

ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
INSIDE DIAMETER OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (FEET)	"T" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES CU. FT. PER FT.	INSIDE DIMENSIONS OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (FEET)	"T" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES CU. FT. PER FT.
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	7.88
27	45	3.75	8.16	22 x 34	53	4.42	8.61
30	49	4.08	9.30	24 x 38	56	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	59	4.92	12.33	32 x 49	71	5.92	13.14
42	63	5.25	13.38	34 x 53	75	6.25	14.05
48	70	6.00	15.67	38 x 60	83	6.92	16.18
54	77	6.75	18.15	43 x 68	92	7.67	18.61
60	84	7.50	20.73	48 x 76	101	8.42	21.55
66	91	8.25	23.43	53 x 83	109	9.08	24.35
72	98	9.00	26.37	58 x 91	118	9.83	27.45
78	105	9.75	29.39	63 x 98	126	10.50	30.50
84	112	10.50	32.57	68 x 106	135	11.25	33.91
90	119	11.25	35.90	72 x 113	143	11.92	36.59
96	126	12.00	39.37	77 x 121	152	12.67	40.69
102	133	12.75	42.99	82 x 128	160	13.33	44.45
108	140	13.50	46.75	87 x 136	168	14.00	47.79
114	147	14.25	50.66	92 x 143	176	14.67	51.70
120	154	15.00	54.72	97 x 151	185	15.42	56.01
126	161	15.75	58.92				
132	168	16.50	63.27	106 x 166	202	16.83	64.48
144	182	18.00	72.40	118 x 180	218	18.17	73.59

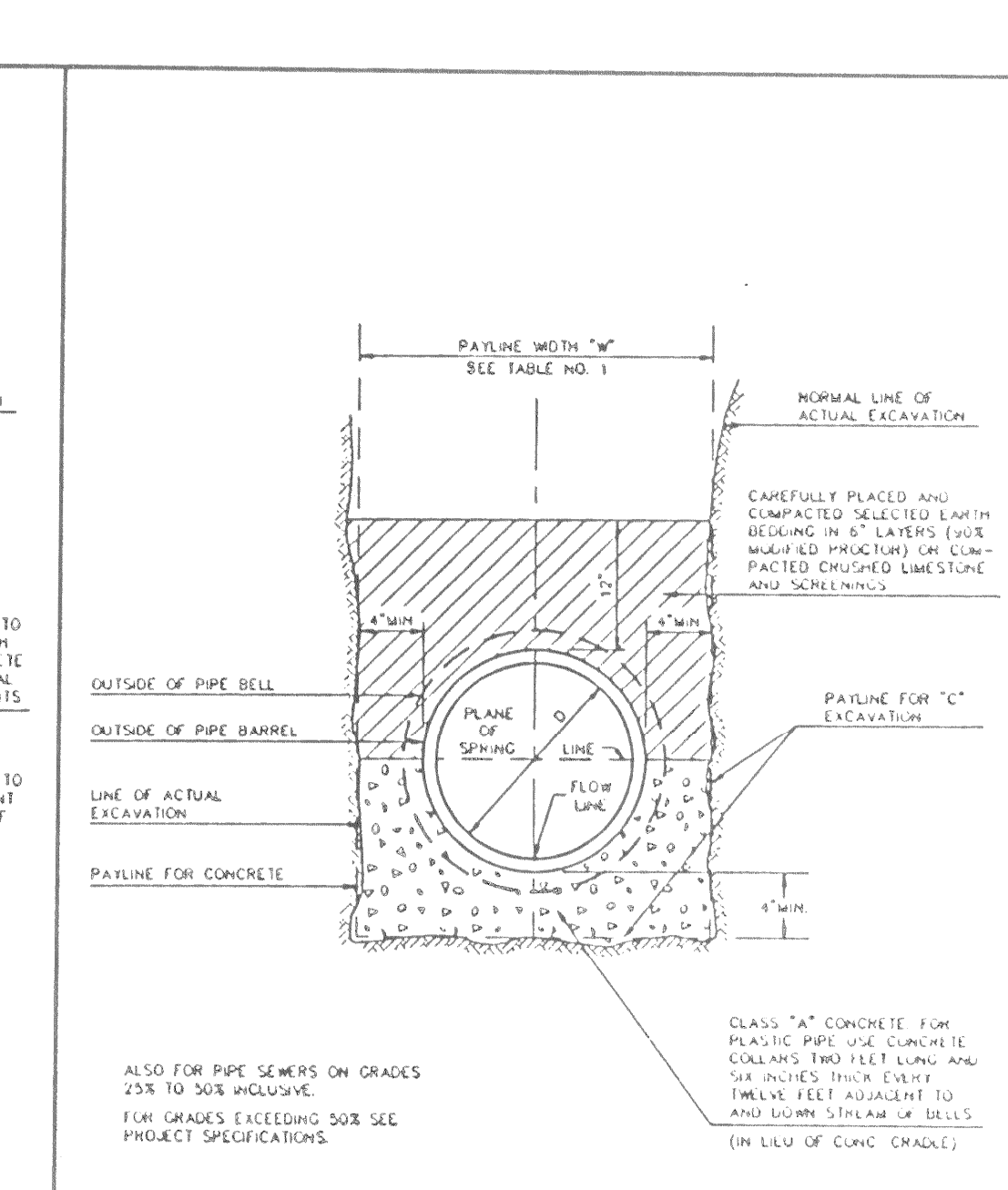
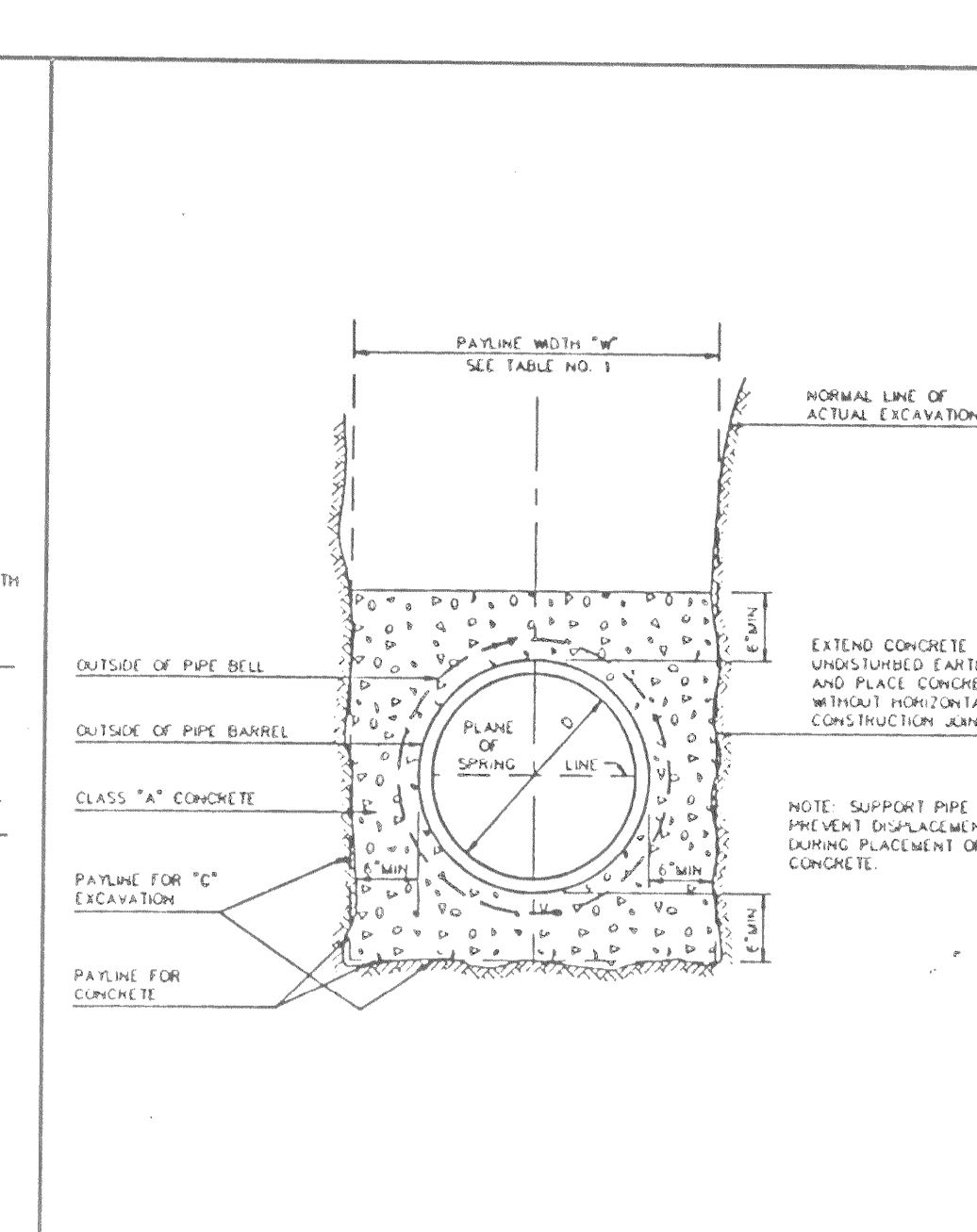
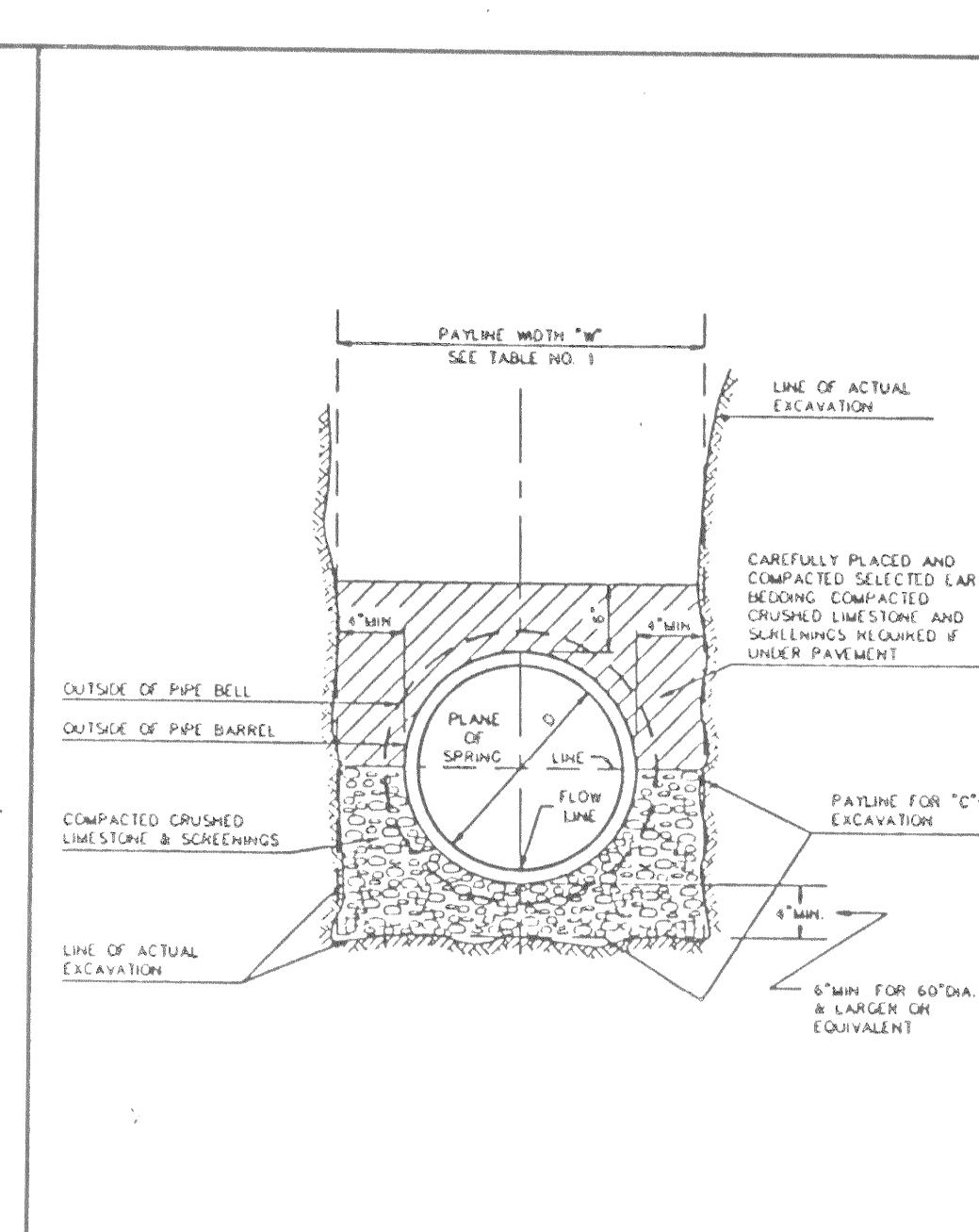
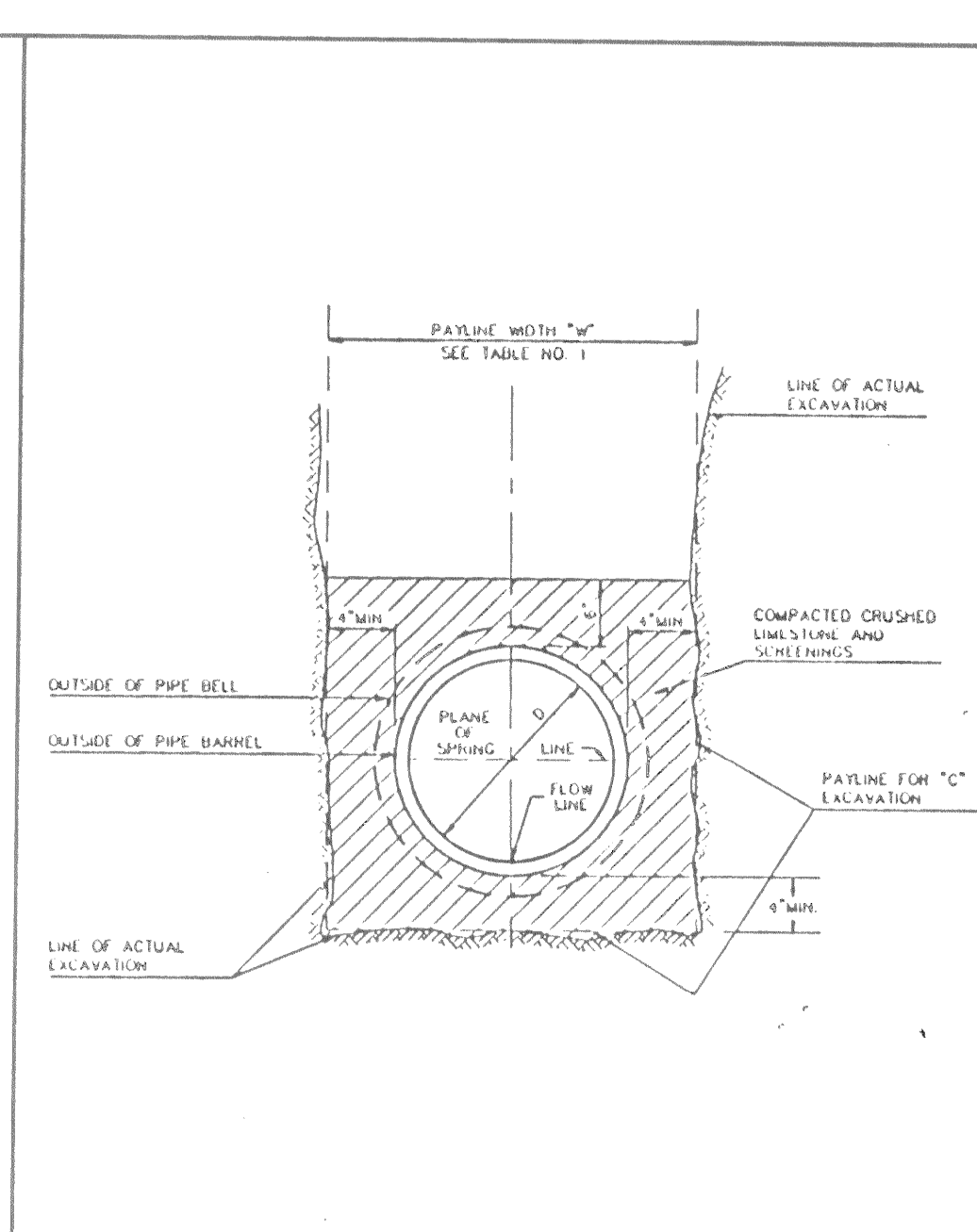
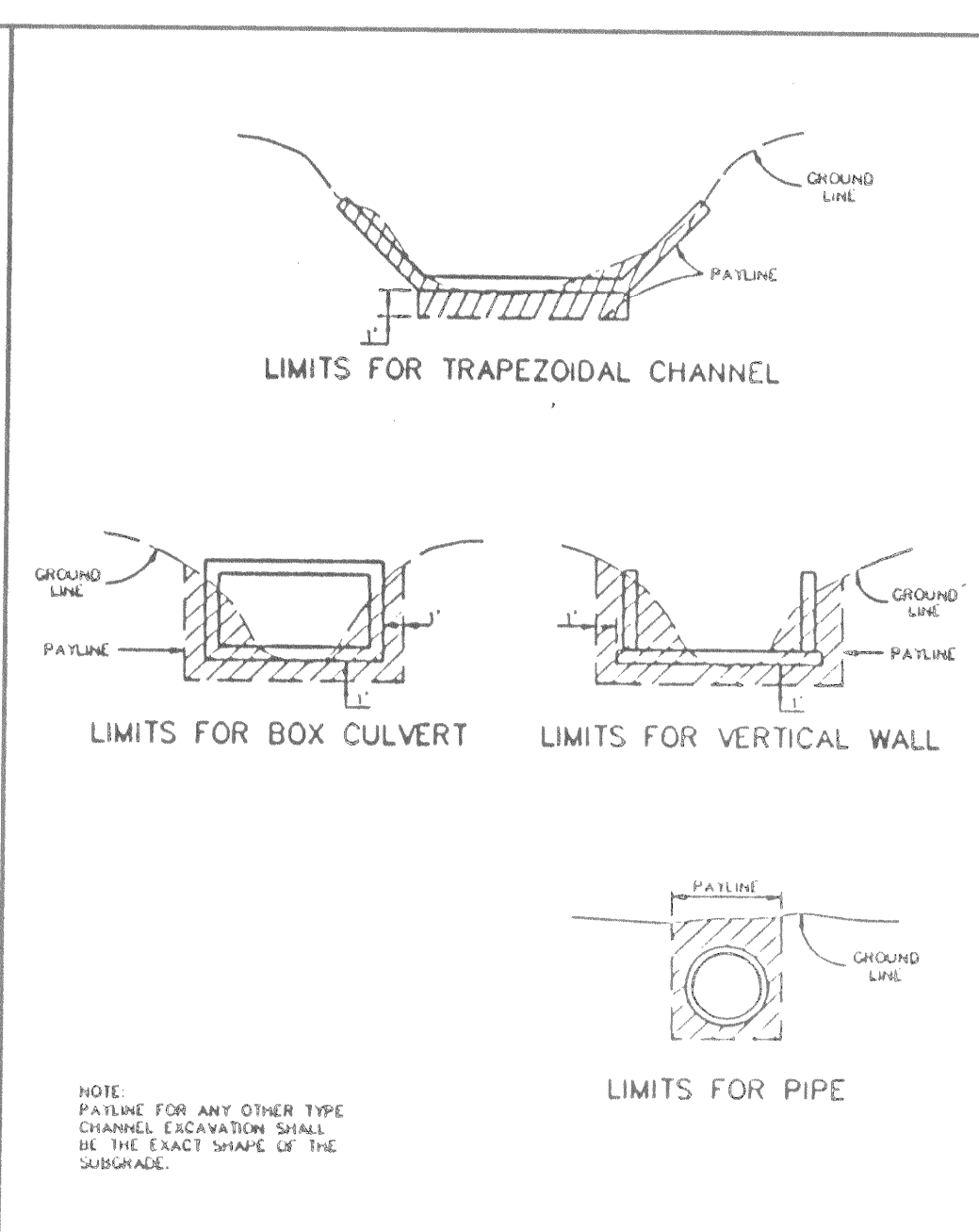


TABLE 1  
PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. B.E.B. Ch. J.C.K. 1992 SHEET 1

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

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 3

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 4

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

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

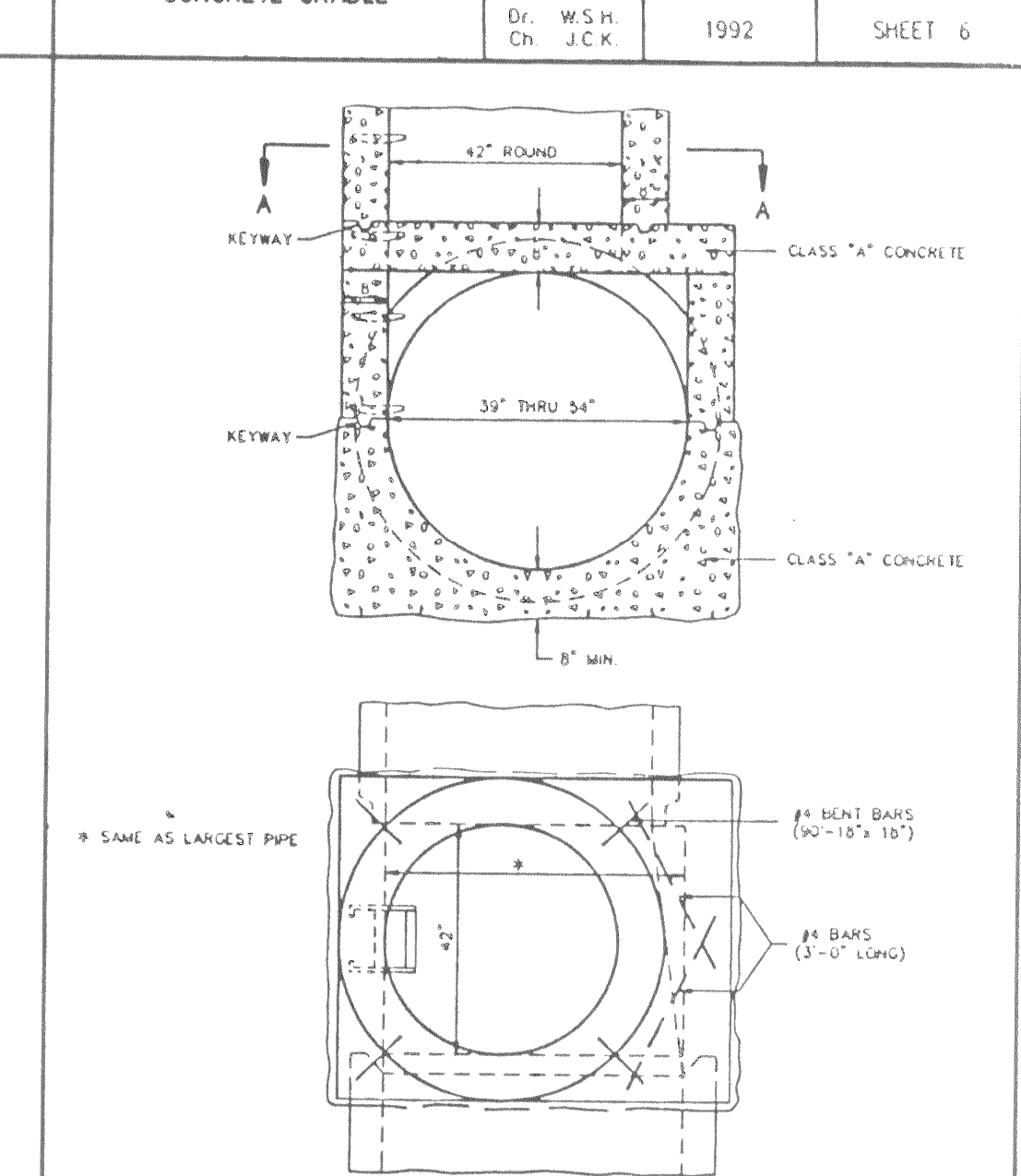
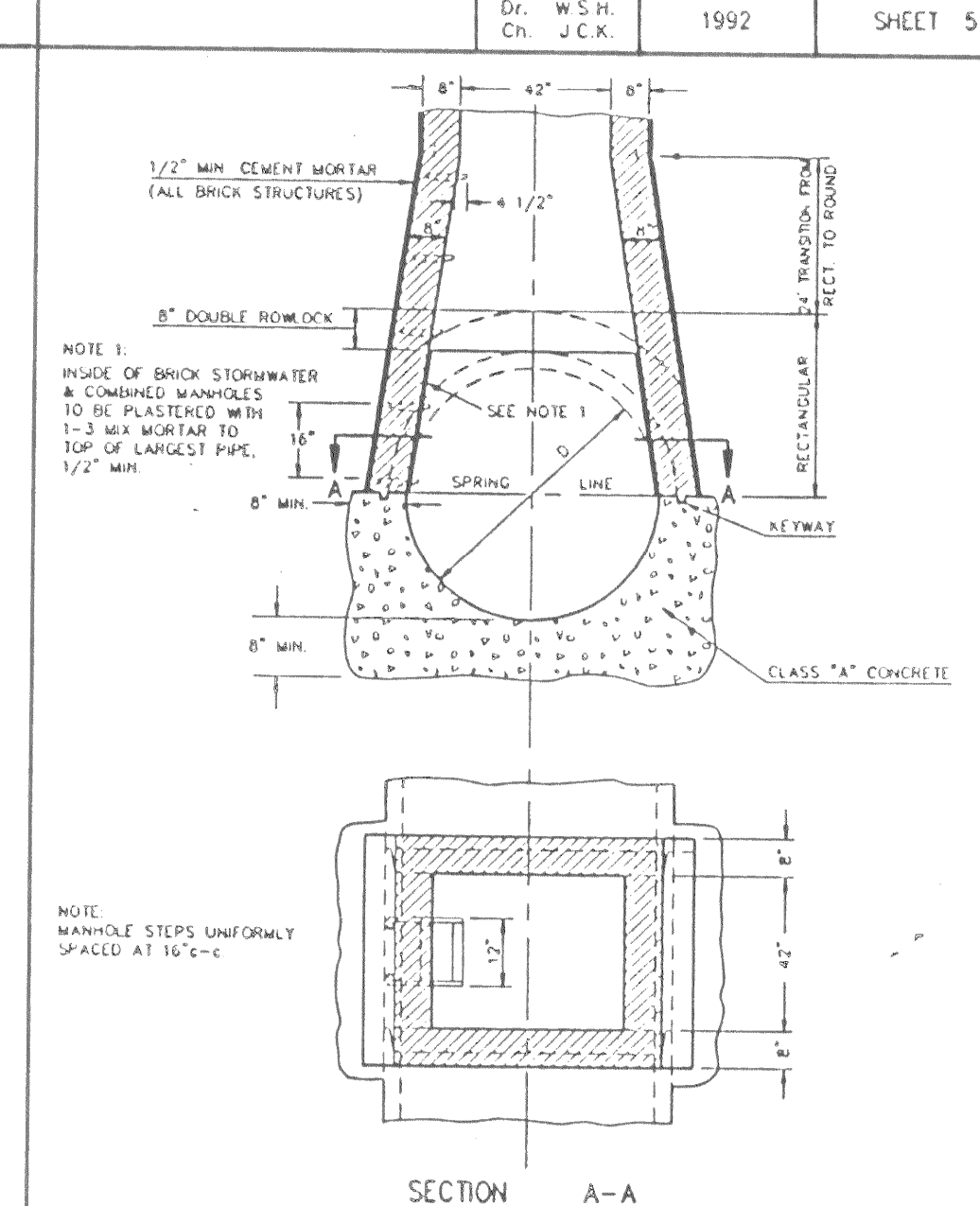
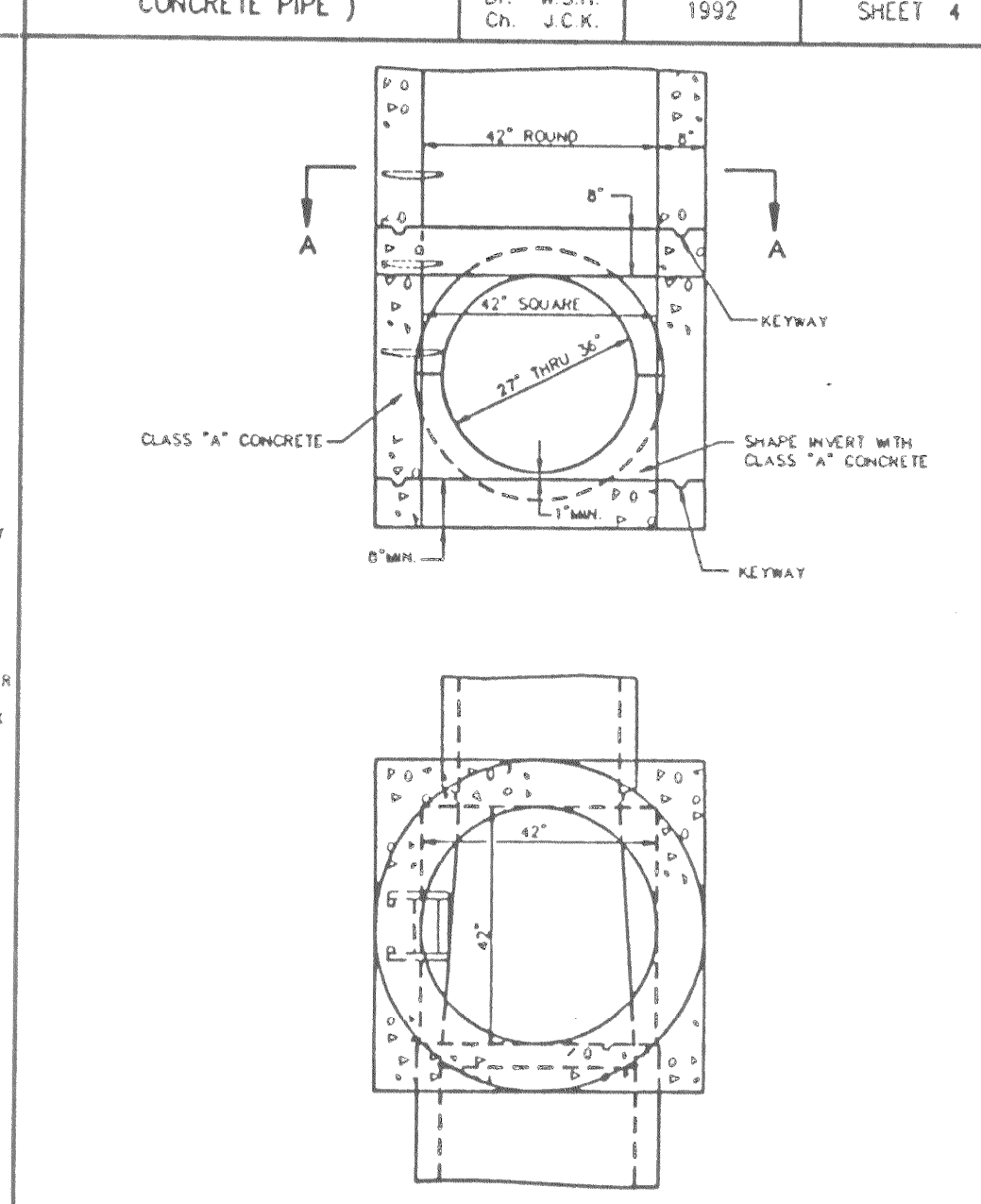
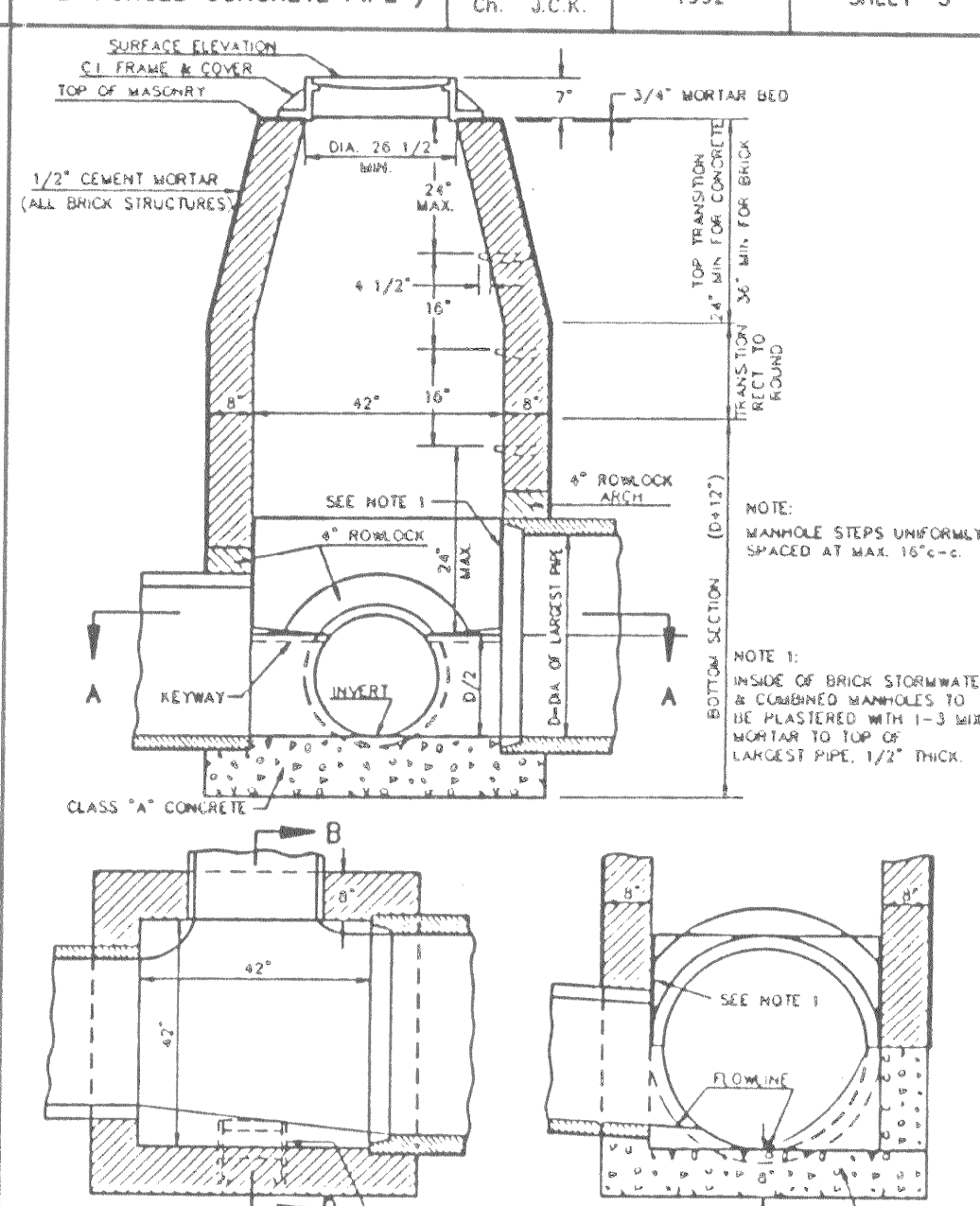
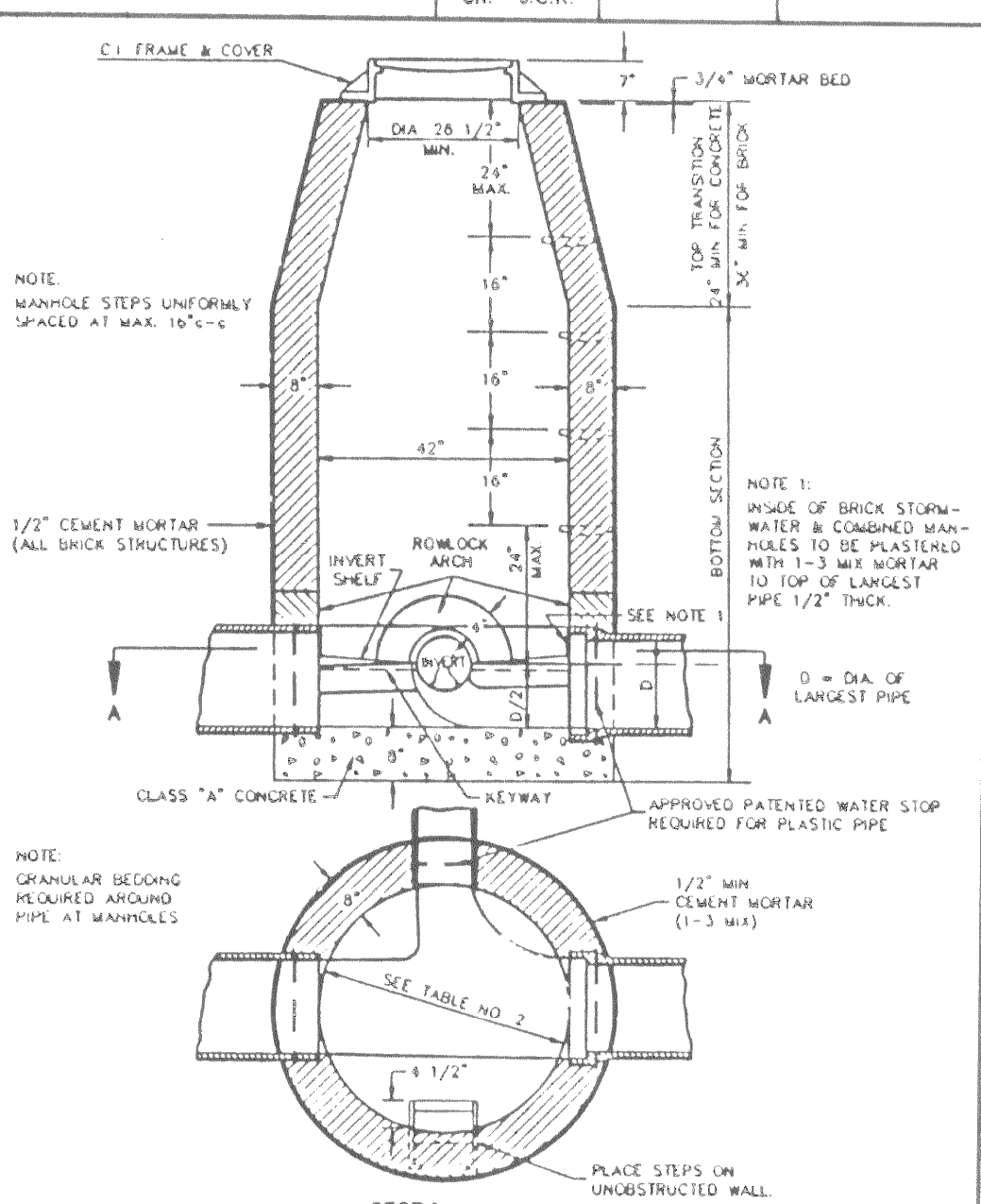
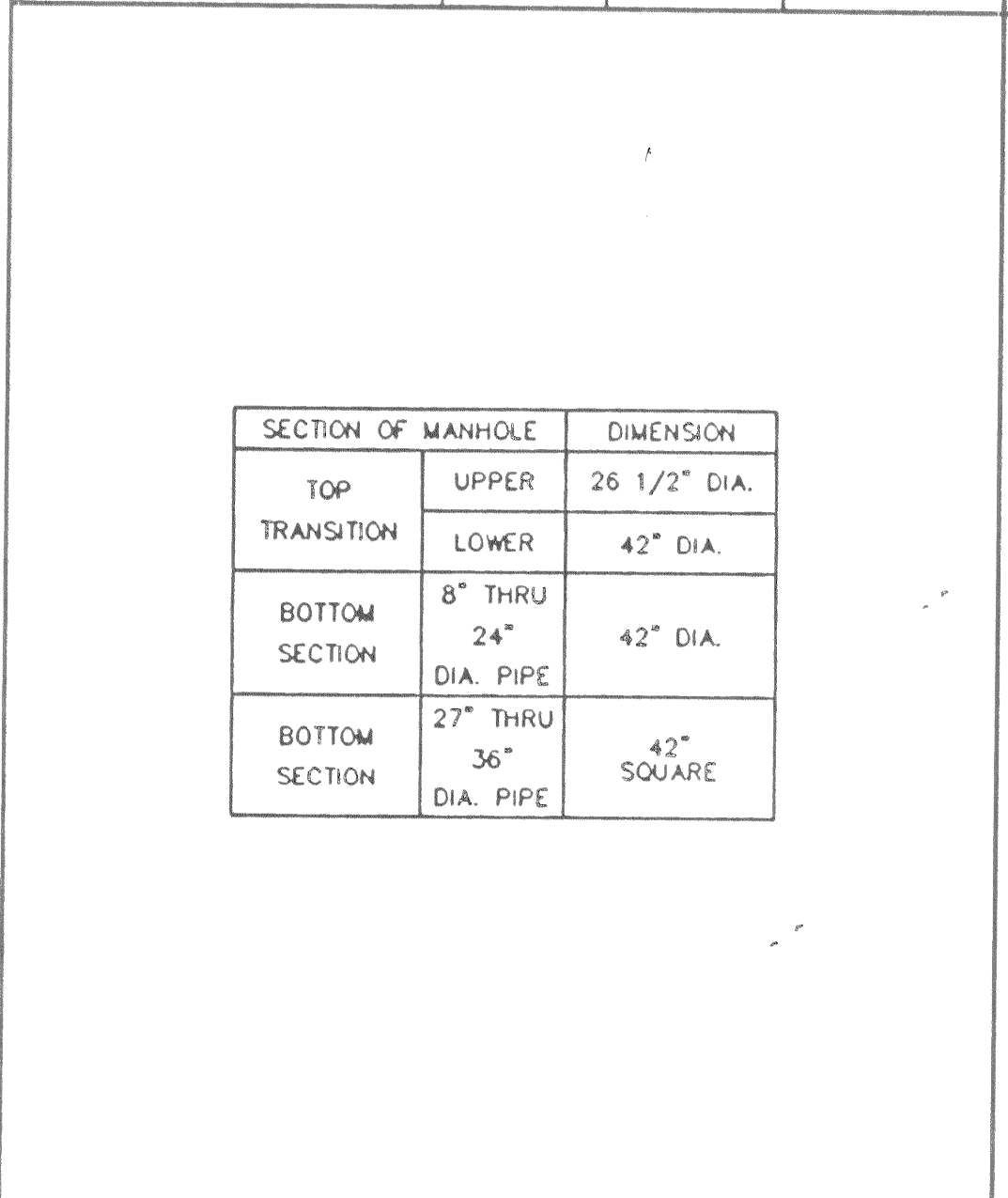


TABLE NO. 2  
STANDARD MANHOLE DIMENSIONS

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. R.G.W. Ch. J.C.K. 1992 SHEET 7

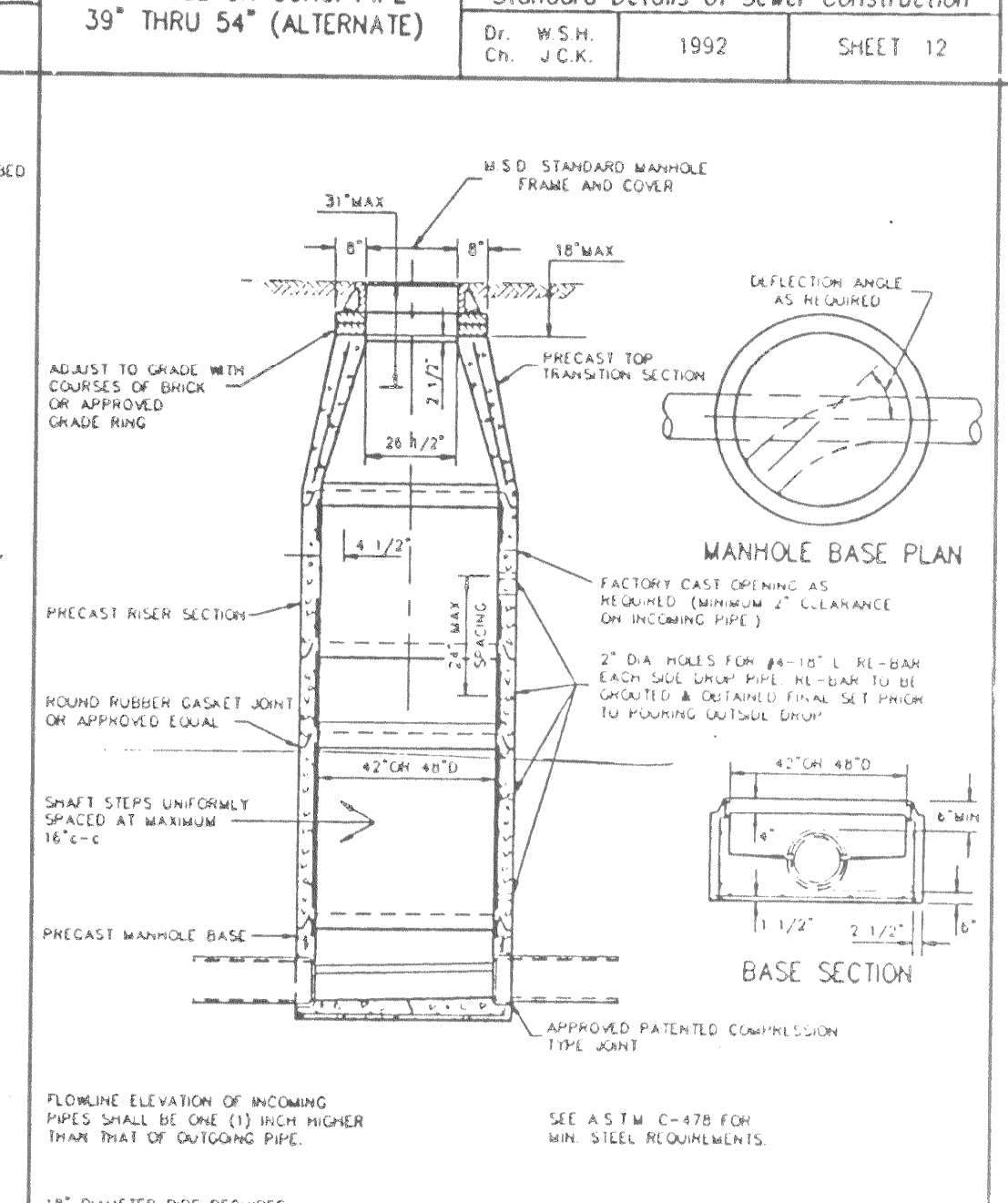
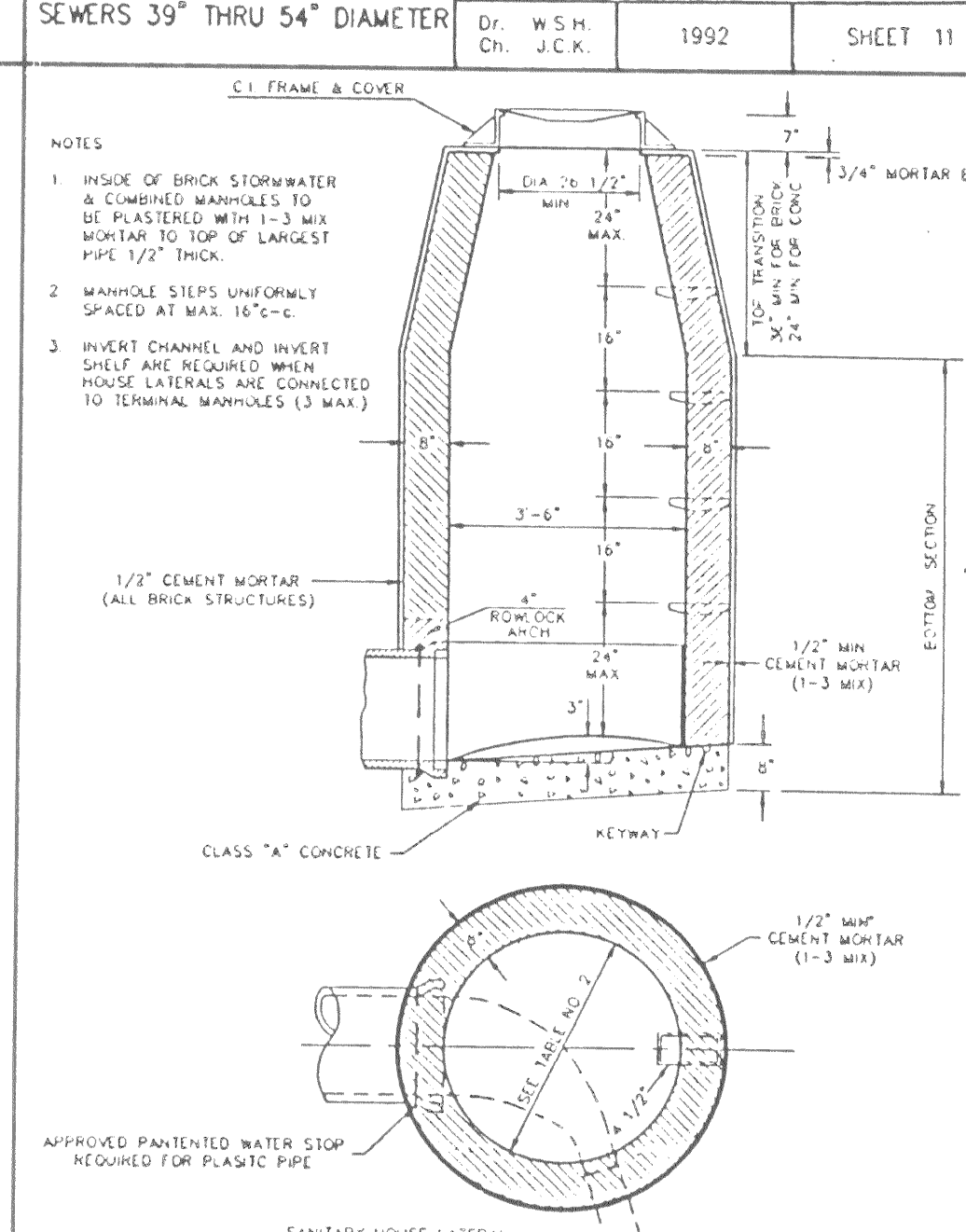
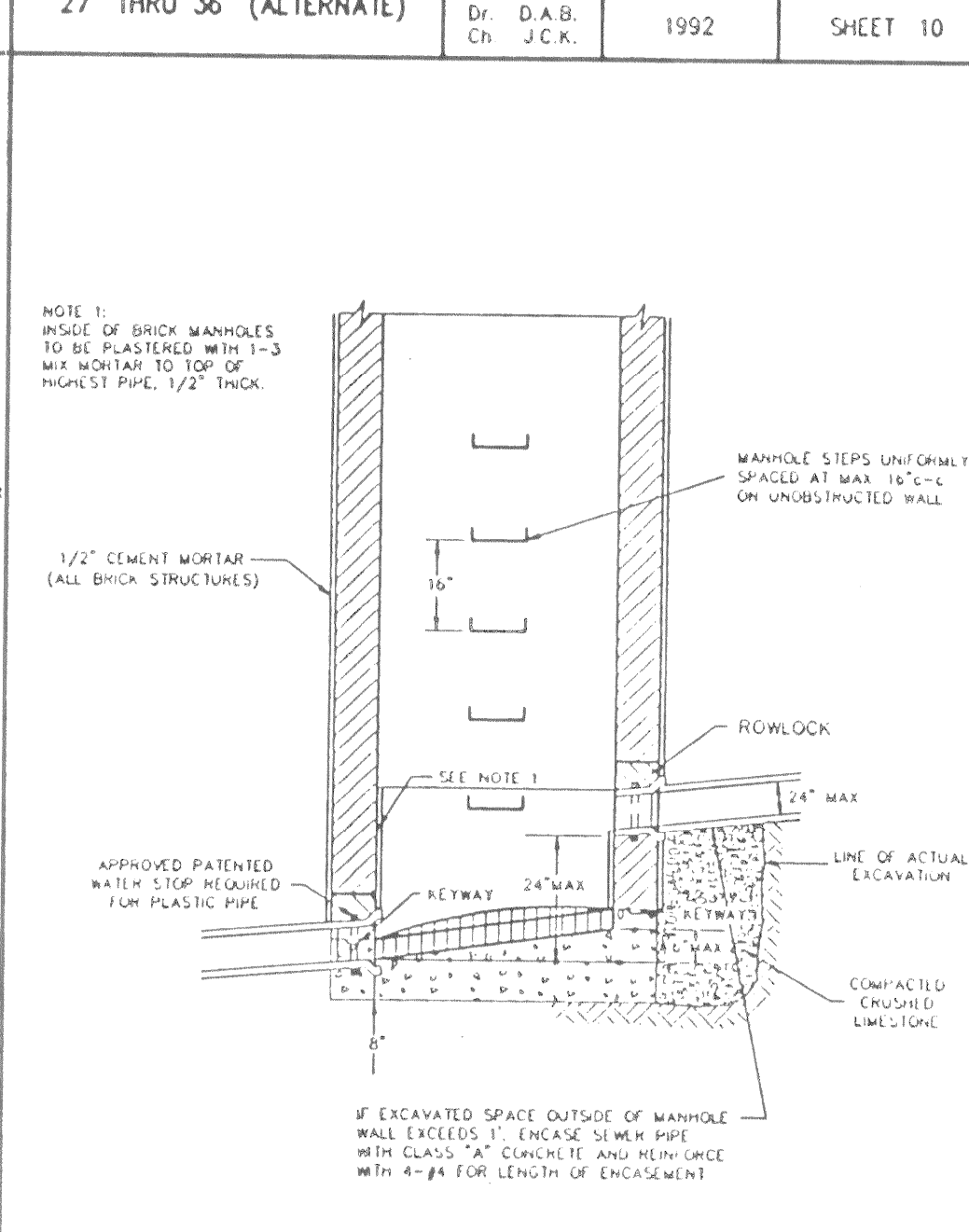
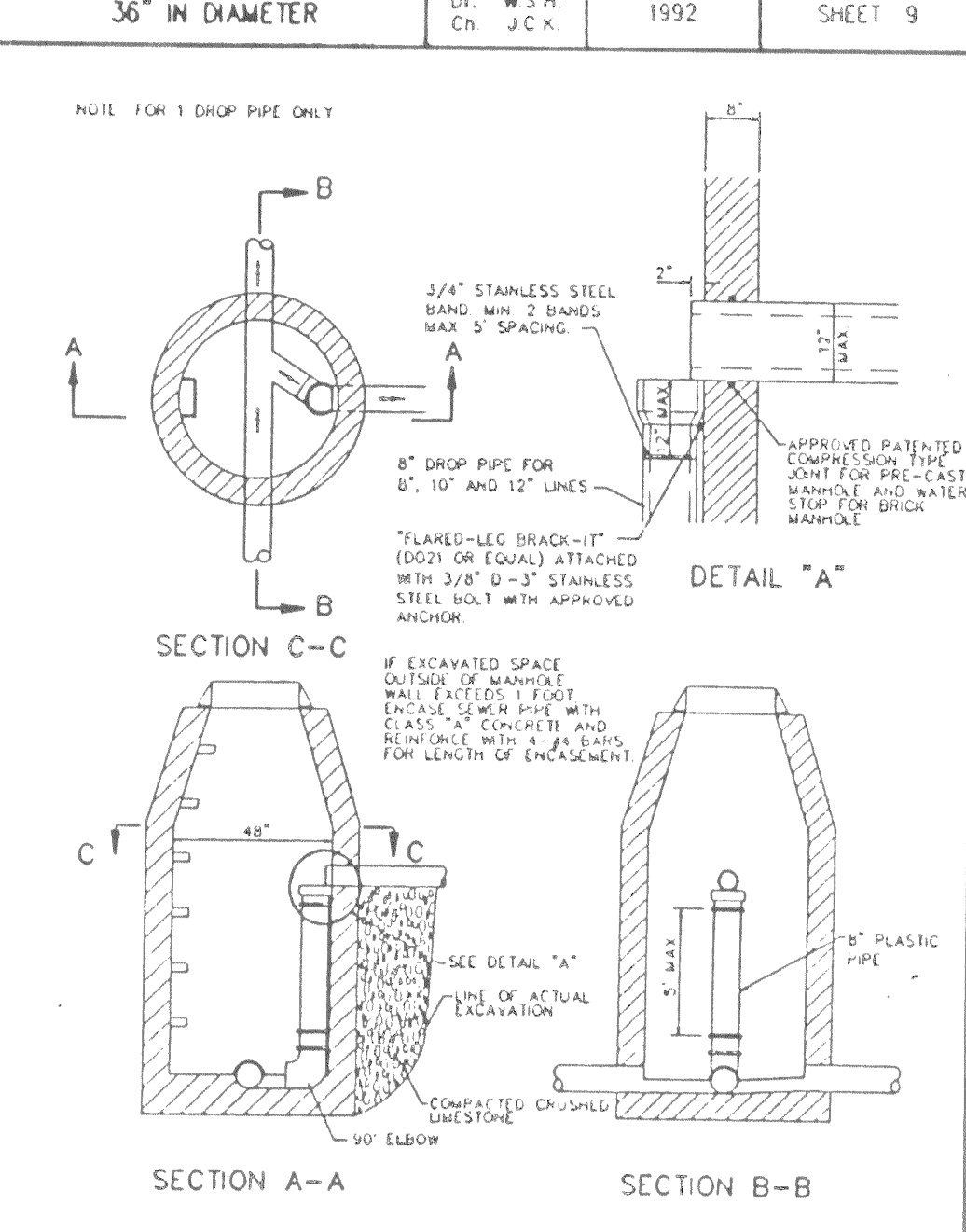
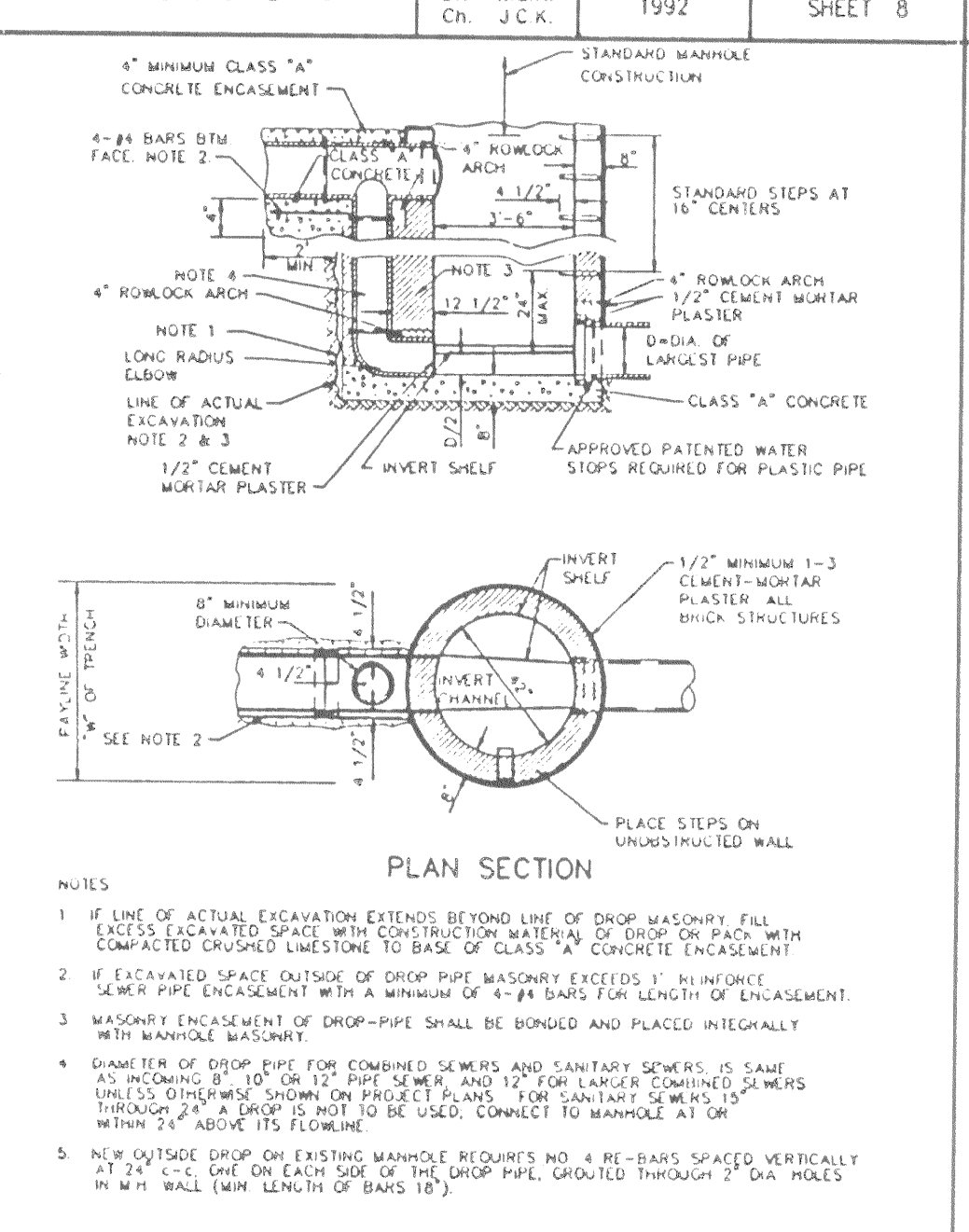
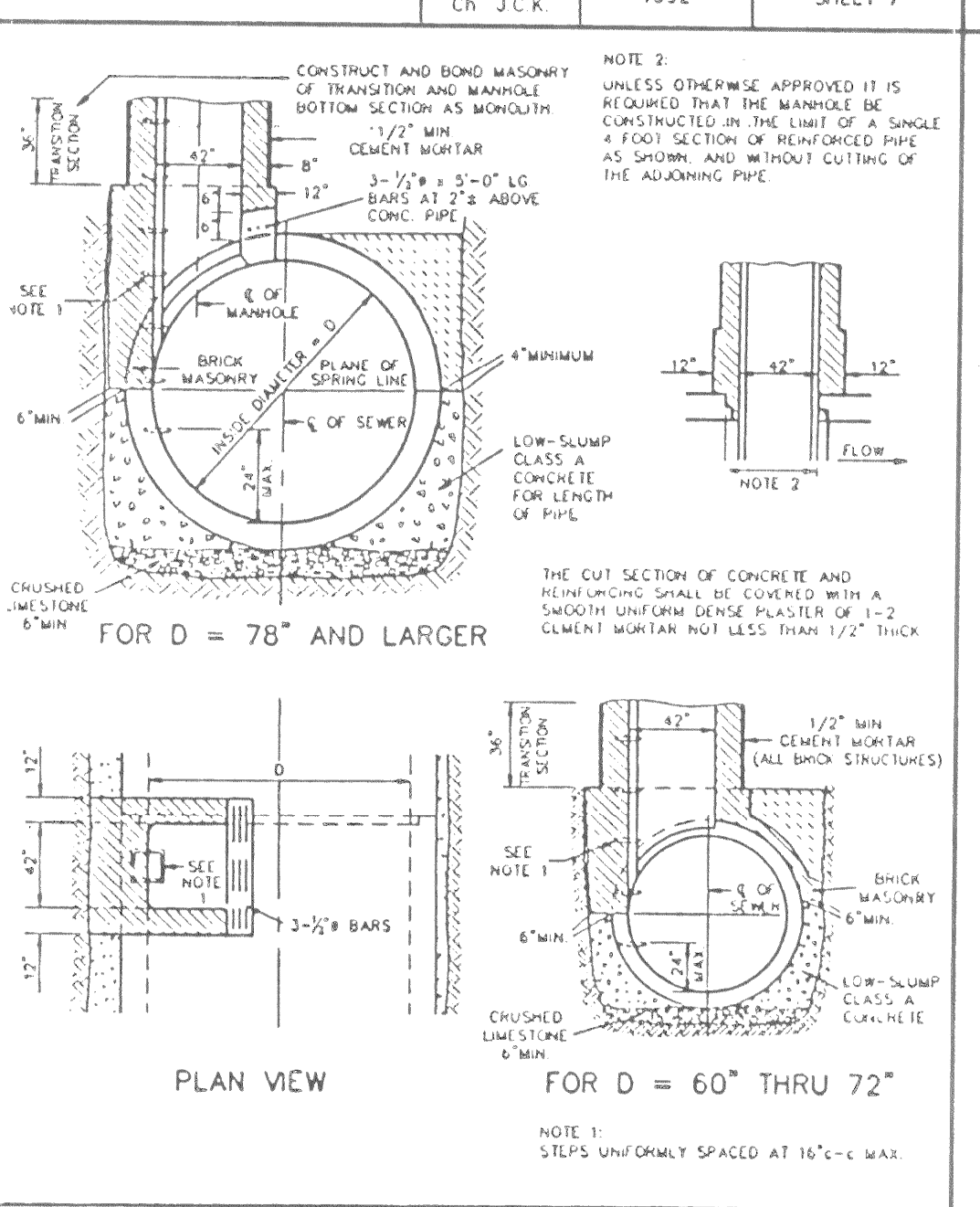
METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 8

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. D.A.B. Ch. J.C.K. 1992 SHEET 9

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 10

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 11

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 12



METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 13

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

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 15

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 16

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

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. W.S.H. Ch. J.C.K. 1992 SHEET 18