

ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
INSIDE DIAMETER OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"M" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES CU. FT. PER FT. OF 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 CONCRETE ENCASUREMENT
4	30	3.50	3.38				
6	30	3.50	3.58				
8	30	3.50	3.87				
10	30	3.50	4.09				
12	30	3.50	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	53	4.42	8.61
30	48	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	4.87	11.43	29 x 45	66	5.50	11.72
39	60	5.25	12.39	32 x 49	71	5.82	12.74
42	63	5.25	13.38	34 x 53	75	6.25	14.05
48	70	5.83	15.67	36 x 60	83	6.92	16.18
54	77	6.42	18.15	43 x 68	92	7.87	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	9.08	24.35
72	98	8.17	26.37	58 x 91	118	9.83	27.45
78	105	8.75	29.59	63 x 98	128	10.50	30.50
84	112	9.33	32.57	68 x 106	135	11.25	33.51
90	118	9.82	35.90	72 x 113	143	11.92	36.99
96	126	10.50	39.37	77 x 121	152	12.67	40.89
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	64.48
144	182	15.17	72.40	116 x 180	218	18.17	73.59

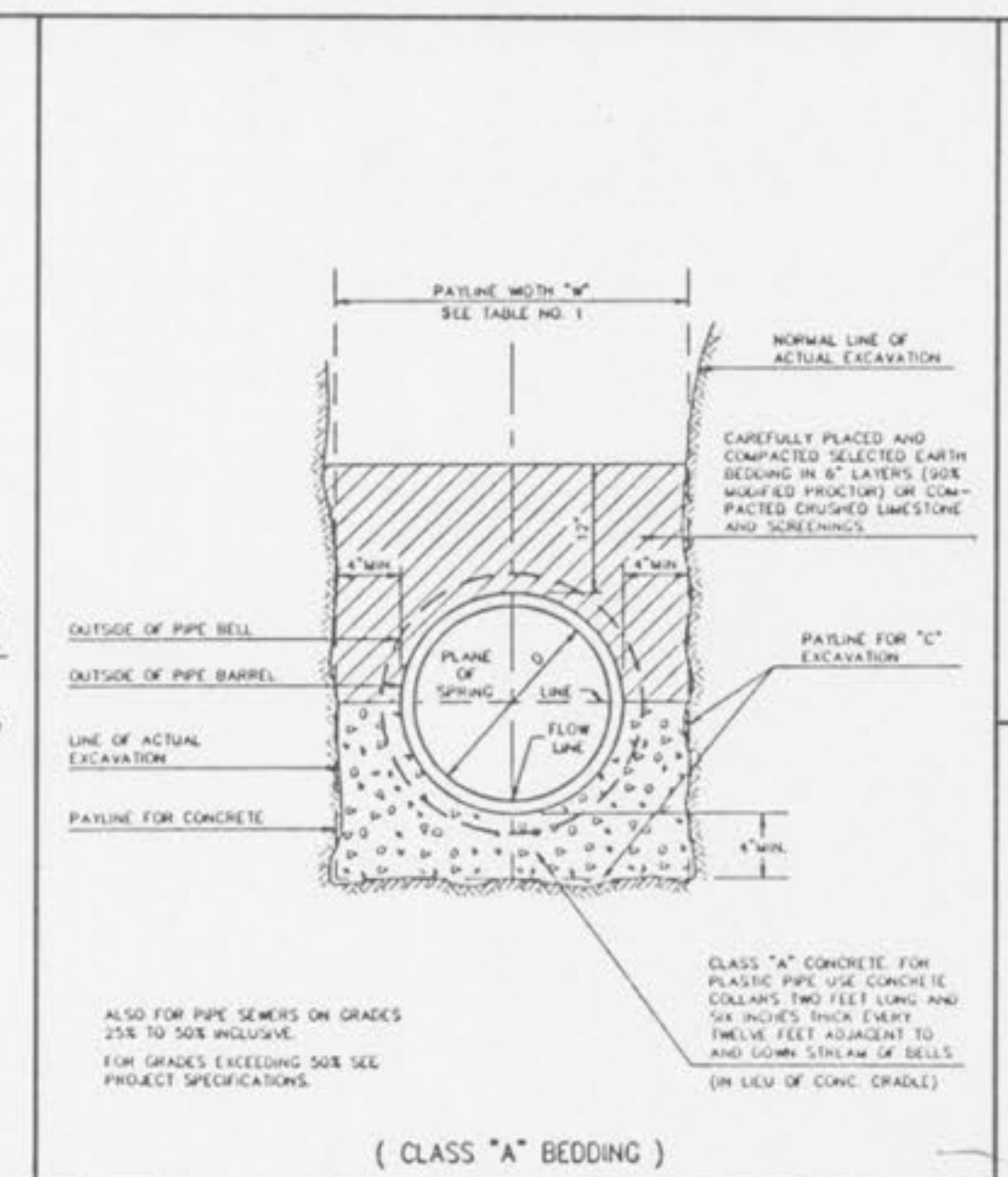
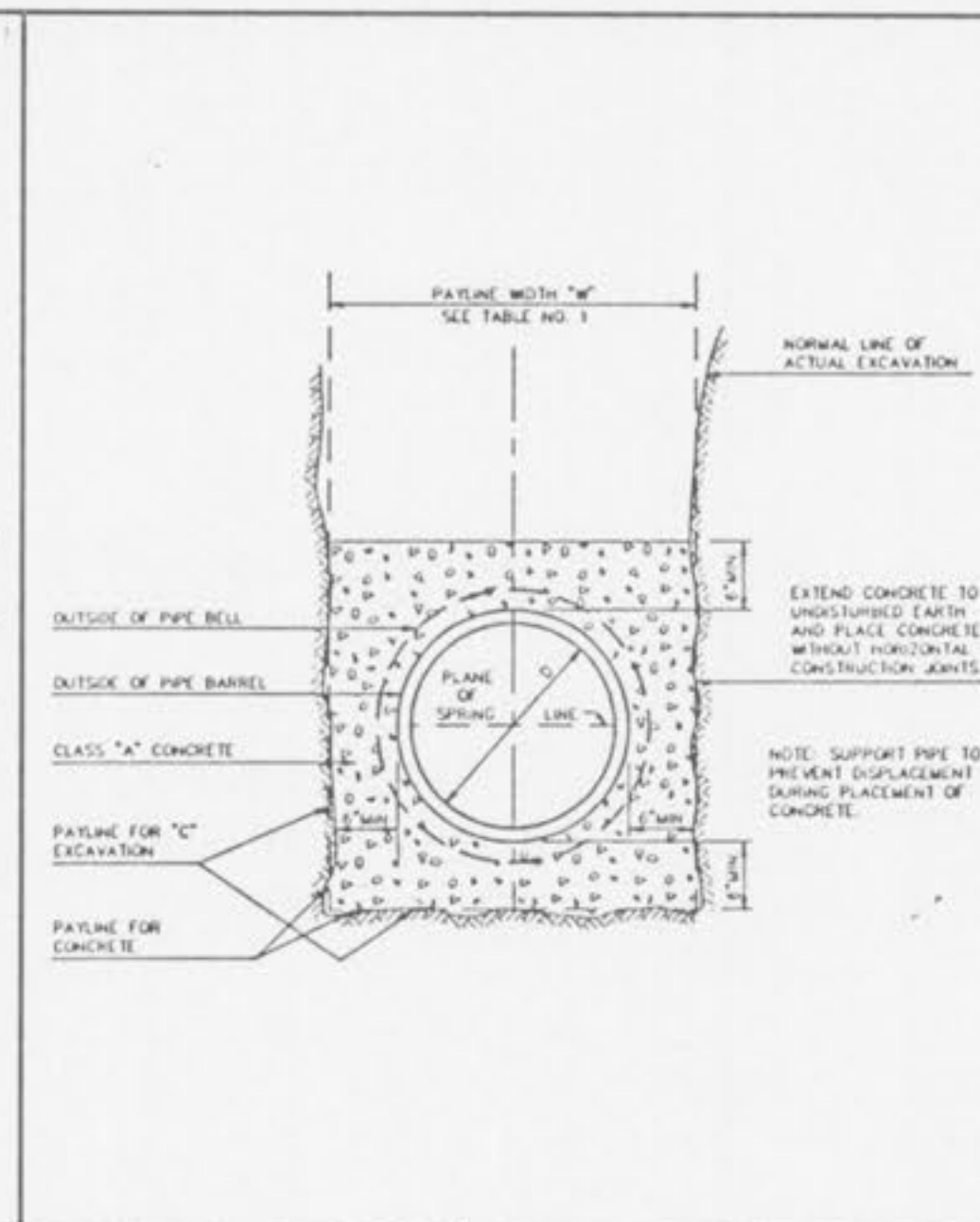
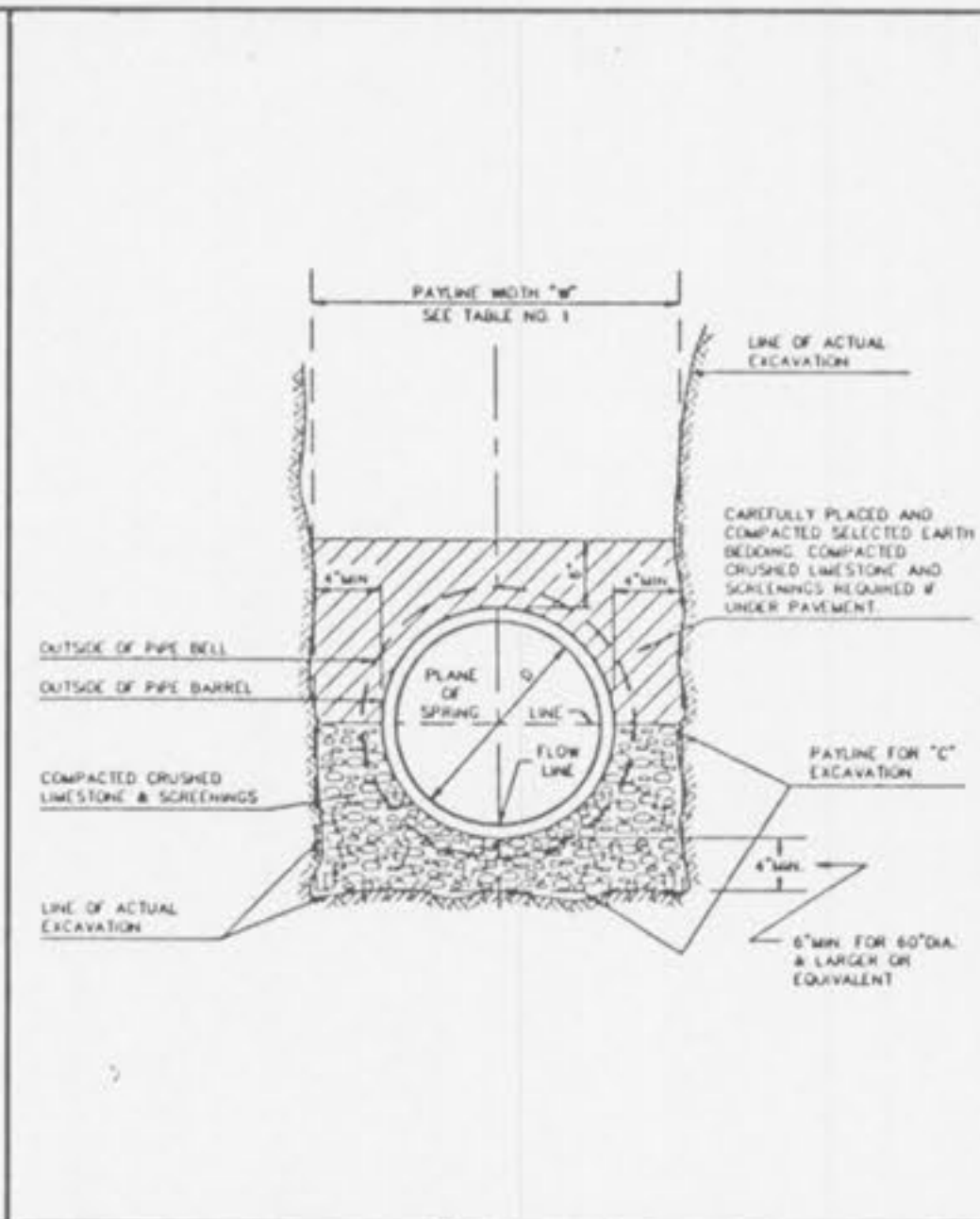
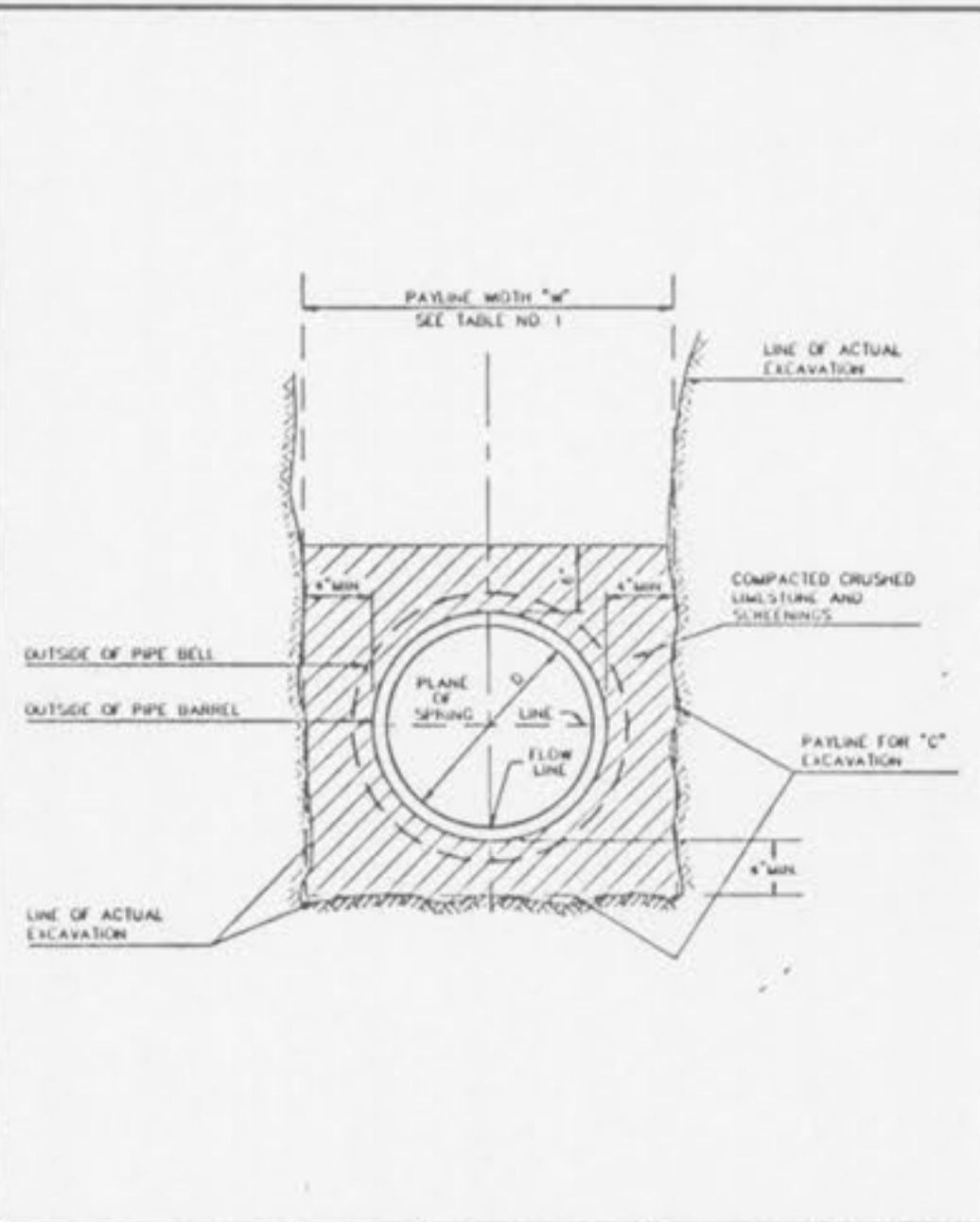
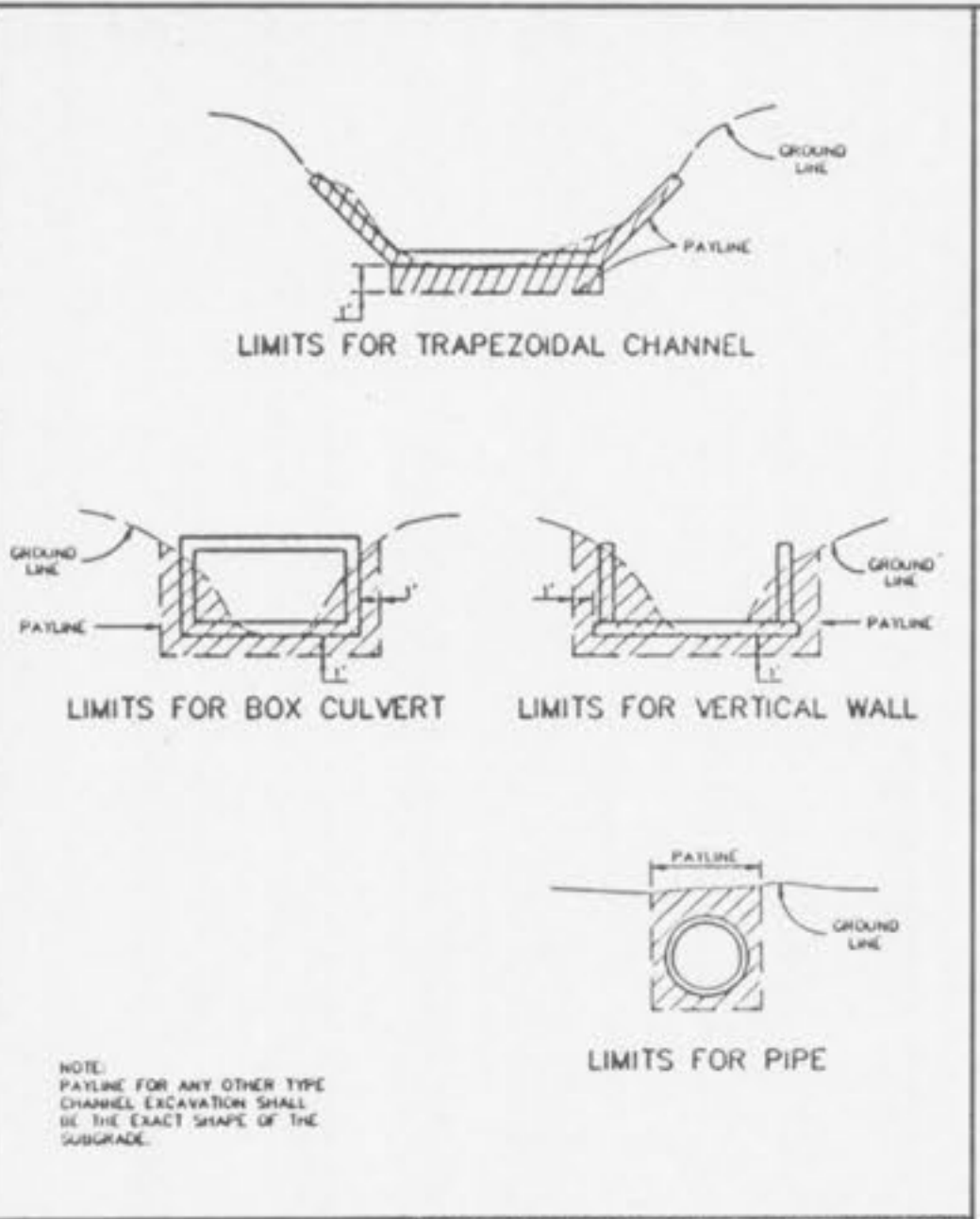


TABLE 1 PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE

METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction

PAYLINE LIMITS FOR EXCAVATION

PIPE BEDDING CLASS "C" (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)

PIPE BEDDING CLASS "C" (MODIFIED FOR REINFORCED CONCRETE PIPE)

CONCRETE ENCASUREMENT

CONCRETE CRADLE

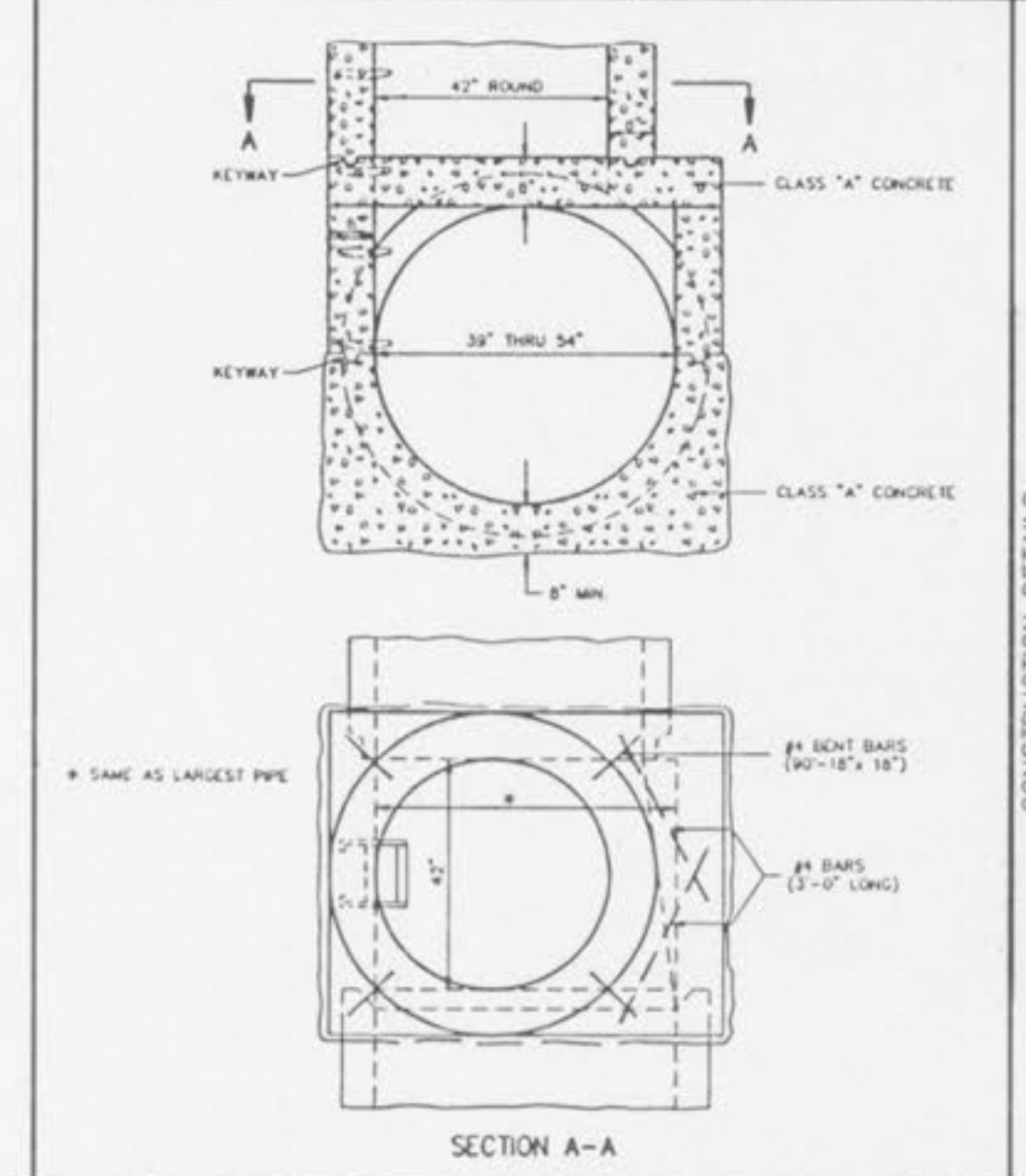
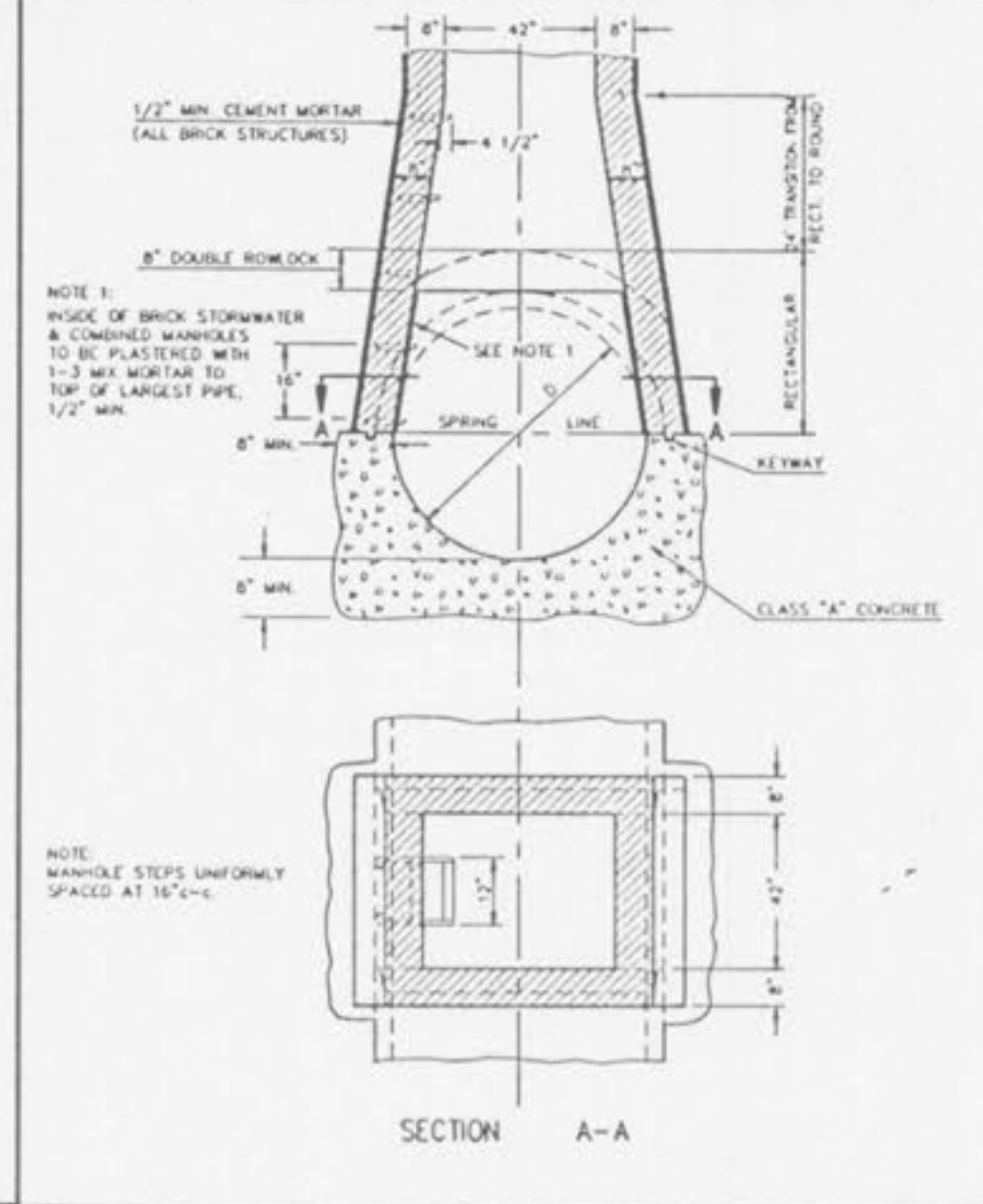
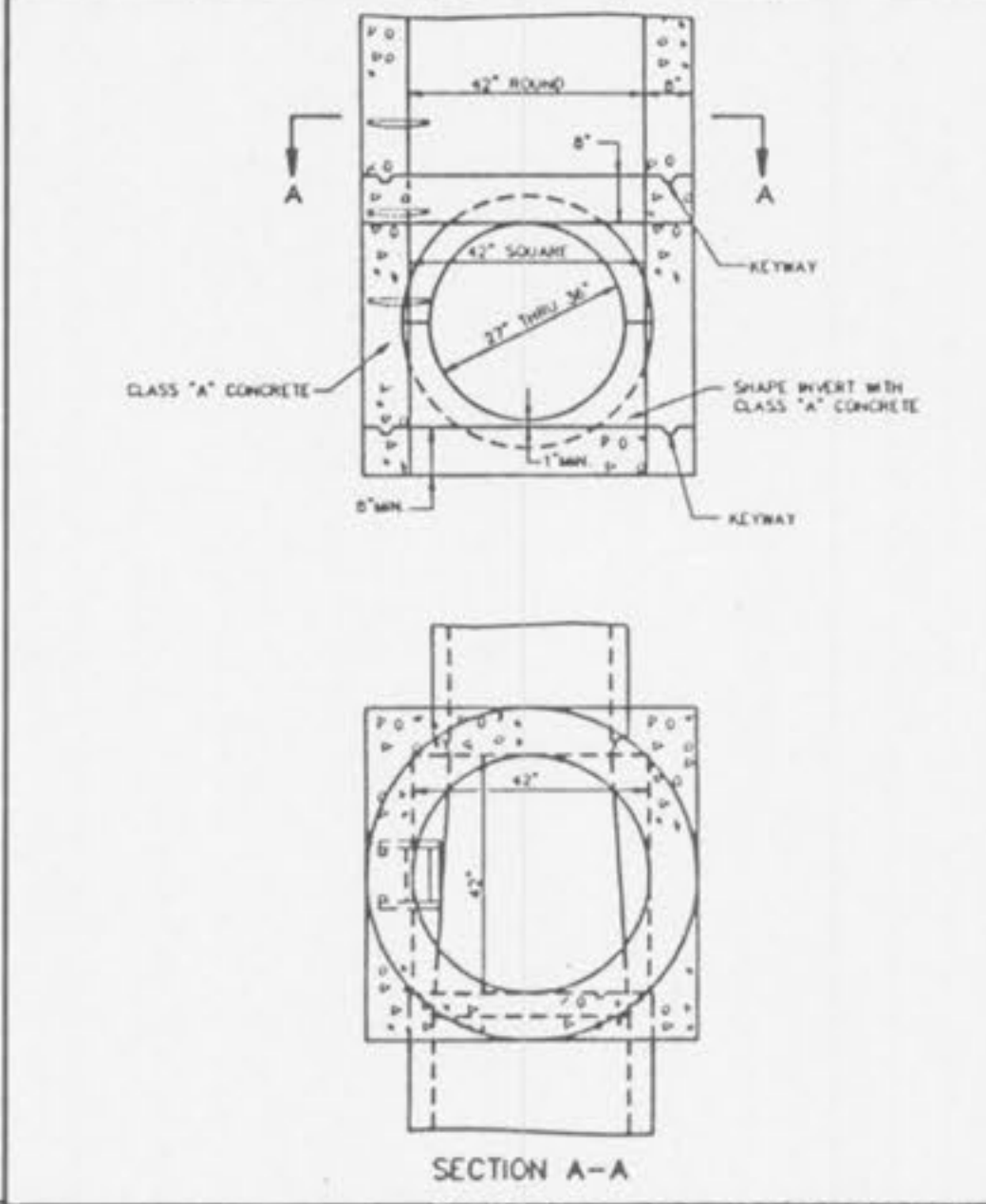
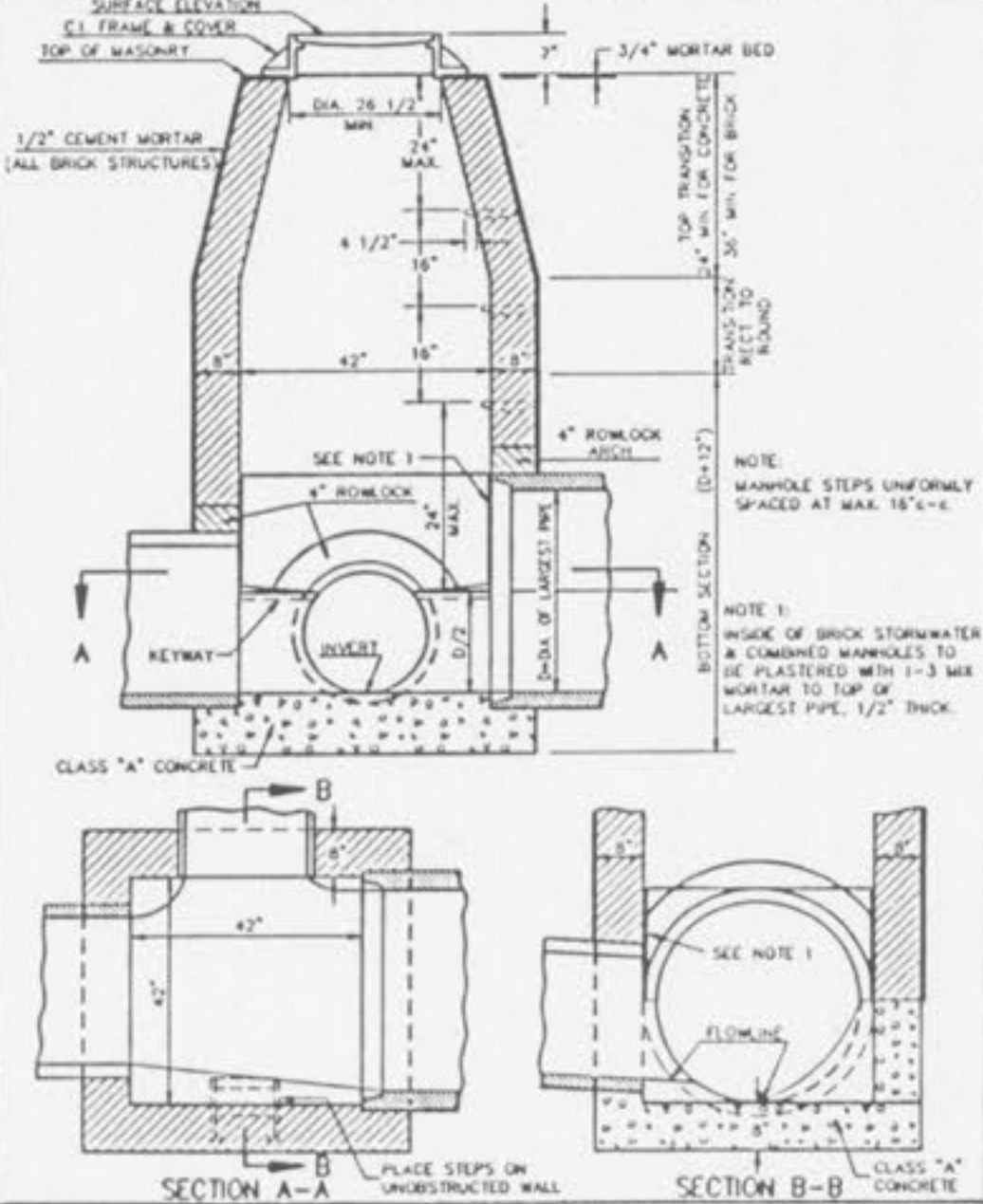
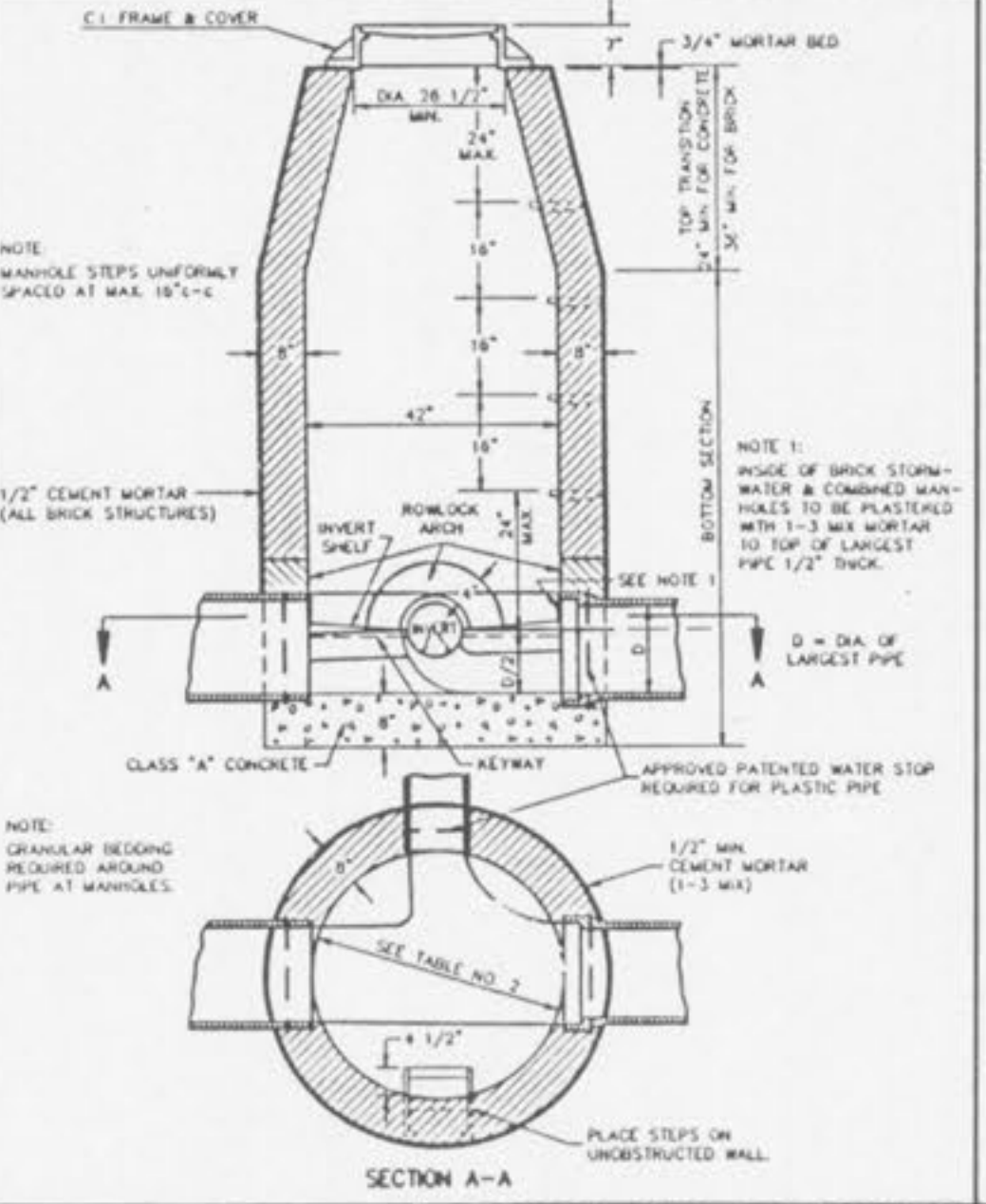
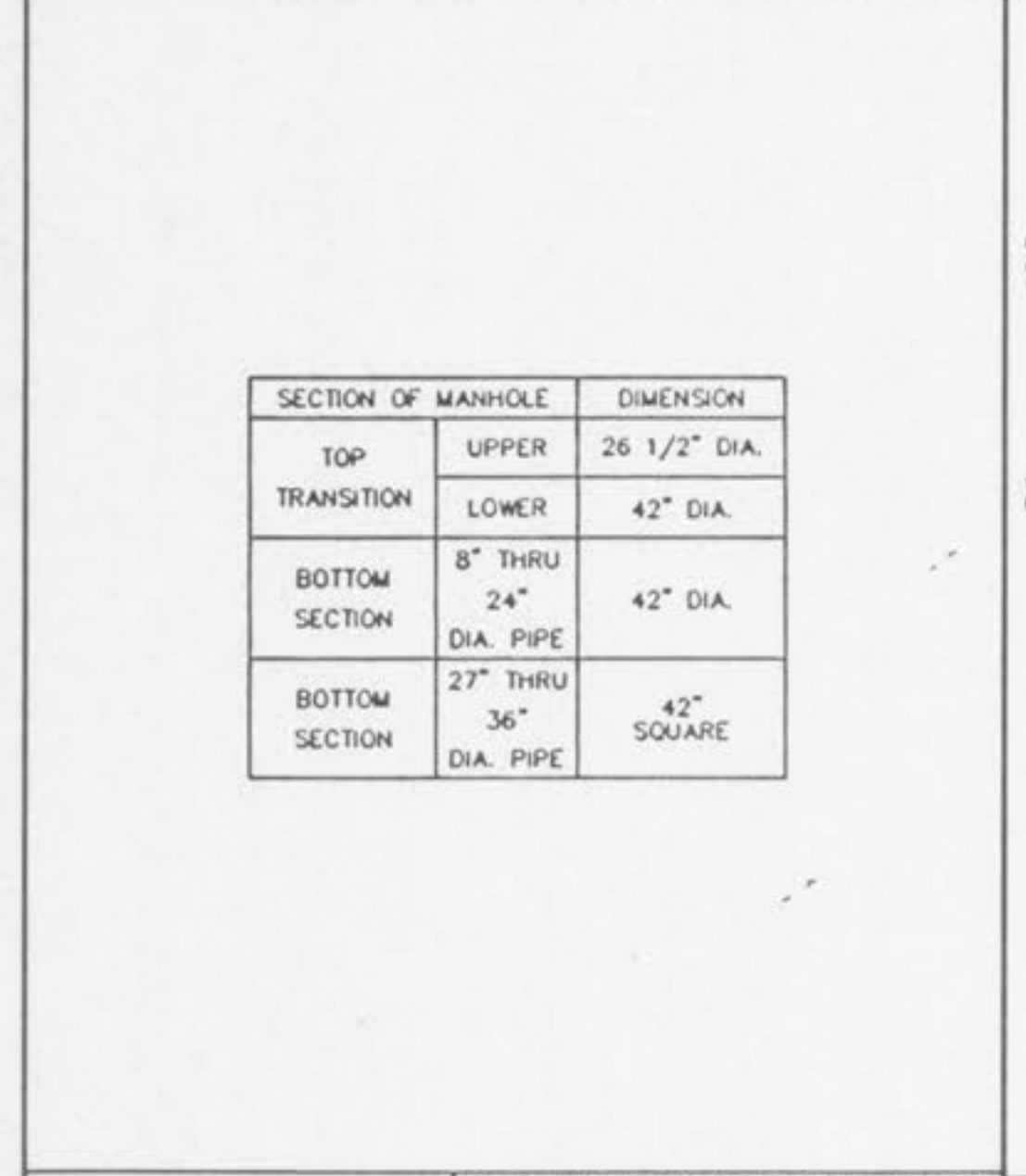


TABLE NO. 2 STANDARD MANHOLE DIMENSIONS

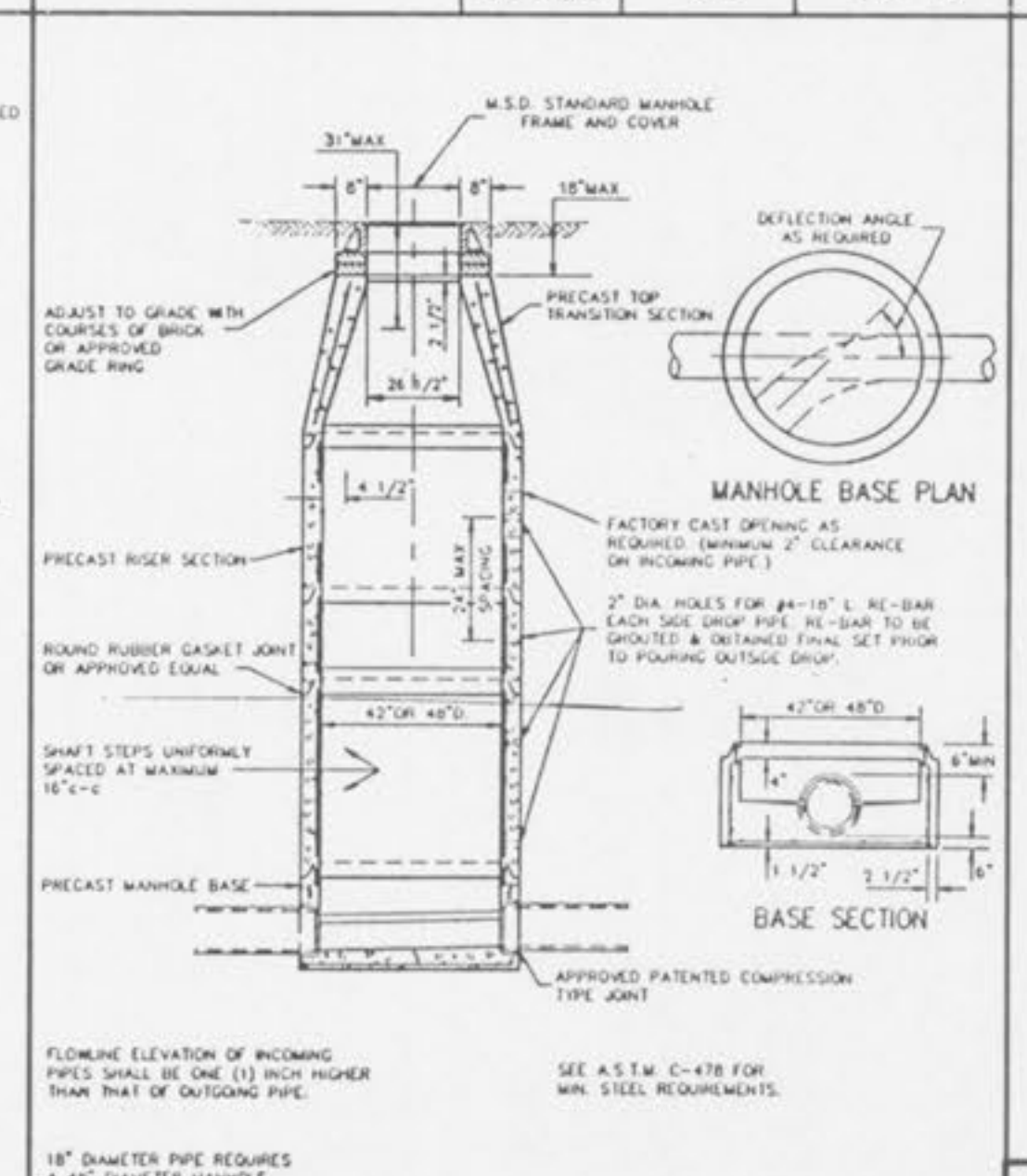
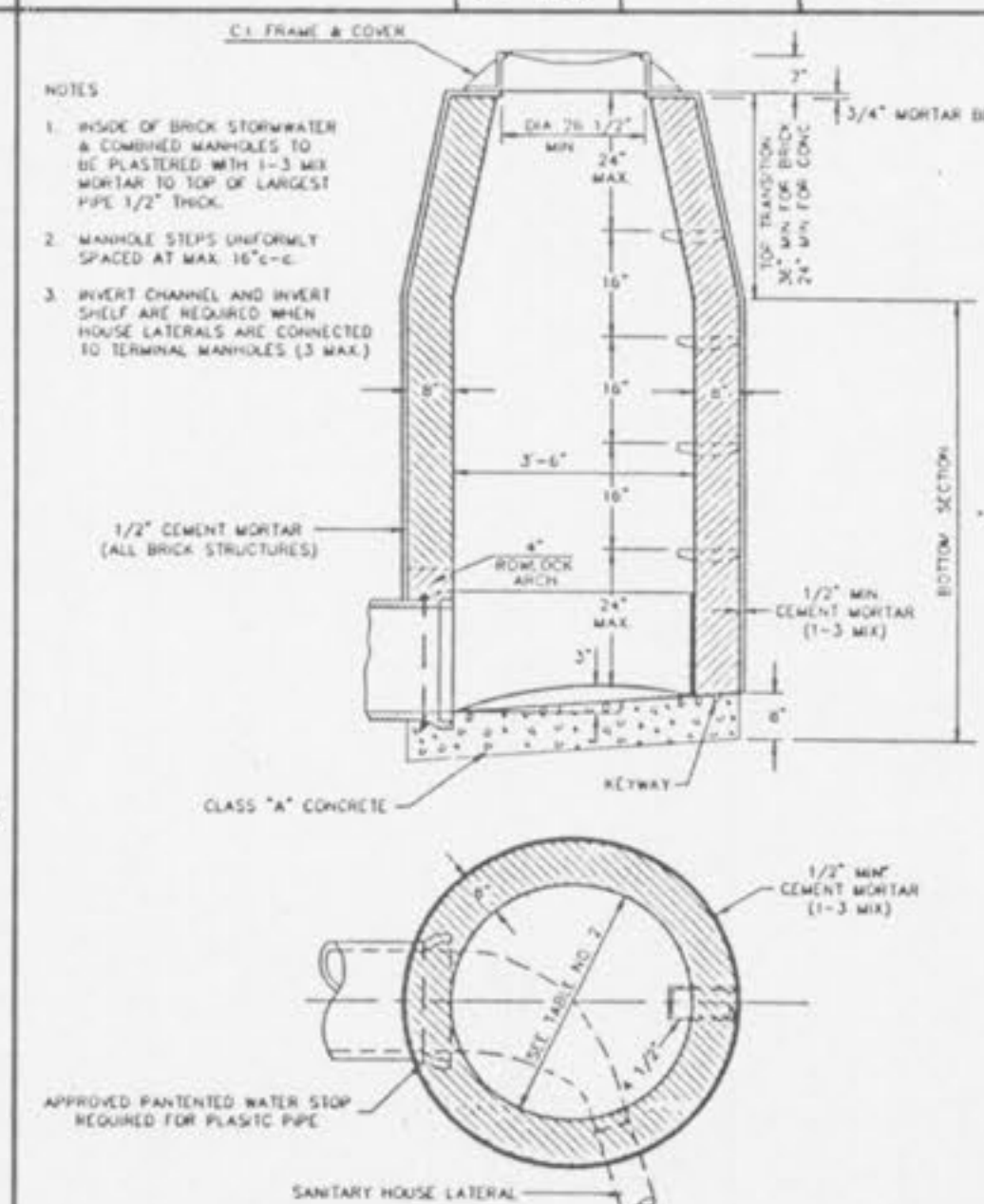
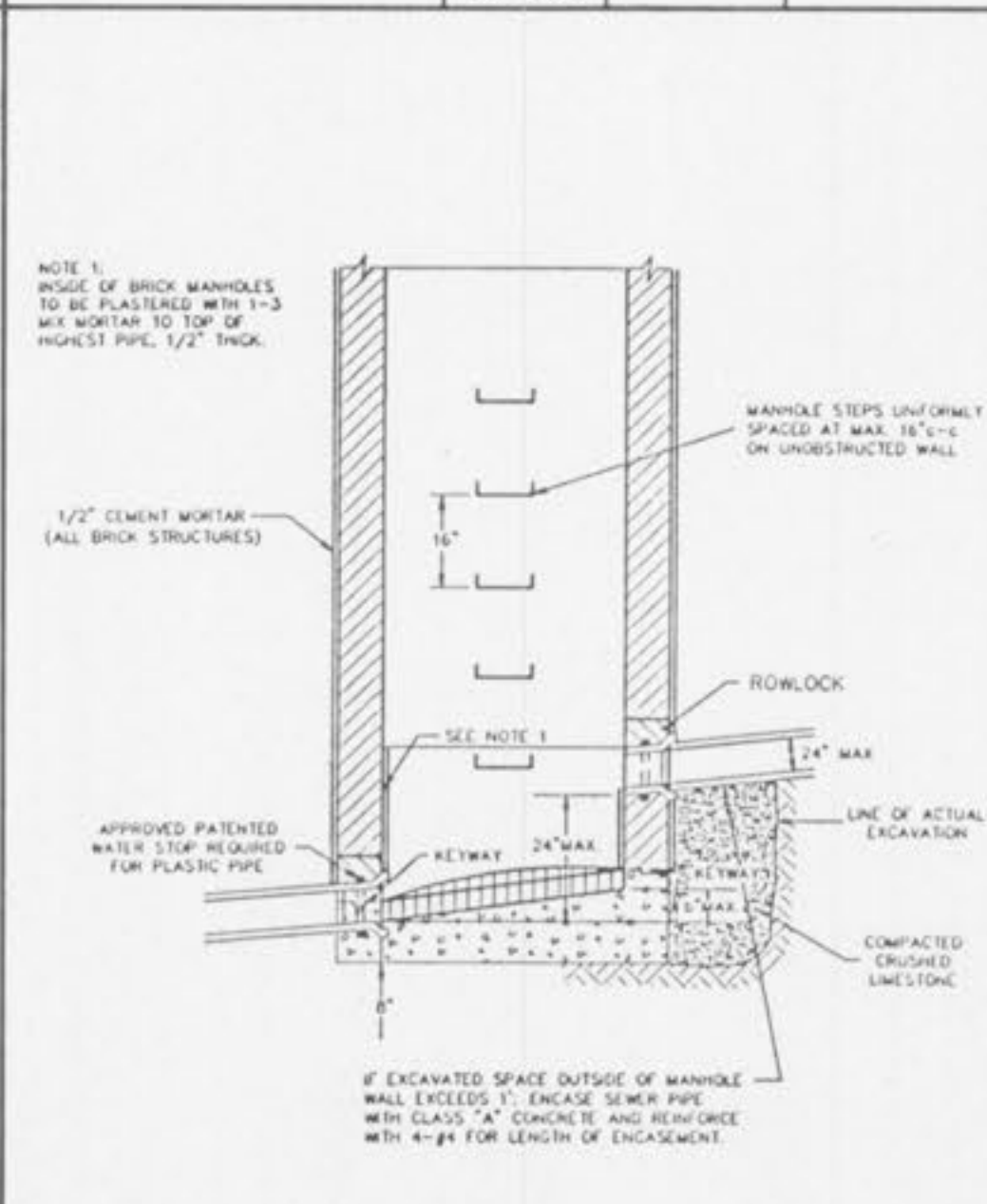
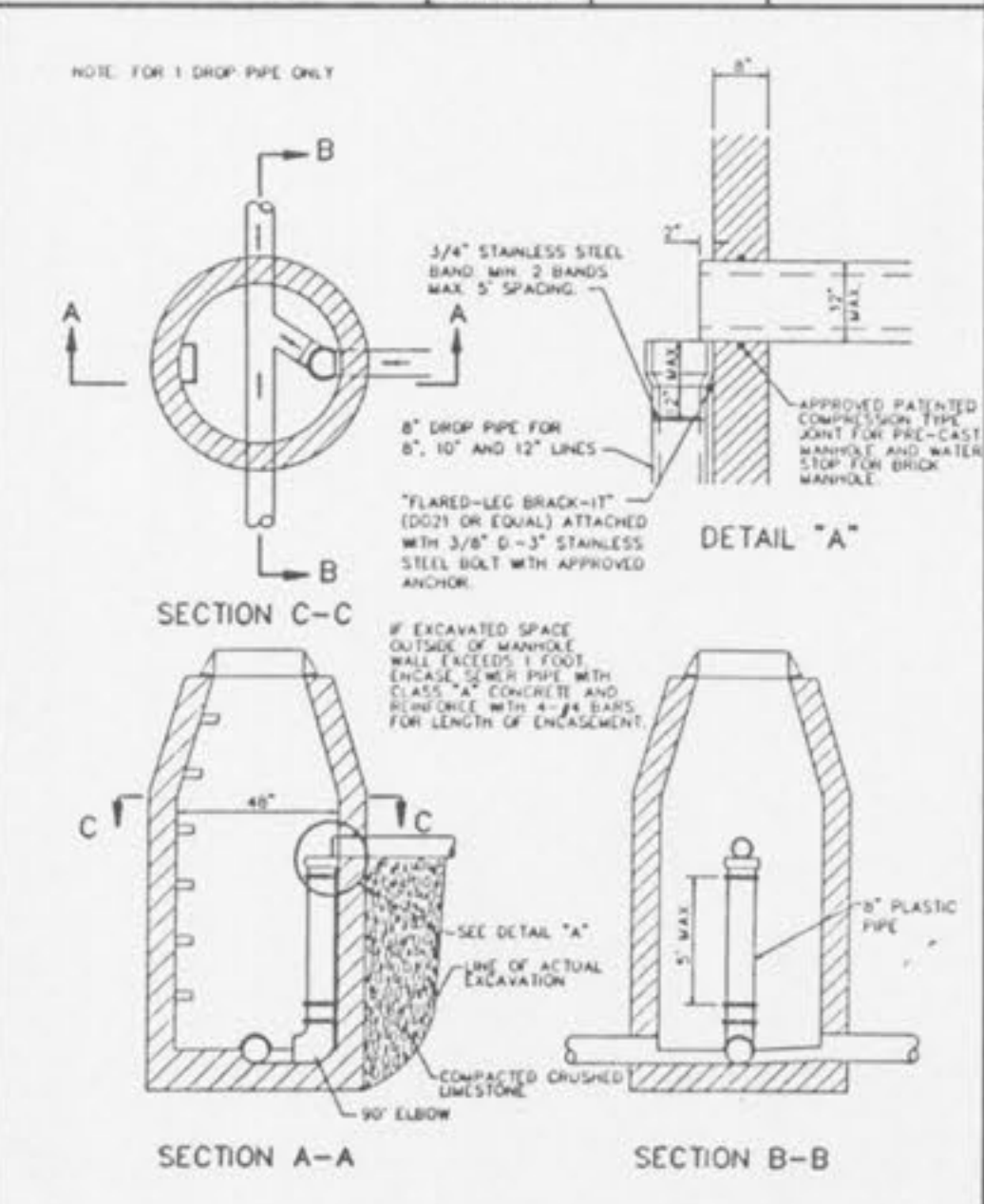
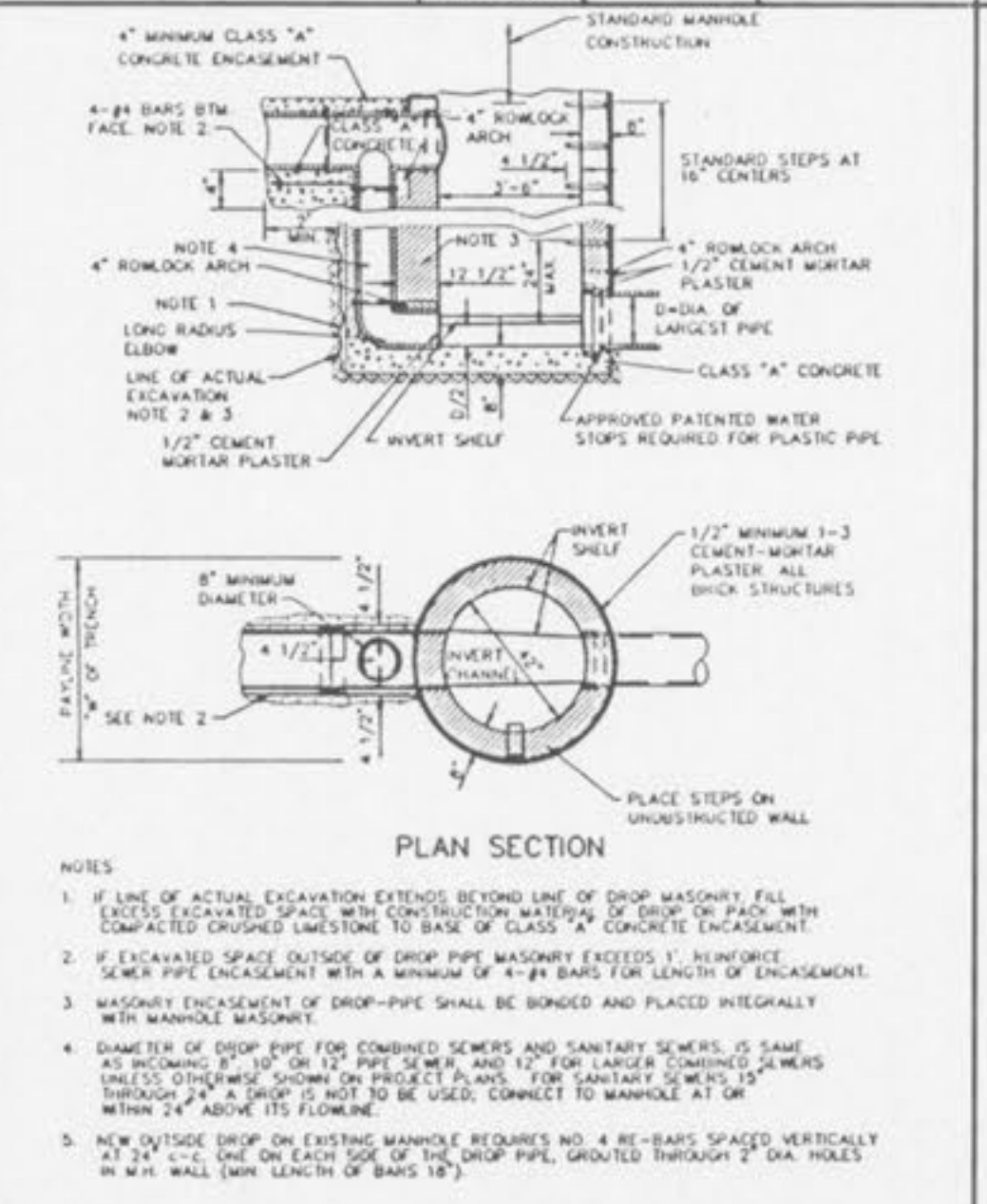
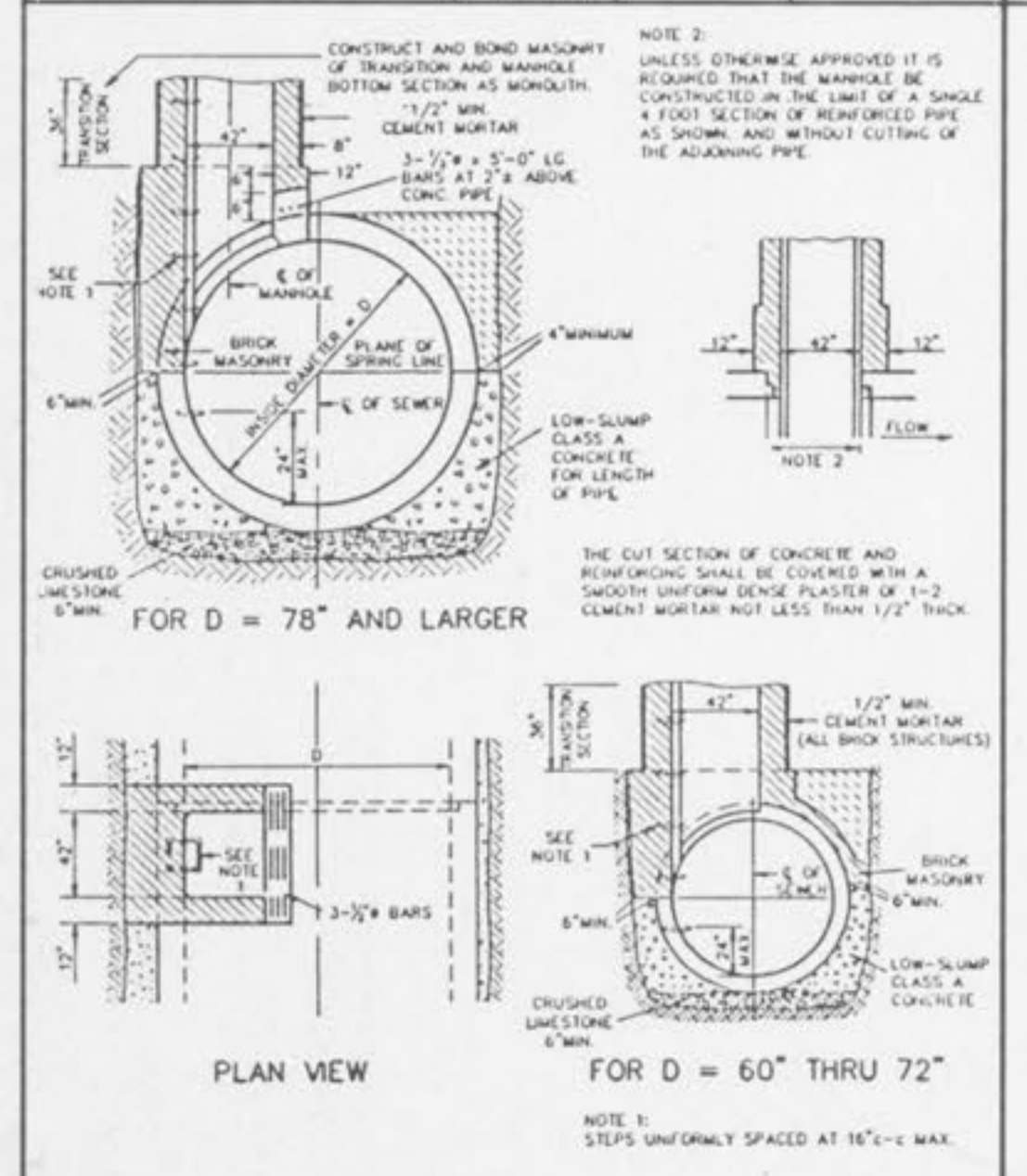
LINE MANHOLE PIPE SEWERS 8\"/>

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

INSIDE FOULWATER DROP MANHOLE

INSIDE FOULWATER DROP MANHOLE (FOR FREE-FALL)

TERMINAL MANHOLE

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