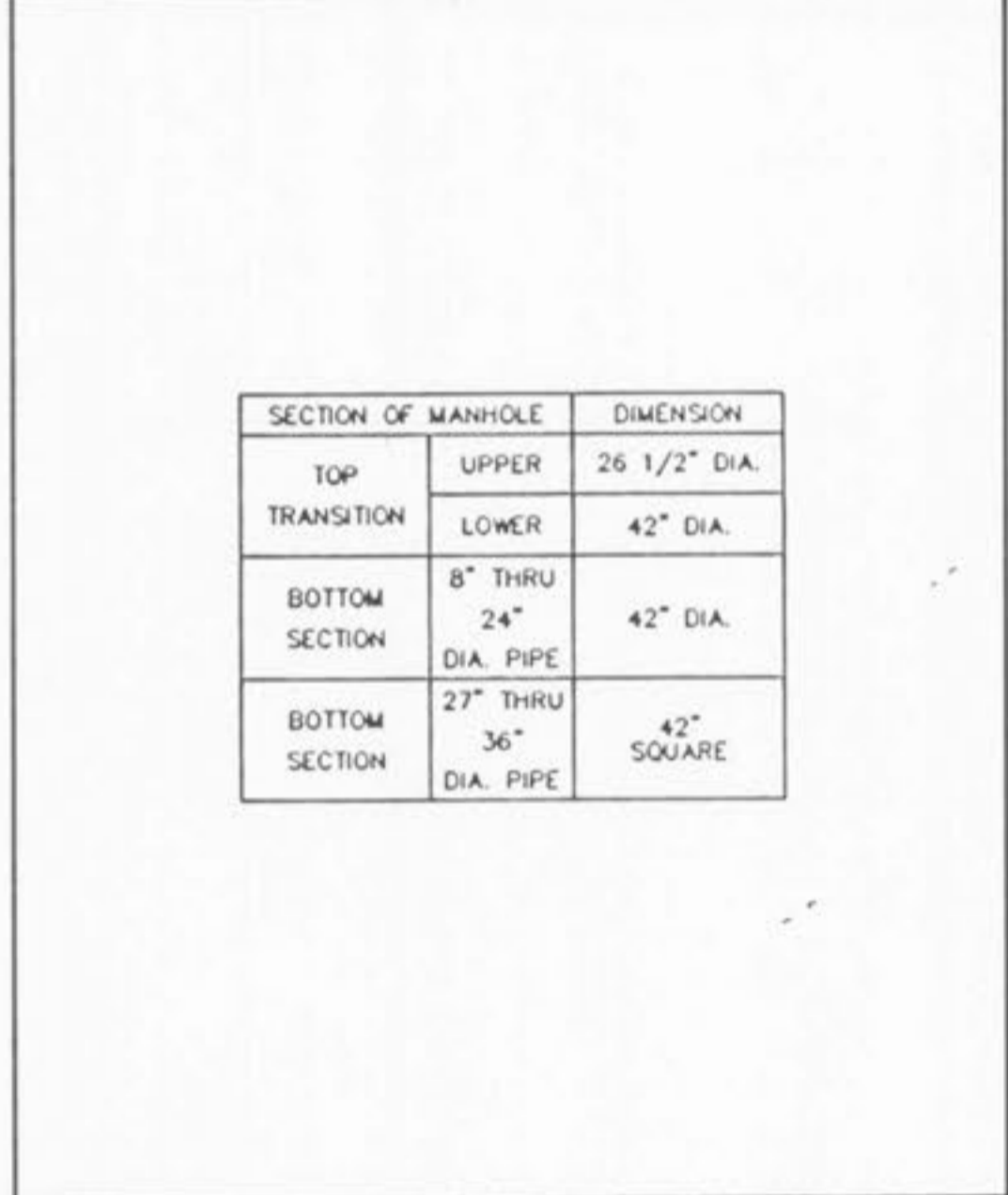


TABLE NO. 2 STANDARD MANHOLE DIMENSIONS METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. R.G.W. Ch. J.C.K. 1992 SHEET 7

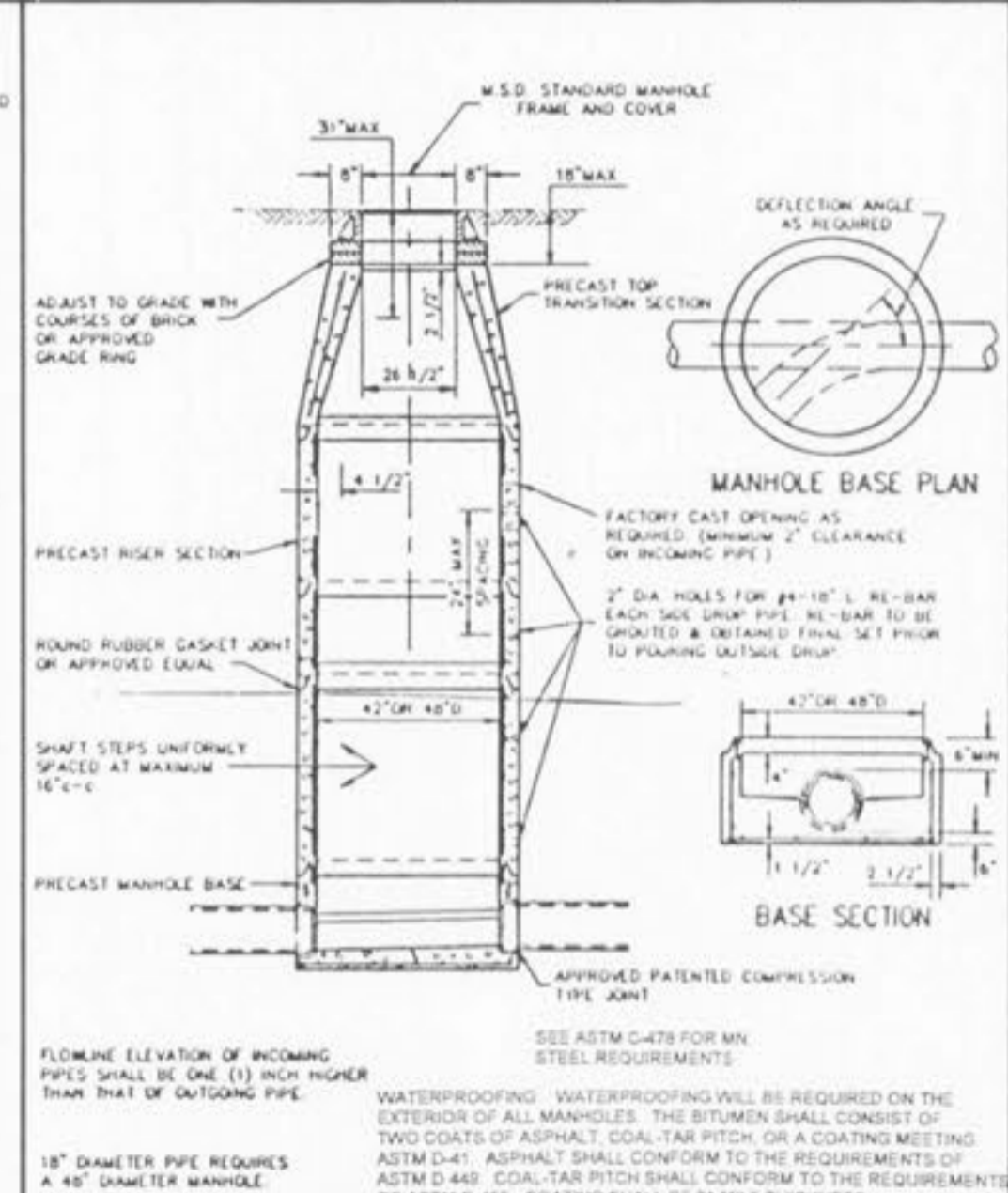
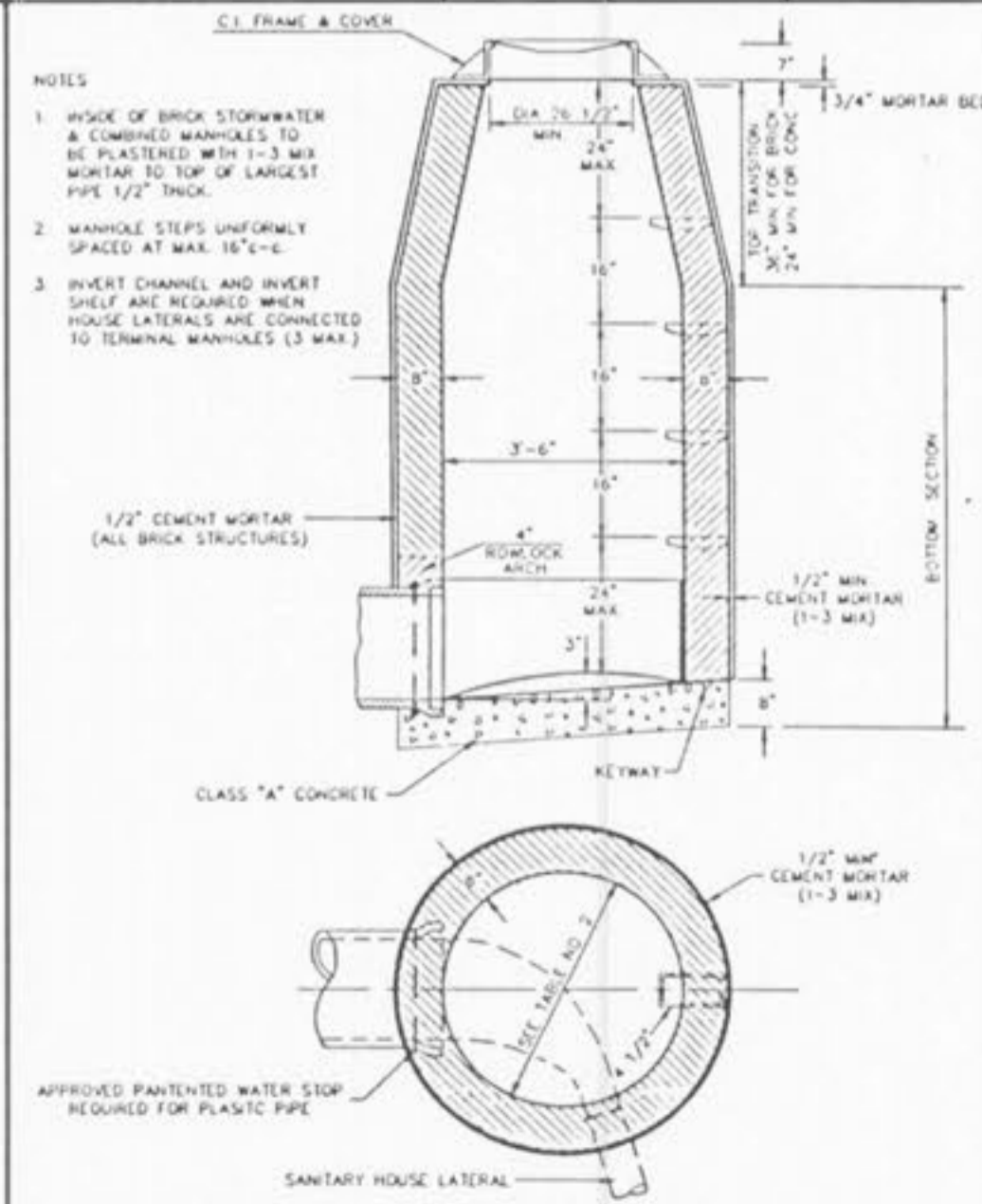
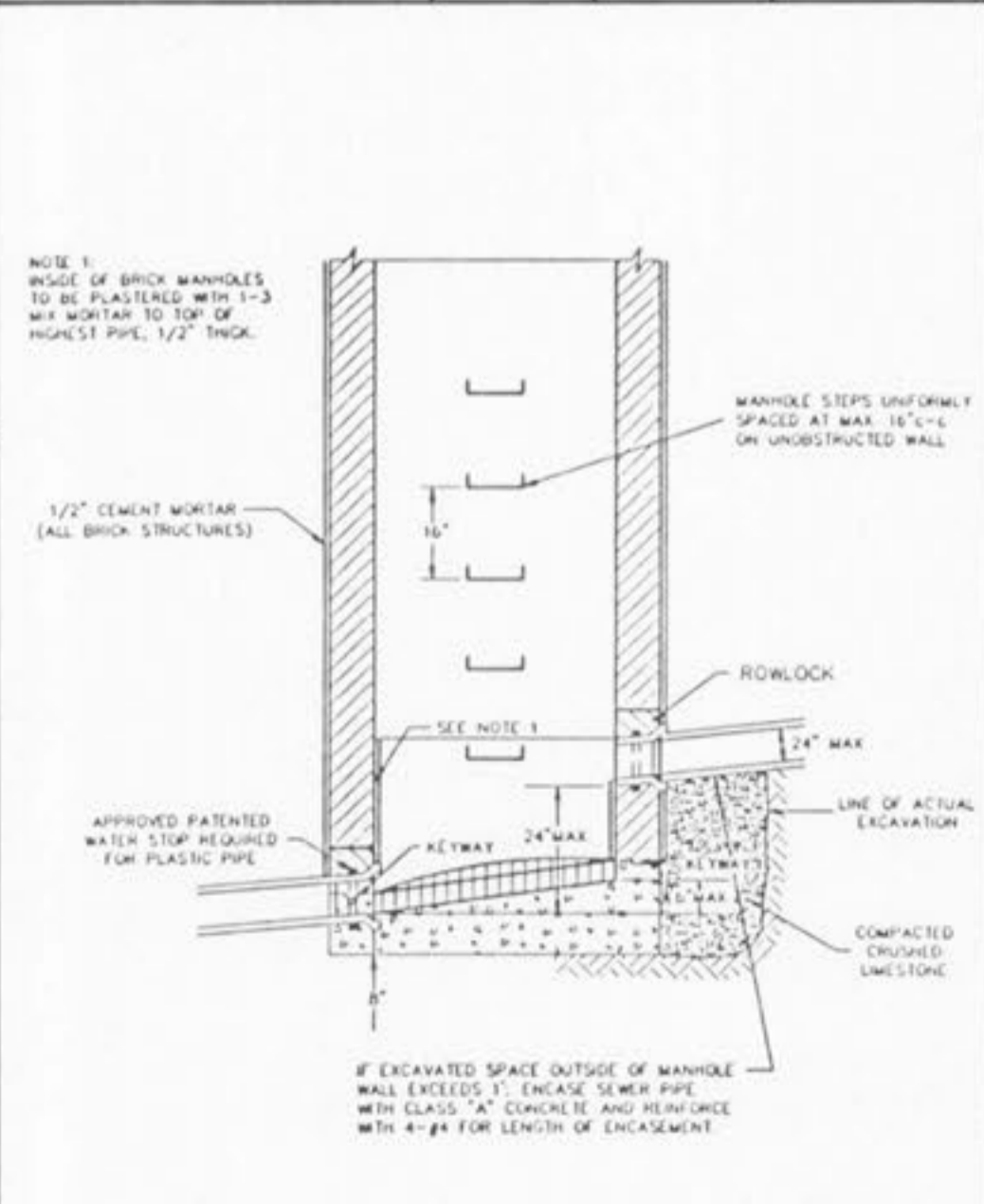
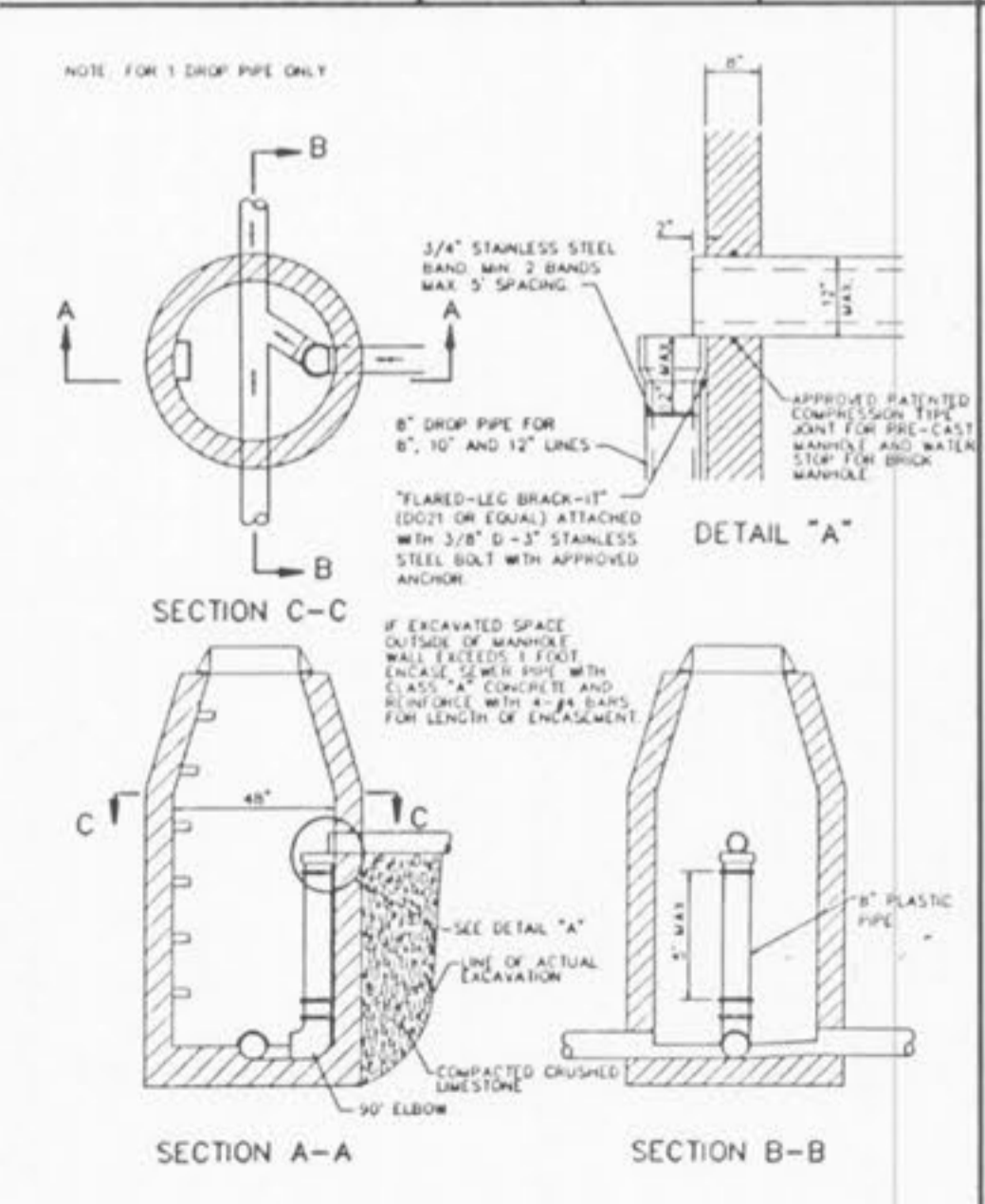
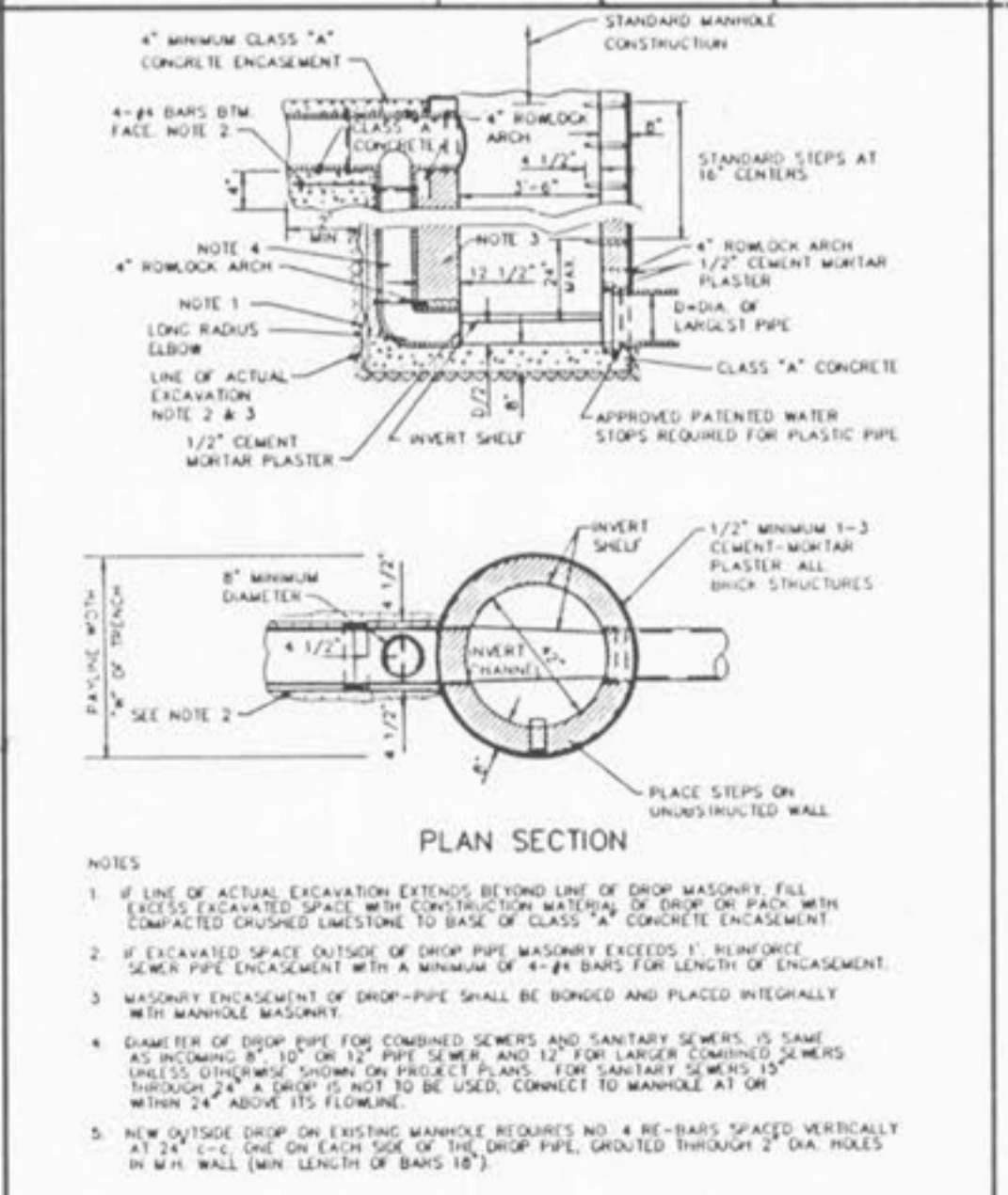
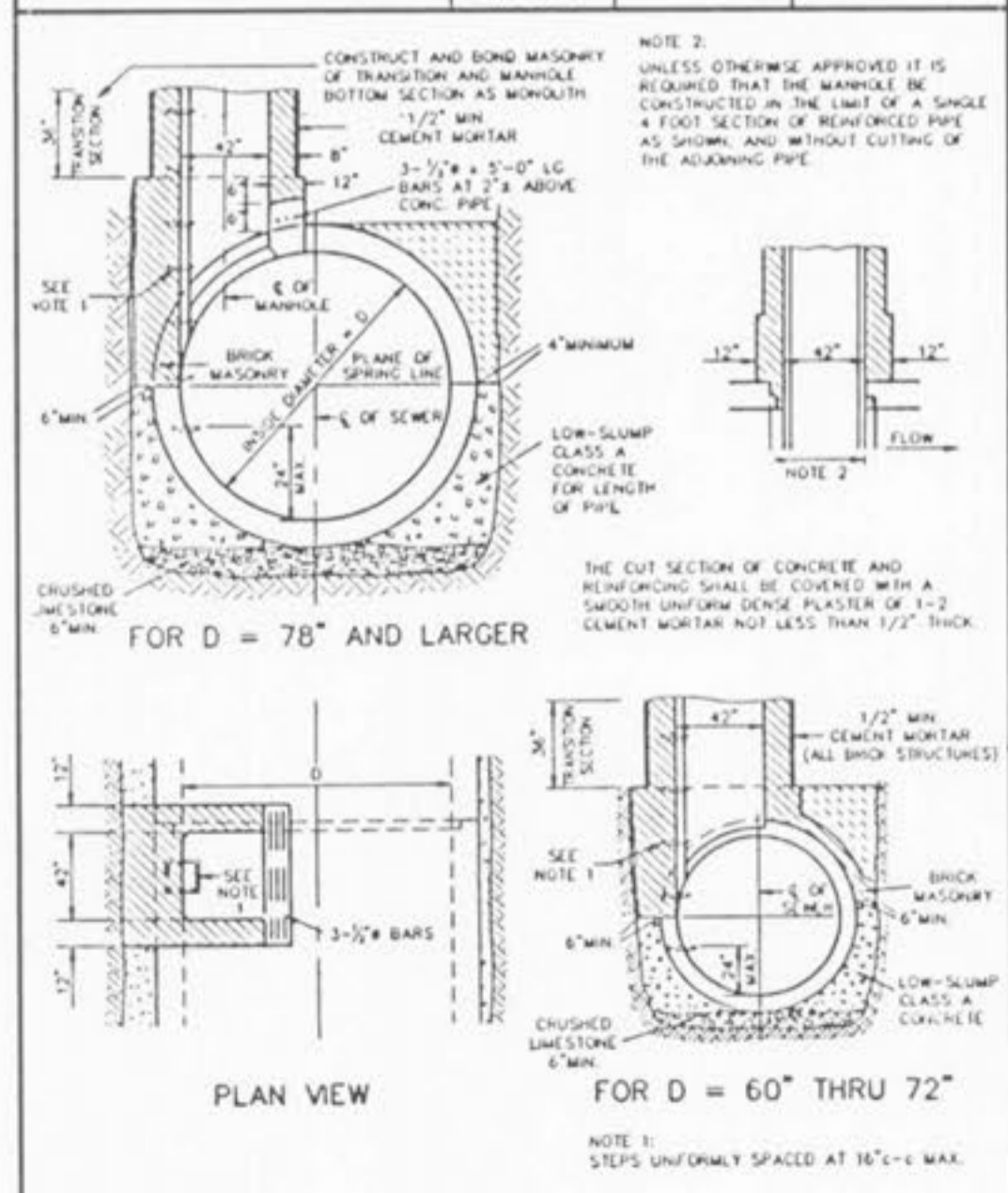
LINE MANHOLE PIPE SEWERS 8\"/>

TYPICAL LINE MANHOLE ON PIPE SEWER 27\"/>

MANHOLE ON PIPE SEWER 27\"/>

MANHOLE ON CONCRETE PIPE SEWERS 39\"/>

MANHOLE ON CONC. PIPE 39\"/>



TYPICAL MANHOLE BASE REINFORCED CONCRETE PIPE SEWERS 60\"/>

OUTSIDE FOULWATER DROP MANHOLE METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. R.G.W. Ch. J.C.K. 1992 SHEET 14

INSIDE FOULWATER DROP MANHOLE METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. R.G.W. Ch. J.C.K. 1992 SHEET 15

INSIDE FOULWATER DROP MANHOLE (FOR FREE-FALL) METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. W.S.H. Ch. J.C.K. 1992 SHEET 16

TERMINAL MANHOLE METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction Dr. W.S.H. Ch. J.C.K. 1992 SHEET 17

PRE-CAST CONCRETE MANHOLE FOR SEWERS 8\"/>