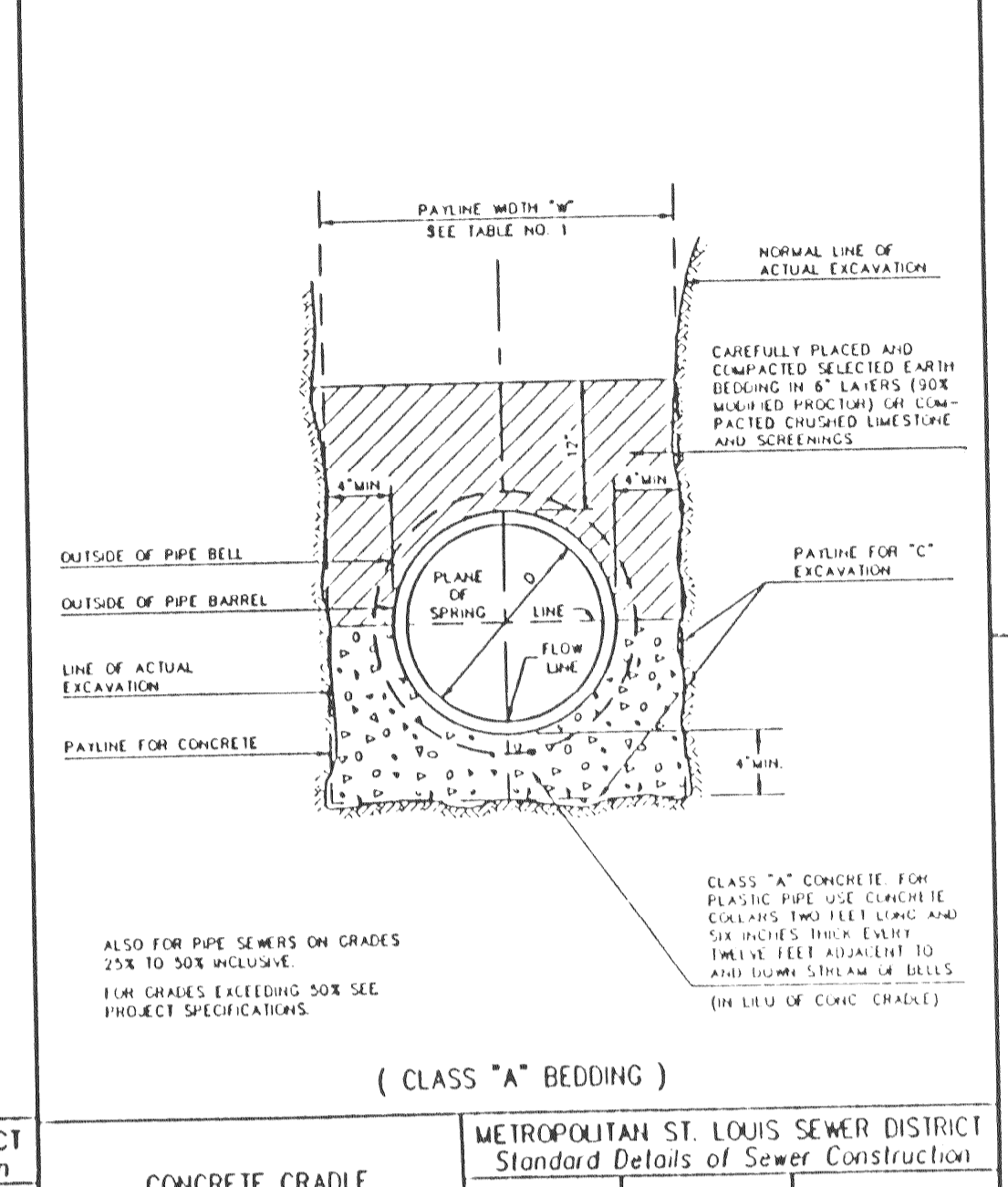
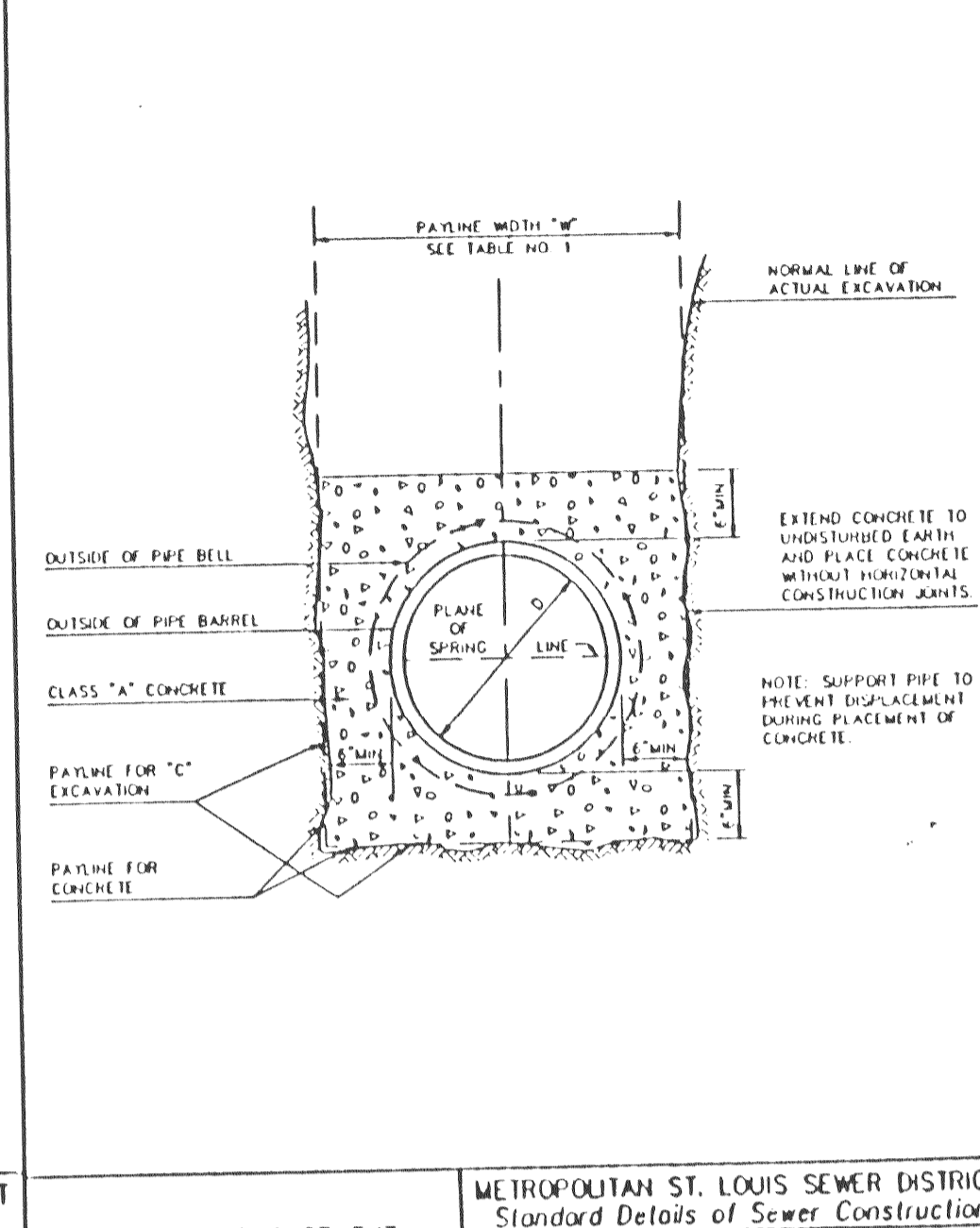
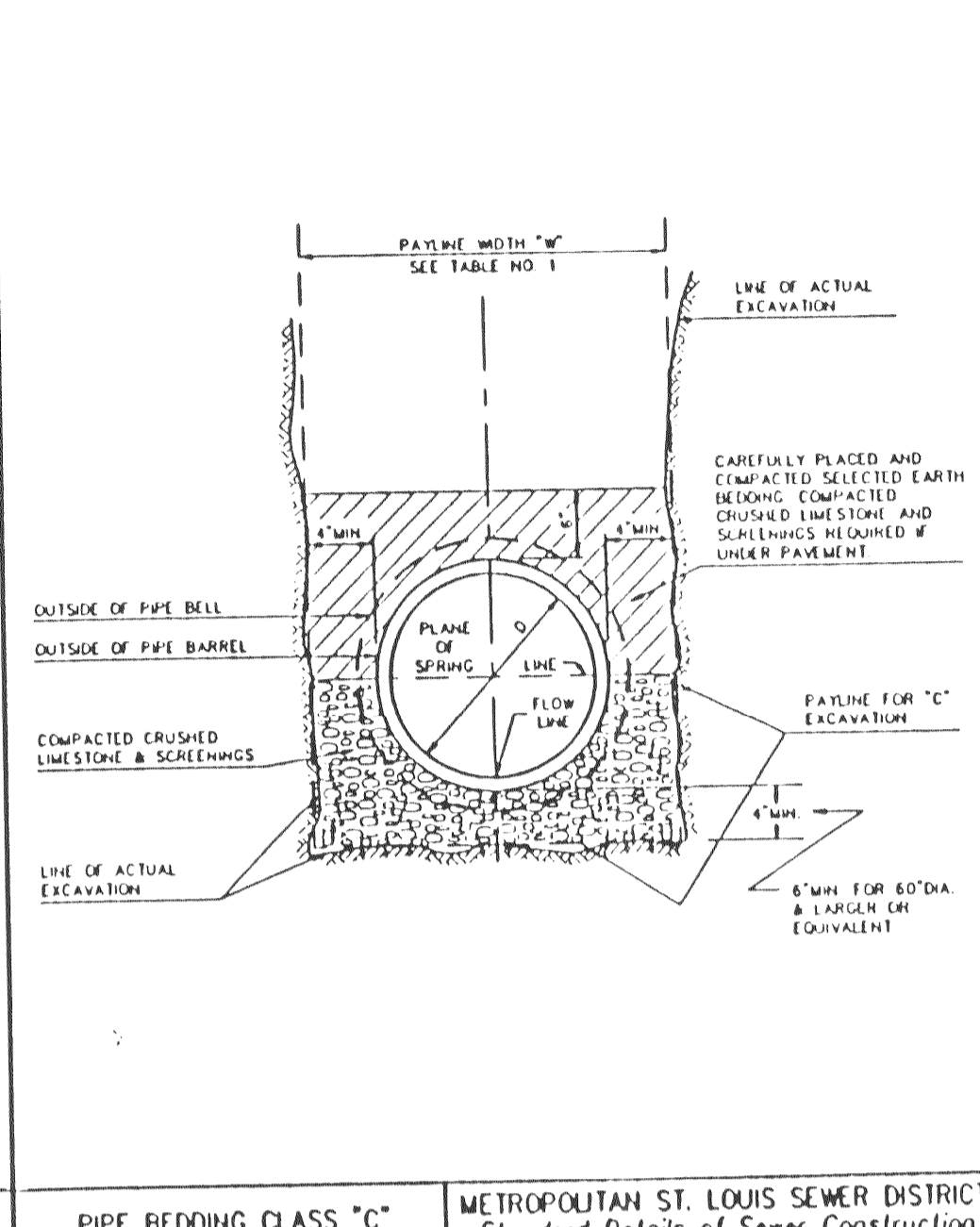
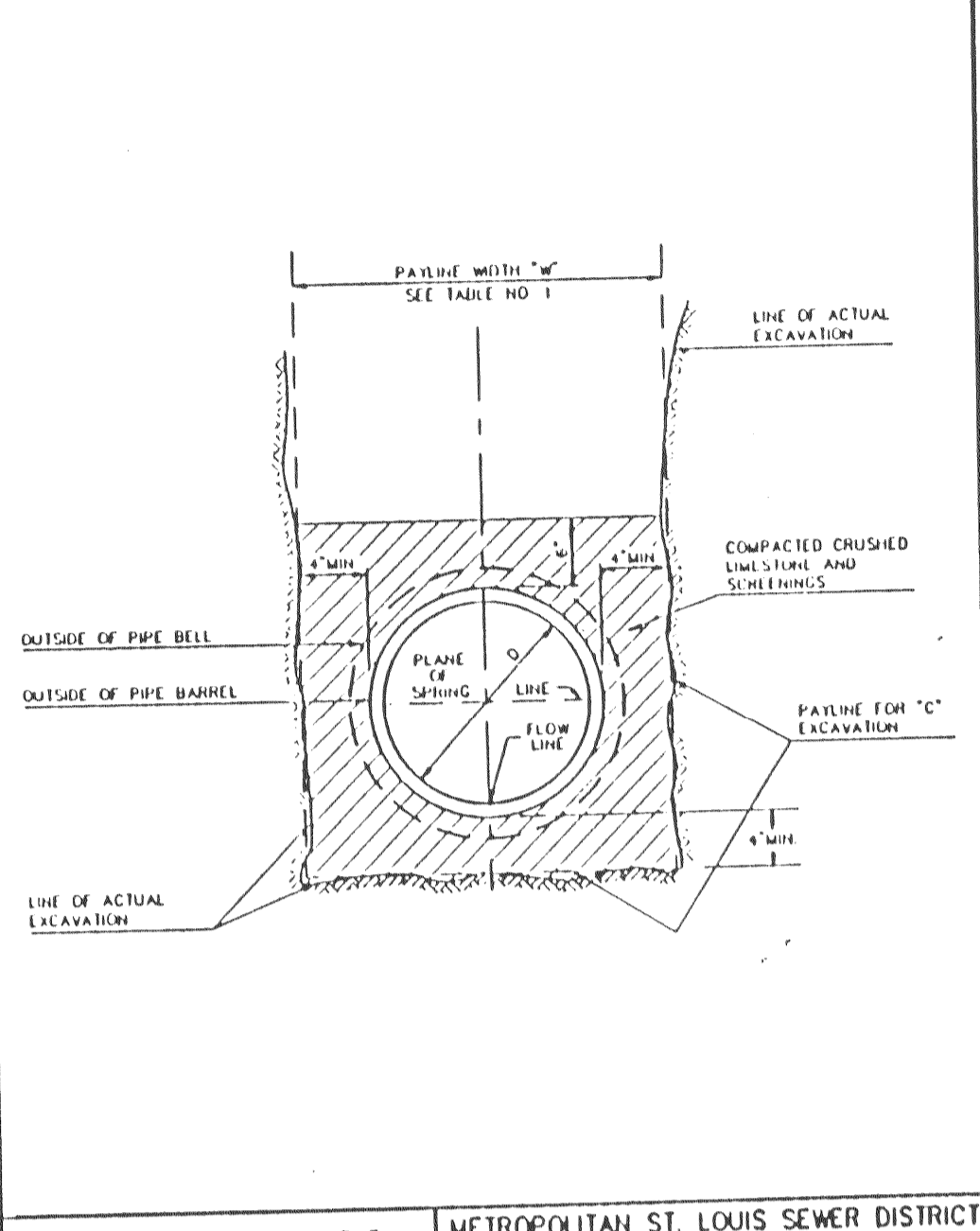
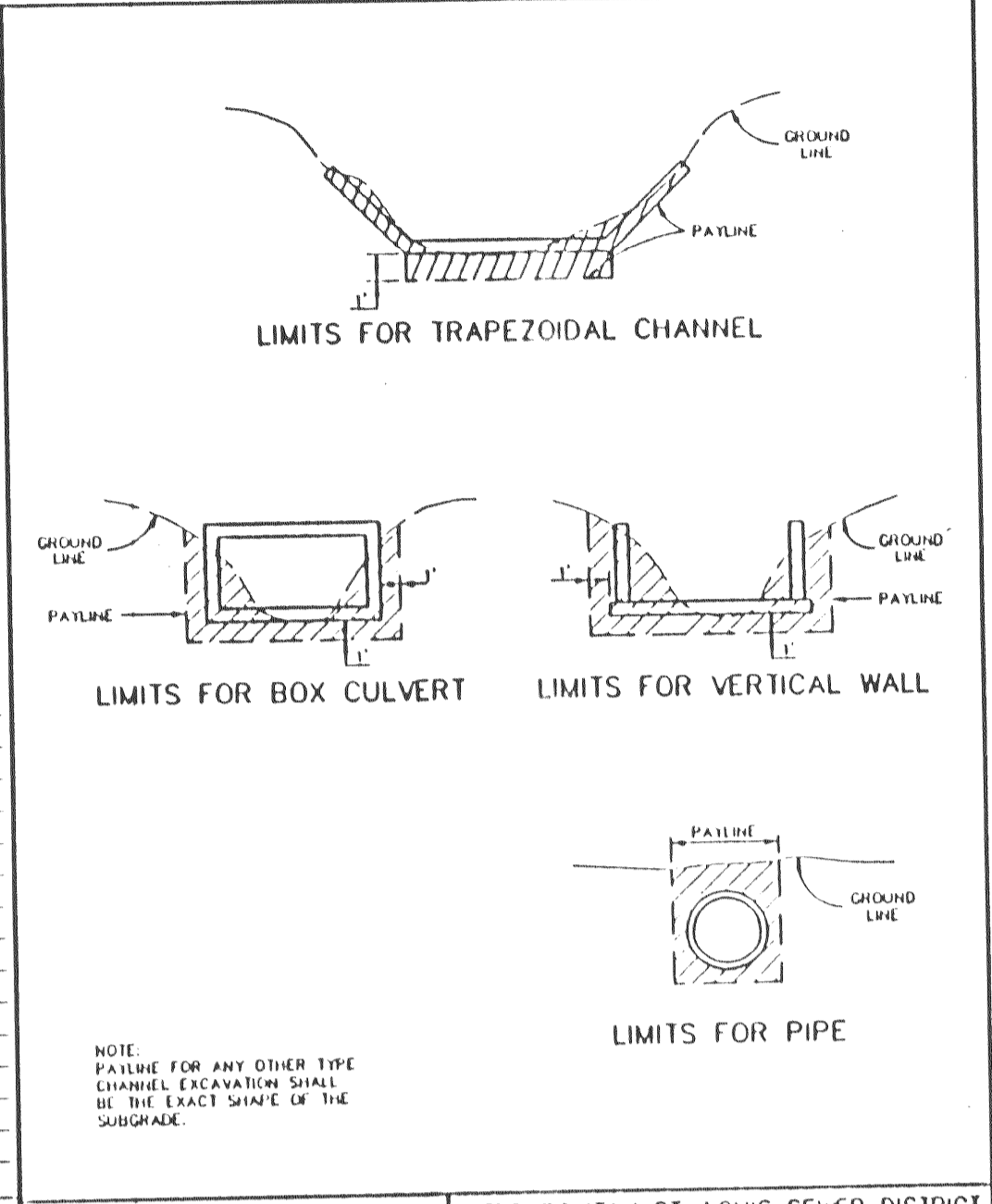


ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
INSIDE DIAMETER OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"M" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES OF CONCRETE ENCASUREMENT (CU YD PER FT)	INSIDE DIMENSIONS OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"M" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES OF CONCRETE ENCASUREMENT (CU YD PER FT)
4	30	2.50	3.78				
6	30	2.50	3.59				
8	30	2.50	3.47				
10	30	2.50	3.40				
12	30	2.50	3.35				
15	36	3.00	3.55				
18	36	3.00	3.77	14 x 23	41	3.42	5.94
21	39	3.25	4.01				
24	42	3.50	4.26	19 x 30	49	4.04	7.48
27	45	3.75	4.52	22 x 34	53	4.42	8.61
30	48	4.00	4.79	24 x 38	58	4.83	9.70
33	51	4.25	5.07	27 x 42	62	5.17	10.71
36	54	4.50	5.36	29 x 45	66	5.50	11.72
39	57	4.75	5.66	32 x 49	71	5.92	12.74
42	60	5.00	5.97	34 x 53	75	6.25	13.76
48	70	5.83	7.15	36 x 60	83	6.92	16.18
54	77	6.47	7.87	43 x 68	92	7.67	18.81
60	84	7.00	8.59	48 x 76	101	8.42	21.59
66	91	7.58	9.31	53 x 83	109	9.08	24.35
72	98	8.17	10.03	58 x 91	118	9.83	27.14
78	105	8.75	10.75	63 x 98	128	10.50	30.00
84	112	9.33	11.47	68 x 106	135	11.25	33.91
90	119	9.92	12.19	72 x 112	143	11.92	36.99
96	126	10.50	12.91	77 x 121	152	12.67	40.69
102	133	11.08	13.63	82 x 128	160	13.33	44.45
108	140	11.67	14.35	87 x 136	168	14.00	47.79
114	147	12.25	15.07	92 x 143	176	14.67	51.70
120	154	12.83	15.79	97 x 151	185	15.42	56.01
126	161	13.42	16.51	102 x 158	193	16.17	60.00
132	168	14.00	17.23	106 x 166	202	16.83	64.48
144	182	15.17	18.74	116 x 180	218	18.17	73.59



**TABLE 1 PAYLINE WIDTHS OF TRENCH AND PAY-VOLUMES OF CONCRETE**

INSIDE DIAMETER OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"M" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES OF CONCRETE ENCASUREMENT (CU YD PER FT)
4	30	2.50	3.78
6	30	2.50	3.59
8	30	2.50	3.47
10	30	2.50	3.40
12	30	2.50	3.35
15	36	3.00	3.55
18	36	3.00	3.77
21	39	3.25	4.01
24	42	3.50	4.26
27	45	3.75	4.52
30	48	4.00	4.79
33	51	4.25	5.07
36	54	4.50	5.36
39	57	4.75	5.66
42	60	5.00	5.97
48	70	5.83	7.15
54	77	6.47	7.87
60	84	7.00	8.59
66	91	7.58	9.31
72	98	8.17	10.03
78	105	8.75	10.75
84	112	9.33	11.47
90	119	9.92	12.19
96	126	10.50	12.91
102	133	11.08	13.63
108	140	11.67	14.35
114	147	12.25	15.07
120	154	12.83	15.79
126	161	13.42	16.51
132	168	14.00	17.23
144	182	15.17	18.74

**TABLE 2 STANDARD MANHOLE DIMENSIONS**

SECTION	DIAMETER
TOP SECTION	26 1/2" DIA.
TRANSITION SECTION	42" DIA.
BOTTOM SECTION	42" DIA.
DIAMETER OF PIPE	27" THRU 36" DIA. PIPE
DIAMETER OF MANHOLE	42" SQUARE

