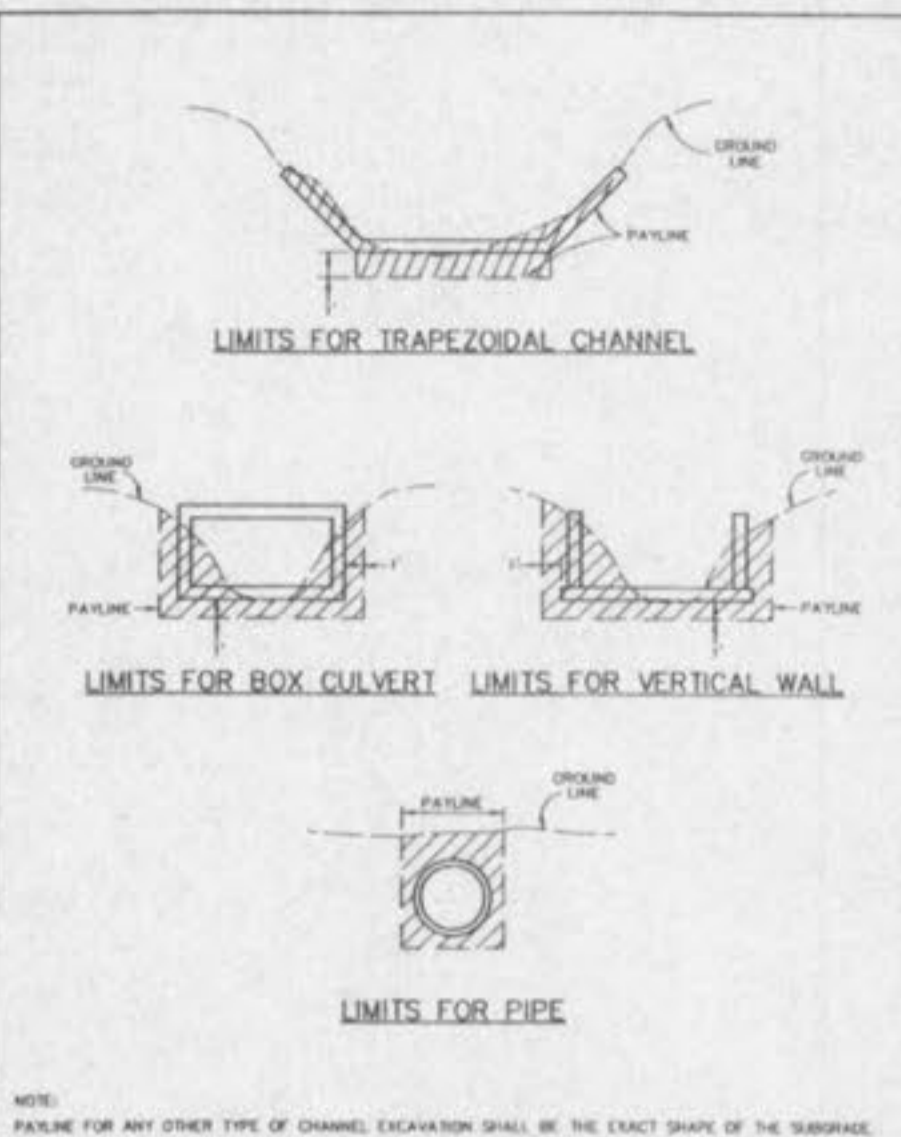
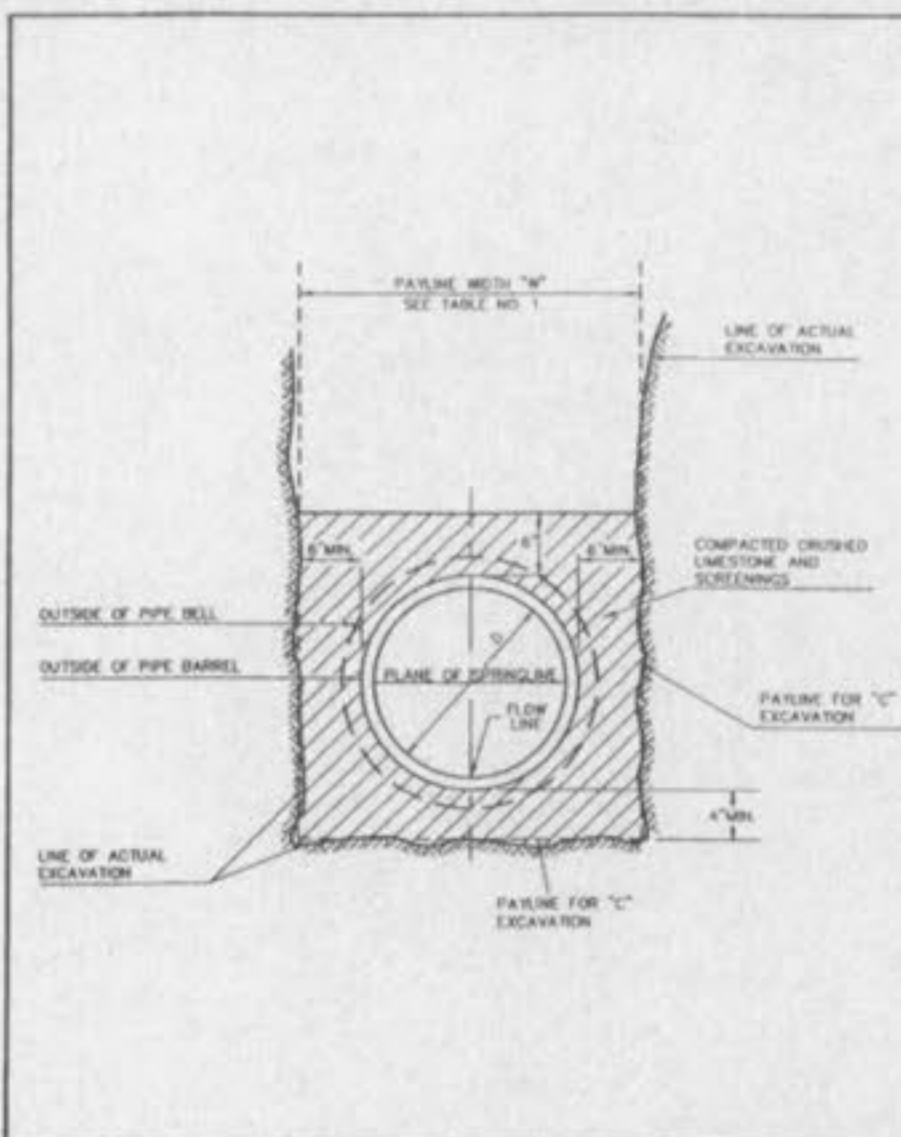


ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
PIPE DIAMETER (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"H" PAYLINE WIDTH OF TRENCH (INCHES)	PAY-VOLUMES (CU FT. PER FT.)	PIPE DIMENSIONS (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"H" PAYLINE WIDTH OF TRENCH (INCHES)	PAY-VOLUMES (CU FT. PER FT.)
4	30	2.50	3.08				
6	30	2.50	3.08				
8	30	2.50	3.08				
10	30	2.50	3.08				
12	30	2.50	3.08				
15	30	3.00	5.50				
18	30	3.00	5.77	14 x 23	41	3.42	5.64
21	39	3.25	6.81				
24	42	3.50	7.36	19 x 30	49	4.08	7.68
27	45	3.75	8.18	23 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	63	5.17	10.71
36	56	4.87	11.43	28 x 45	68	5.50	11.72
39	60	5.25	12.50	32 x 49	71	5.92	13.14
42	63	5.63	13.38	34 x 53	75	6.25	14.05
48	70	6.42	15.67	38 x 60	83	6.92	16.10
54	77	7.13	18.15	43 x 68	92	7.67	18.81
60	84	7.90	20.71	48 x 76	101	8.42	21.58
66	91	8.63	23.45	53 x 83	109	9.09	24.35
72	98	9.33	26.27	58 x 91	118	9.87	27.40
78	105	10.00	29.20	63 x 98	126	10.50	30.50
84	112	10.63	32.27	68 x 106	135	11.20	33.91
90	119	11.25	35.50	72 x 113	143	11.82	36.99
96	126	11.83	38.87	77 x 121	152	12.47	40.89
102	133	12.38	42.39	82 x 128	160	13.13	44.40
108	140	12.90	46.07	87 x 136	168	13.80	47.79
114	147	13.38	50.00	92 x 143	176	14.47	51.70
120	154	13.83	54.12	97 x 151	185	15.12	56.01
126	161	14.25	58.42				
132	168	14.63	62.90	106 x 160	200	16.83	64.48
144	182	15.71	72.40	118 x 180	218	18.17	73.59

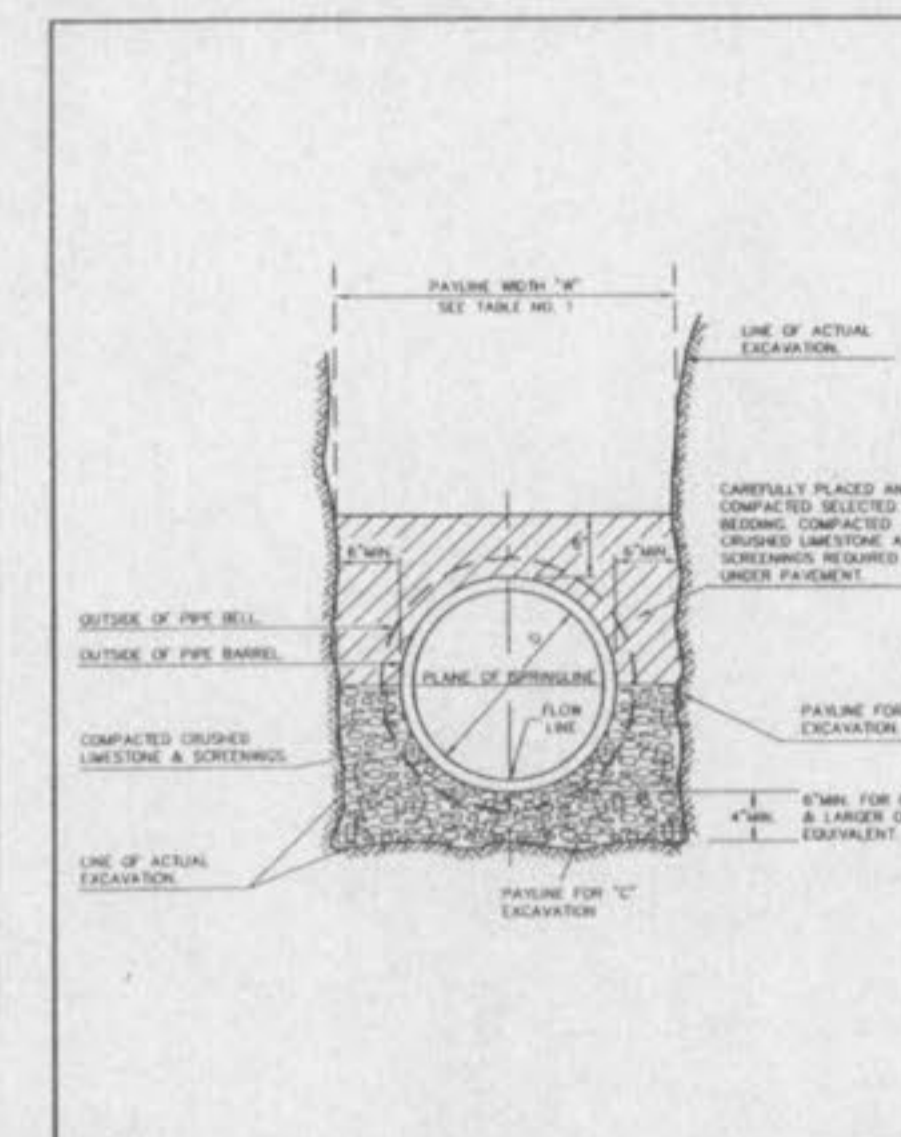
TABLE 1
PAYLINE WIDTHS OF TRENCH AND PAY-VOLUMES OF CONCRETE
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 1



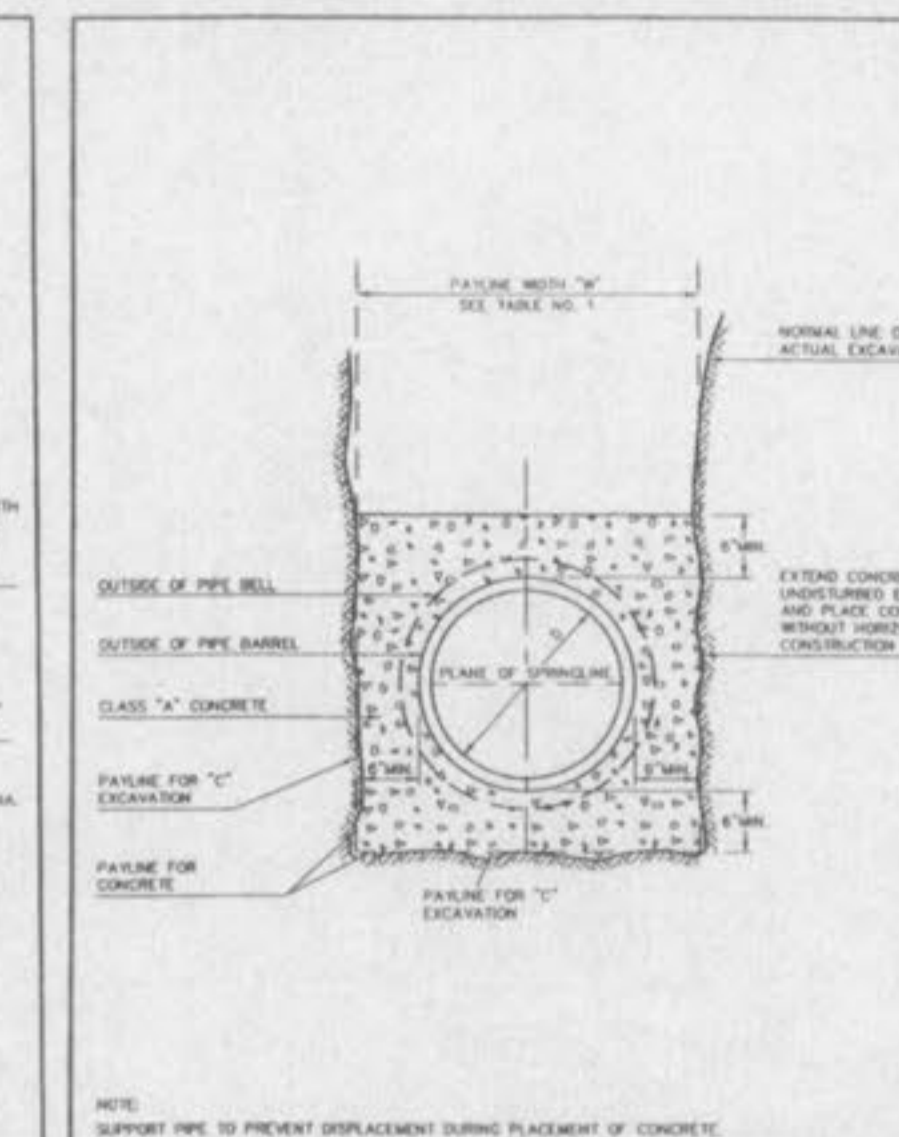
NOTE: PAYLINE FOR ANY OTHER TYPE OF CHANNEL EXCAVATION SHALL BE THE EXACT SHAPE OF THE SURROUNDING.
PAYLINE LIMITS FOR EXCAVATION
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 2



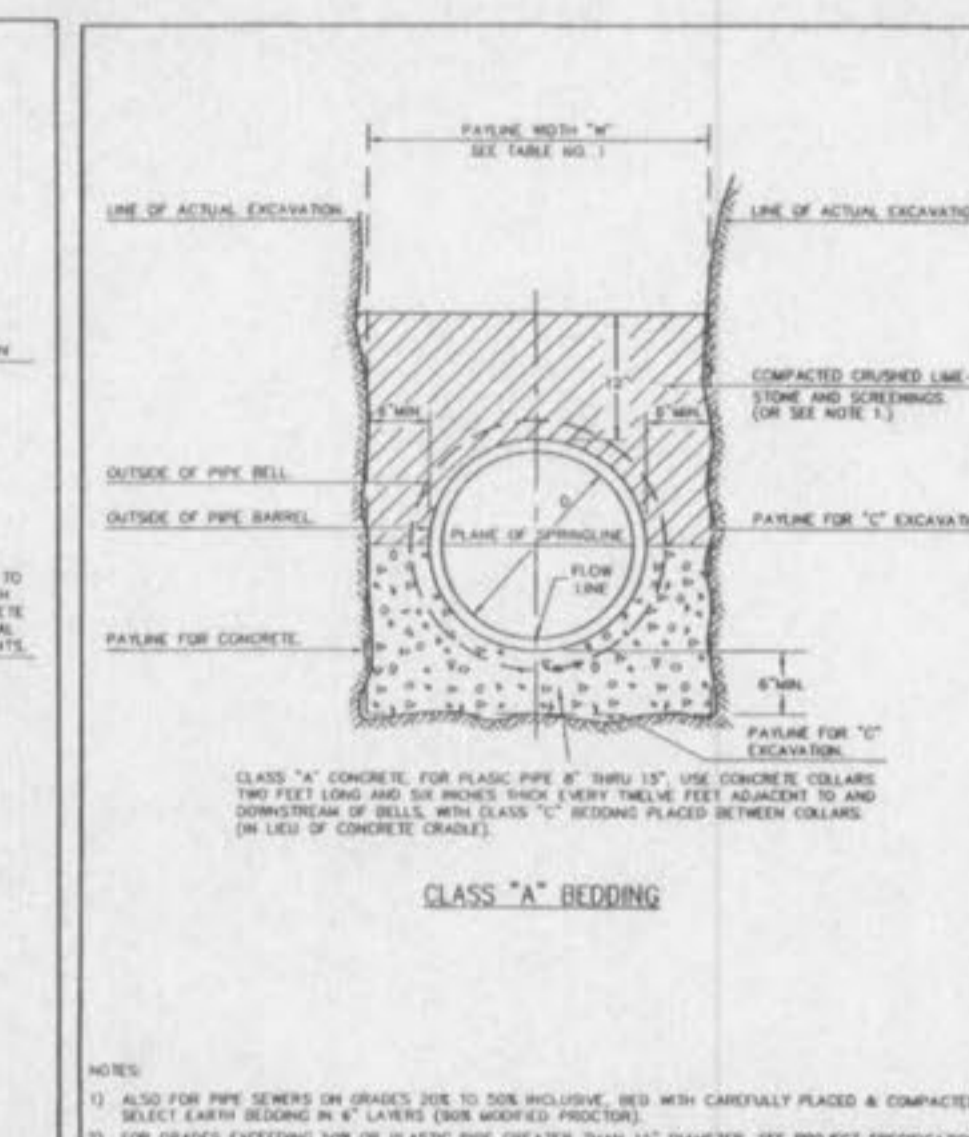
PIPE BEDDING CLASS "C" (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 4



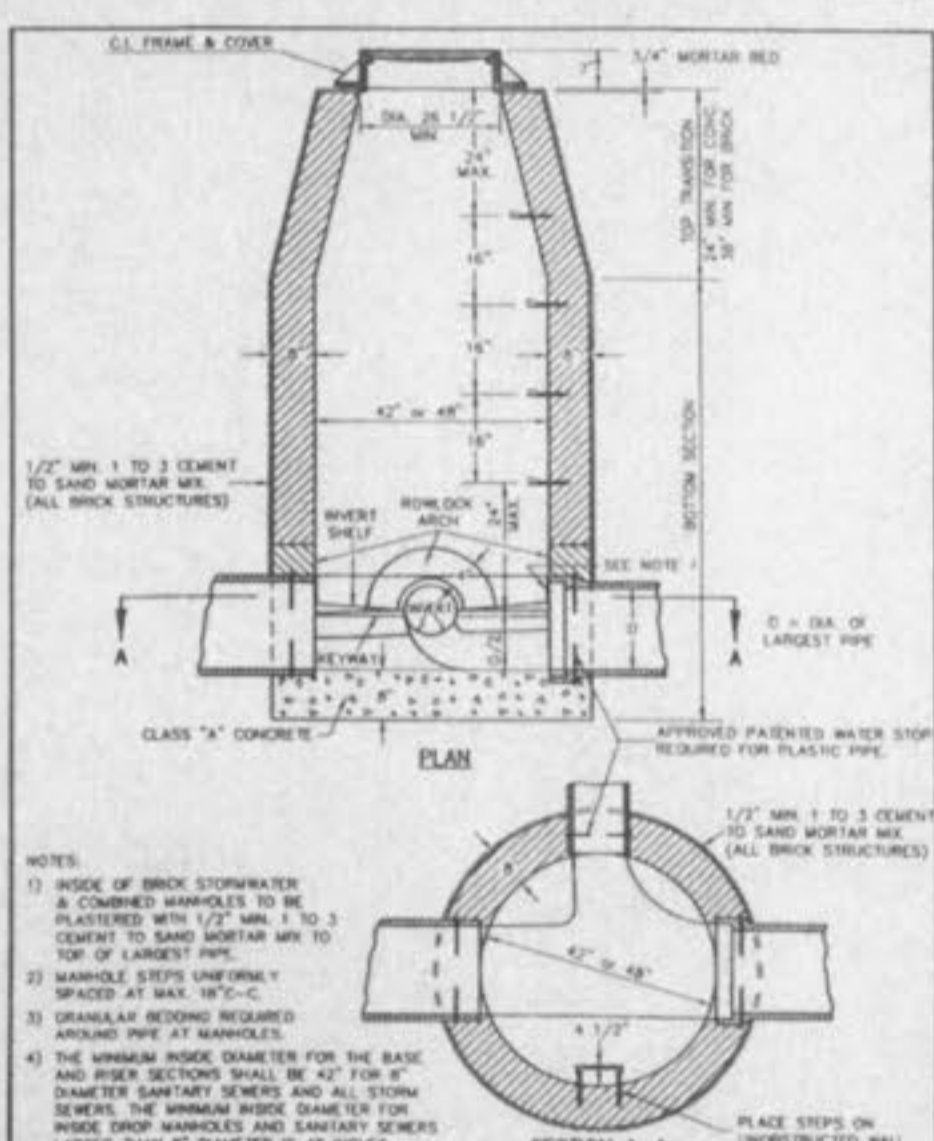
PIPE BEDDING CLASS "C" (MODIFIED FOR REINFORCED CONCRETE PIPE)
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 5



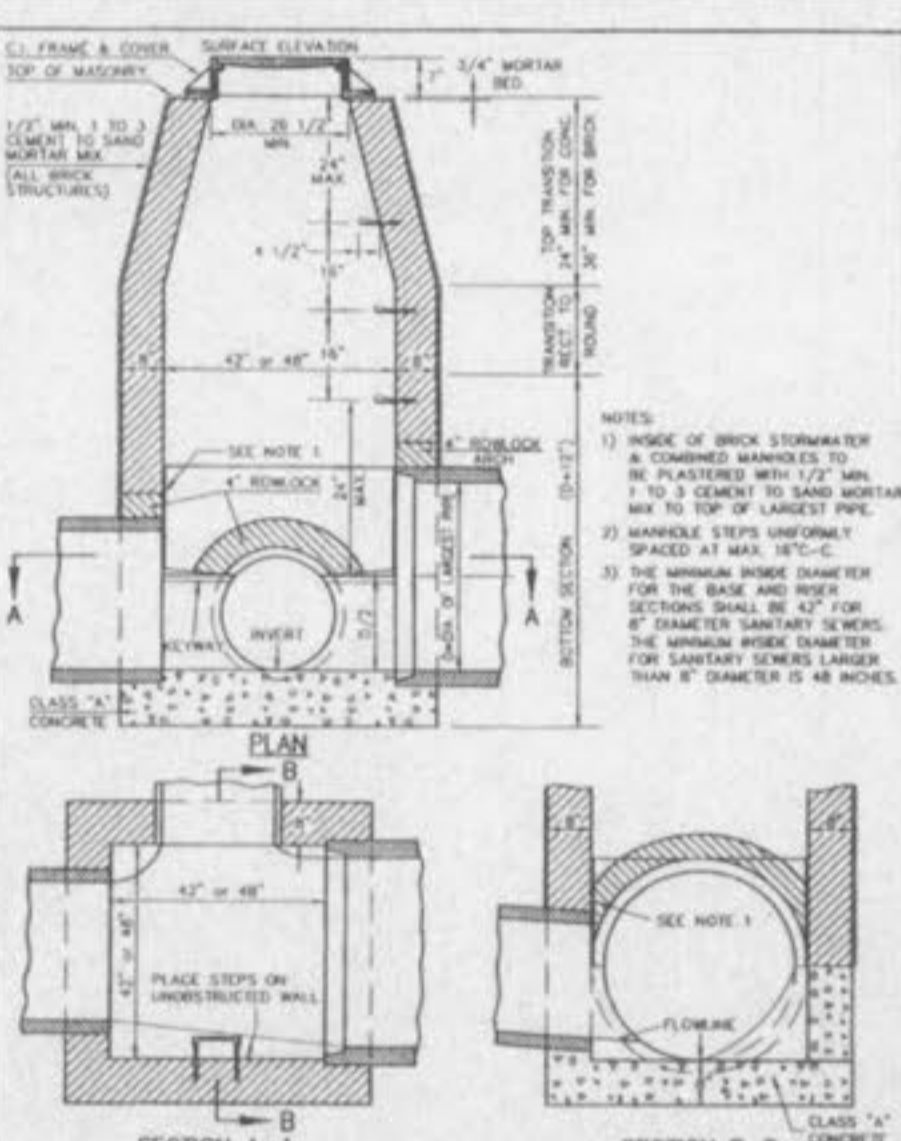
CONCRETE ENCASEMENT
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 8



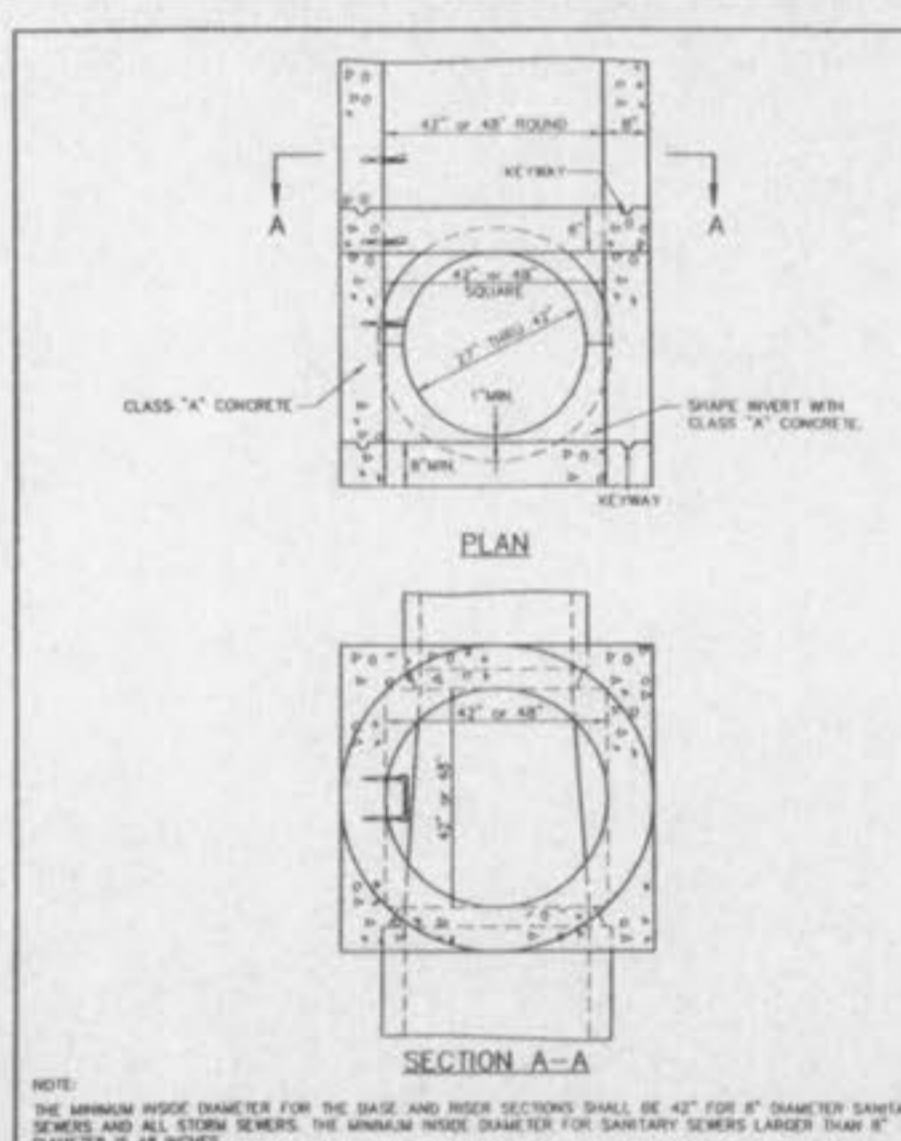
CLASS "A" BEDDING
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 9



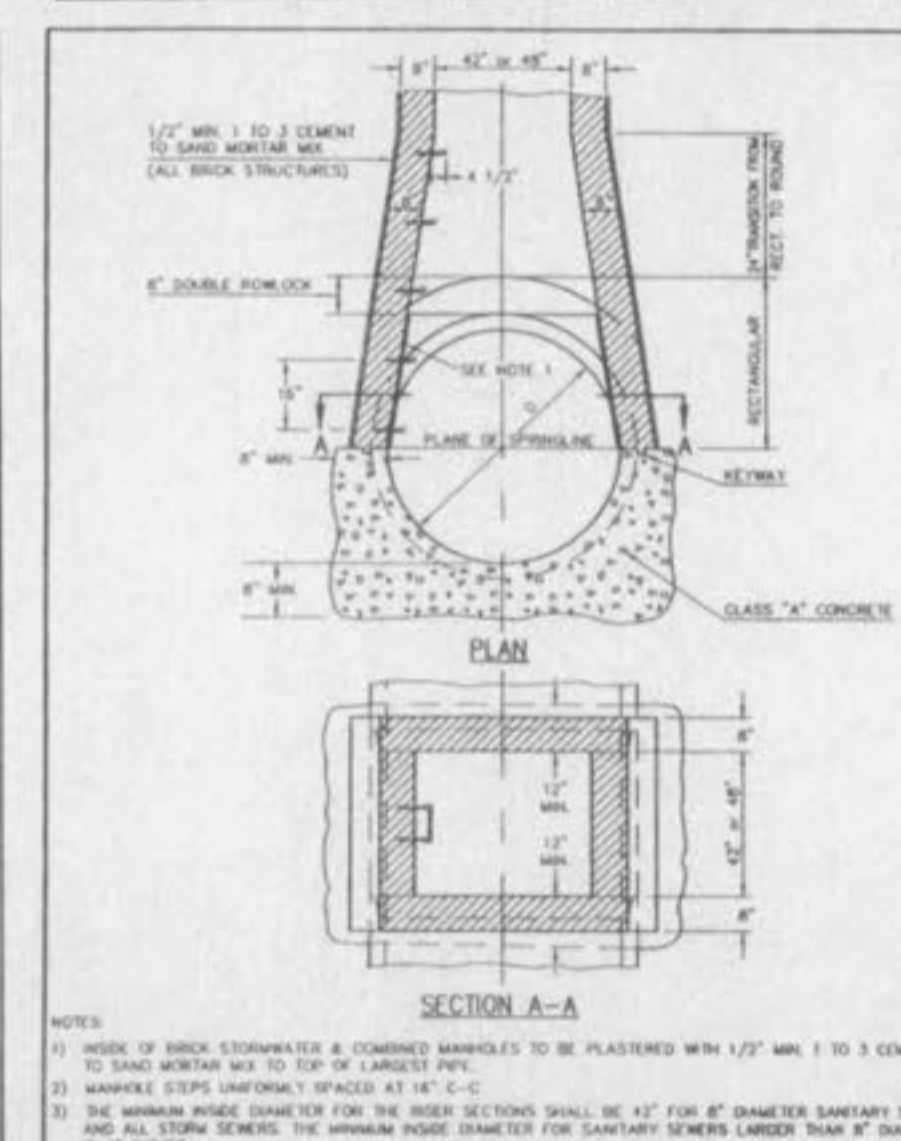
LINE MANHOLE PIPE SEWERS 8"-24" DIA.
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 10



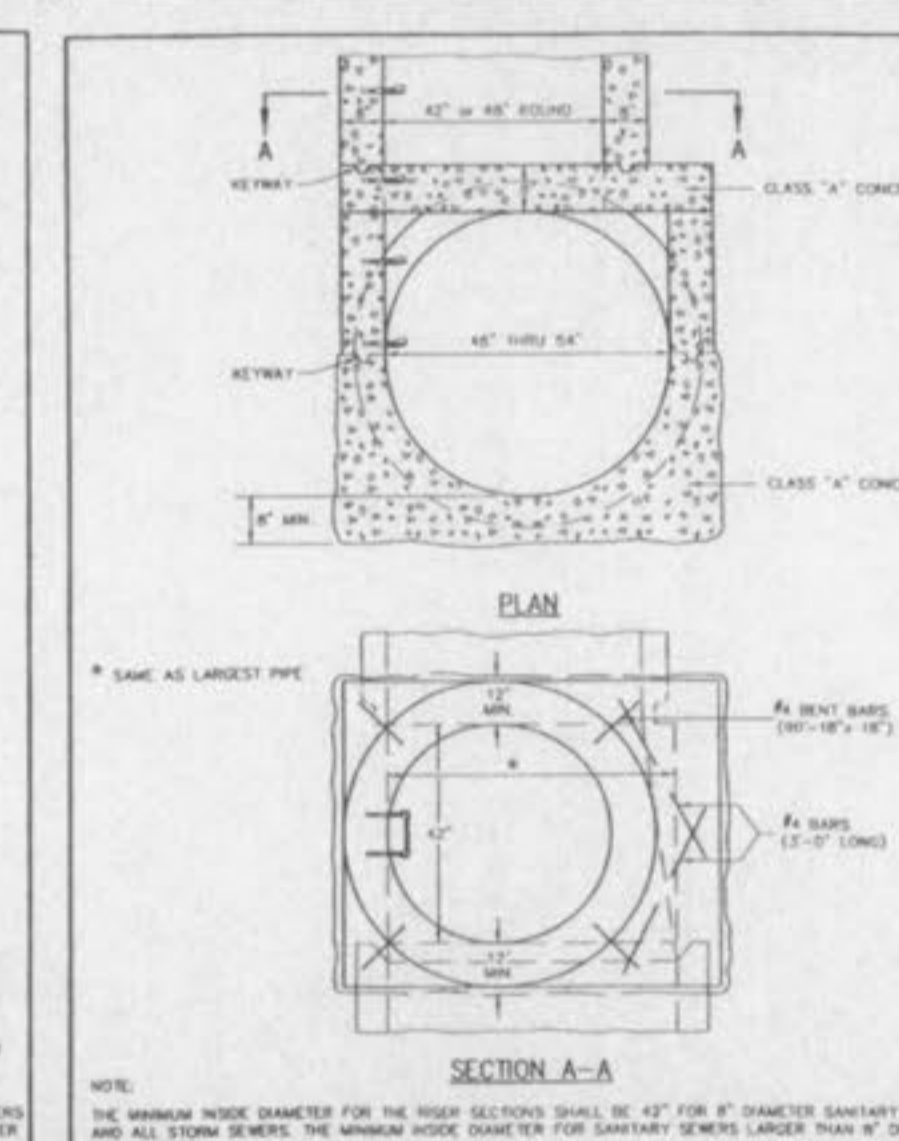
TYPICAL LINE MANHOLE ON PIPE SEWER 27" THRU 42" IN DIAMETER
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 11



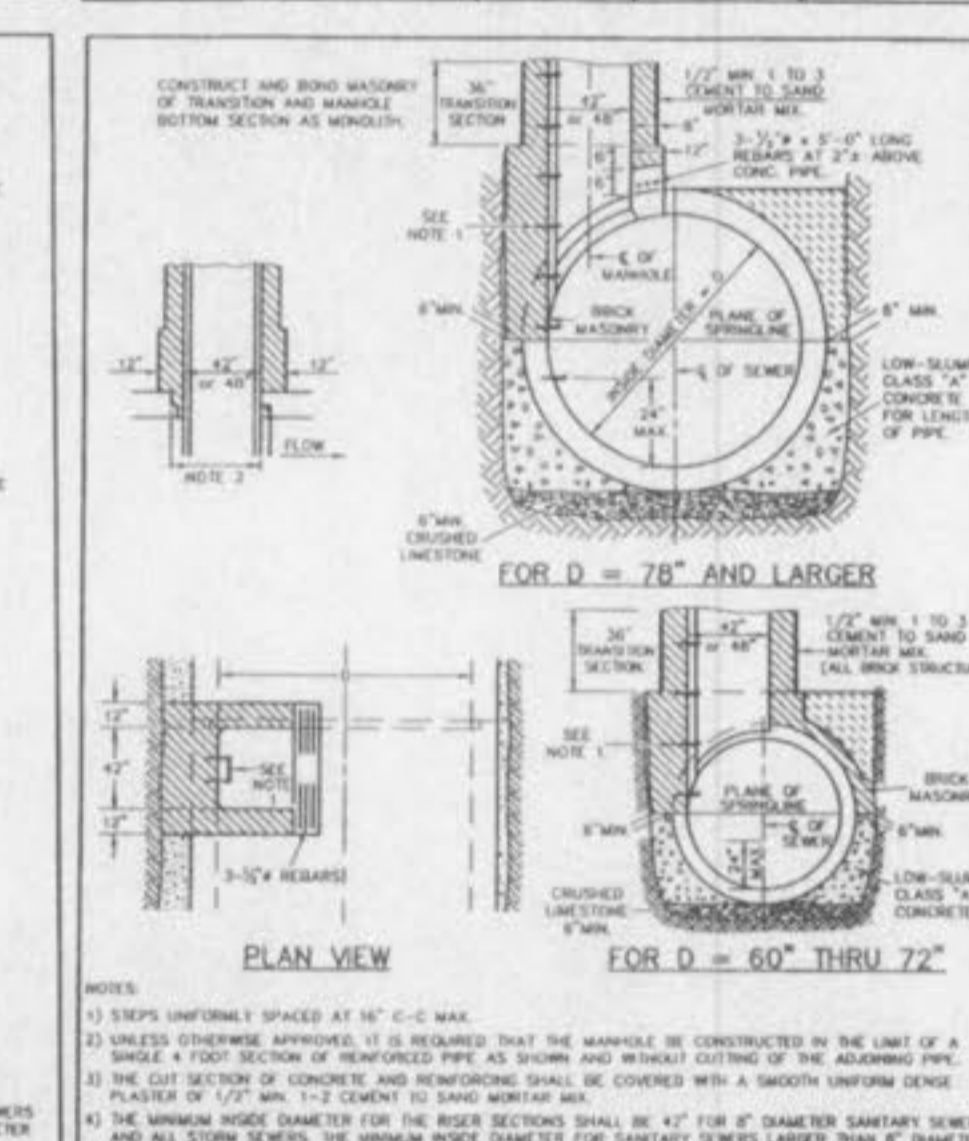
MANHOLE ON PIPE SEWER 27" THRU 42" (ALTERNATE)
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. D.A.B./SAM
Ch. J.C.K. 2000 SHEET 12



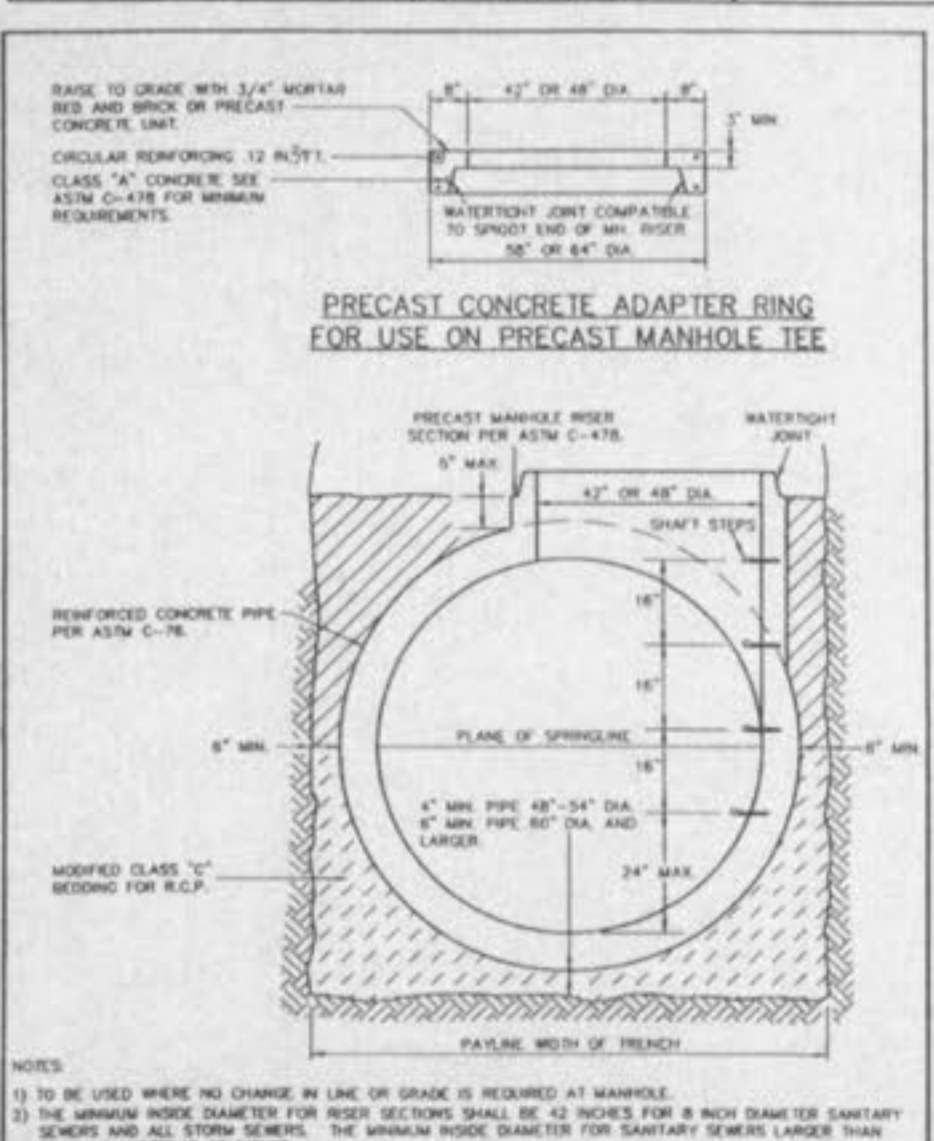
MANHOLE ON CONCRETE PIPE SEWERS 48" THRU 54" DIAMETER
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 13



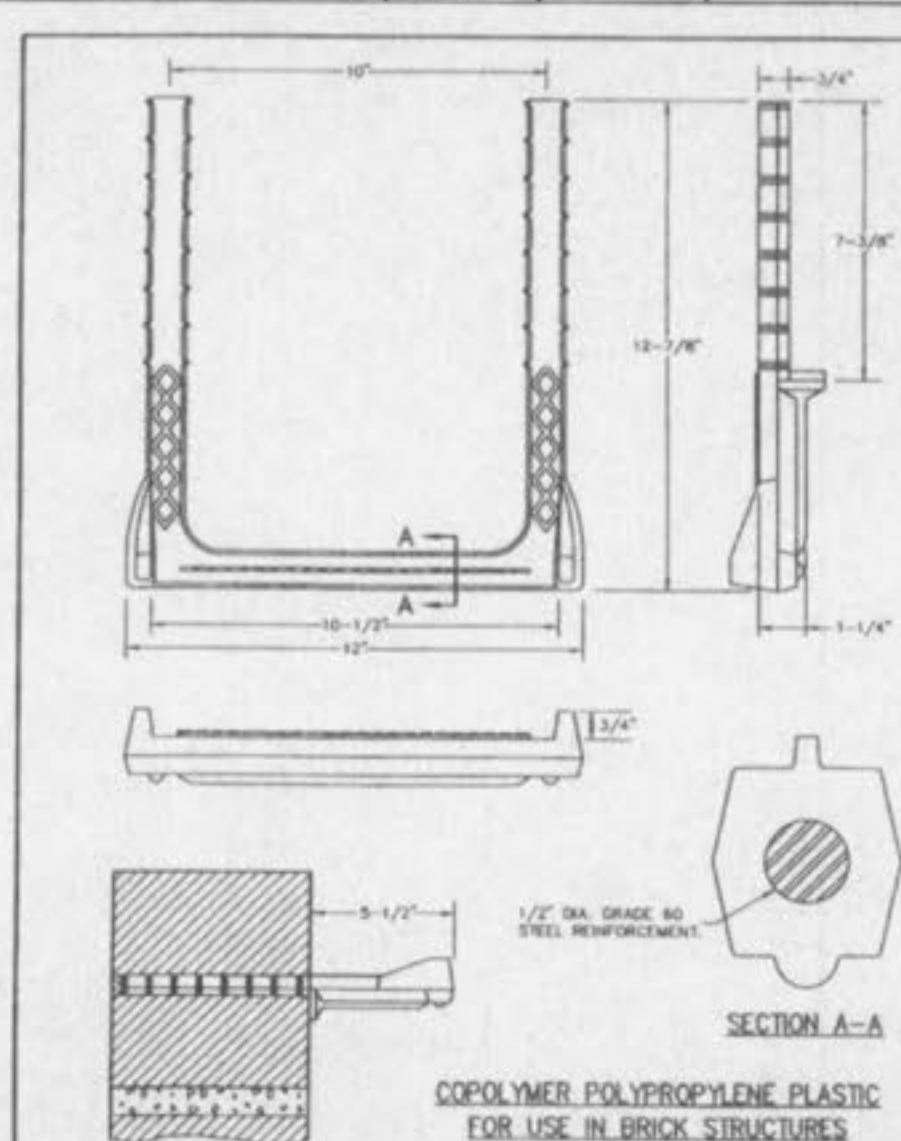
MANHOLE ON CONC. PIPE 48" THRU 54" (ALTERNATE)
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 14



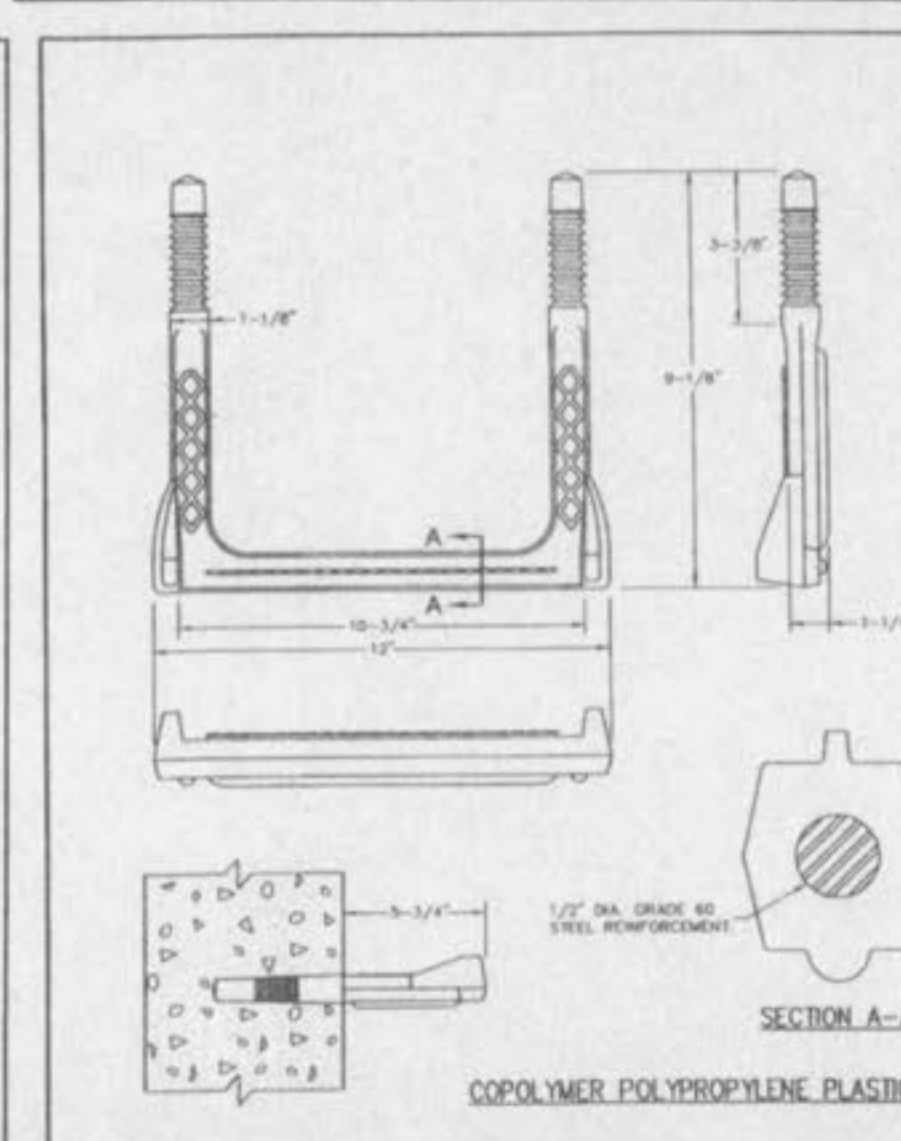
TYPICAL MANHOLE BASE REINFORCED CONCRETE PIPE 60" AND LARGER IN DIAMETER
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 15



TYPICAL PRECAST MANHOLE TEE FOR REINFORCED CONCRETE PIPE SEWERS 48 INCH AND LARGER IN DIAMETER
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 24



PSI-B MANHOLE STEP INTO JOINT
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. W.S.H./SAM
Ch. J.C.K. 2000 SHEET 57



MANHOLE STEP FOR PRECAST & CAST-IN-PLACE MANHOLE
METROPOLITAN ST. LOUIS SEWER DISTRICT
Standard Details of Sewer Construction
Dr. D.A.B./SAM
Ch. J.C.K. 2000 SHEET 58

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