HIGHGROVE PLACE
(SOUTH PORTION)
CONSTRUCTION DETAILS

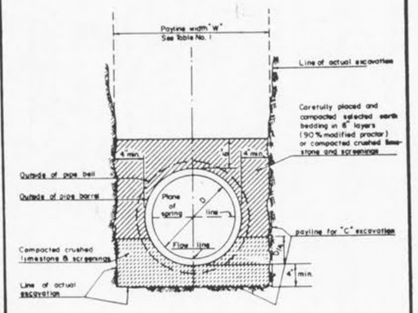
MAY, 1996 — Job No. 95-067

Rev. 7-10-96 City Comments

ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
Inside Diameter of Pipe (Inches)	"W" Payline Width of Trench (Inches)	"W" Payline Width of Trench (Feet)	Pay-volumes cu. ft. per ft. Concrete Encasement	Inside Dimensions of Pipe (Inches)	"W" Payline Width of Trench (Inches)	"W" Payline Width of Trench (Feet)	Pay-volumes cu. ft. per ft. Concrete Encasement
4	28	2.33	3.20				
6	28	2.33	3.46				
8	28	2.33	3.70				
10	28	2.33	3.86				
12	28	2.33	3.98				
15	32	2.67	4.89				
18	35	2.92	5.63	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	8.81
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	11.72
39	DISCONTINUED			32 x 49	71	5.92	13.14
42	63	5.25	13.38	34 x 53	75	6.25	14.05
48	70	5.83	15.67	38 x 60	83	6.92	16.18
54	77	6.42	18.15	43 x 68	92	7.67	18.81
60	84	7.00	20.73	48 x 76	101	8.42	21.58
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	29.39	63 x 98	126	10.50	30.50
84	112	9.33	32.57	68 x 106	135	11.25	33.91
90	119	9.92	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	44.65
108	140	11.67	46.75	87 x 136	168	14.00	47.78
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	73.58

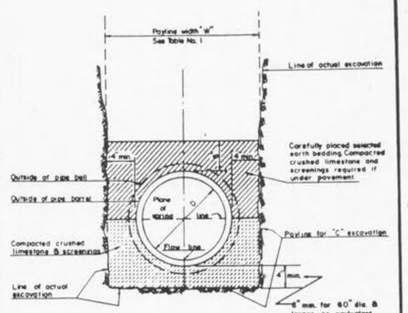
TABLE NO. I
PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE

DETAIL 1



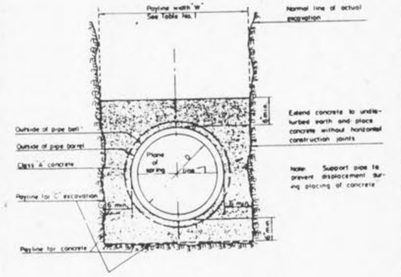
PIPE BEDDING CLASS "C"
(FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)

DETAIL 2



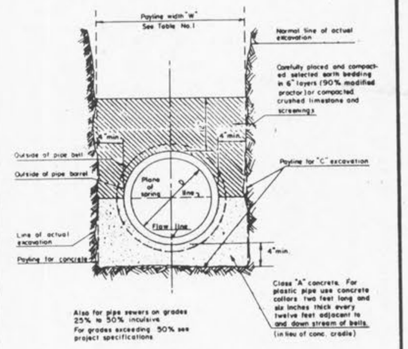
PIPE BEDDING CLASS "C"
(MODIFIED FOR REINFORCED CONCRETE PIPE)

DETAIL 3



CONCRETE ENCASEMENT

DETAIL 4



(CLASS "A" BEDDING)

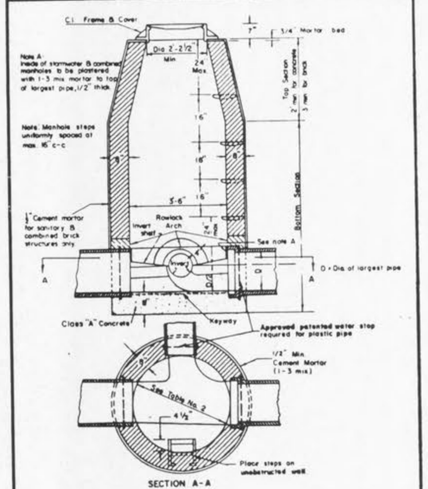
CONCRETE CRADLE

DETAIL 5

Section of Manhole		Dimension
Top Transition	Upper	2'-2½" Dia.
	Lower	3'-6" Dia.
Bottom Section	8" thru 24" Dia. Pipe	3'-6" Dia.
Bottom Section	27" thru 36" Dia. Pipe	3'-6" Square

TABLE NO. 2
STANDARD MANHOLE DIMENSIONS

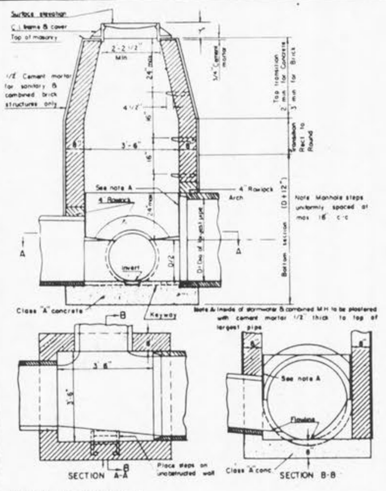
DETAIL 6



SECTION A-A

LINE MANHOLE
PIPE SEWERS 8"-24" DIA.

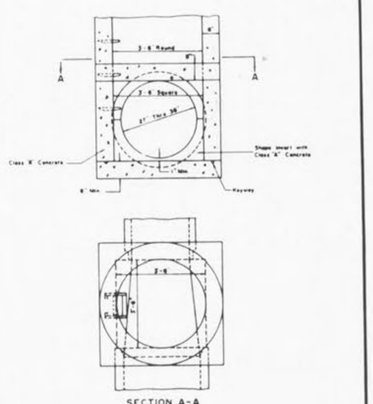
DETAIL 7



SECTION A-A SECTION B-B

TYPICAL LINE MANHOLE
ON PIPE SEWER 27" THRU 36" IN DIAMETER.

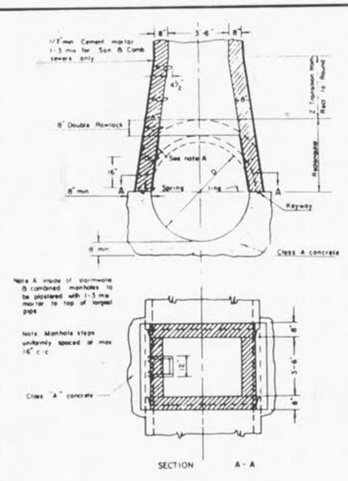
DETAIL 8



SECTION A-A

MANHOLE ON PIPE SEWER
27" THRU 36" (ALTERNATE)

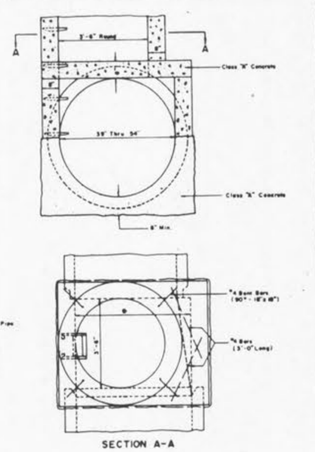
DETAIL 9



SECTION A-A

MANHOLE ON CONCRETE PIPE
SEWERS 39" THRU 54" DIAMETER

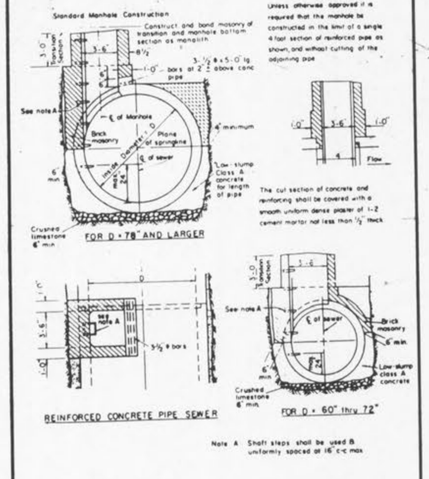
DETAIL 10



SECTION A-A

MANHOLE ON CONC. PIPE
39" THRU 54" (ALTERNATE)

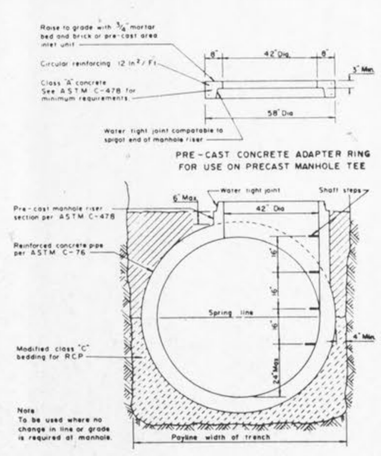
DETAIL 11



REINFORCED CONCRETE PIPE SEWER

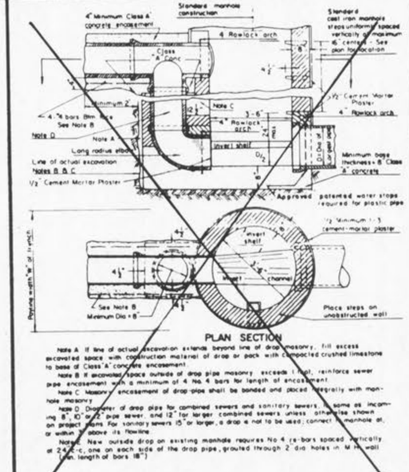
TYPICAL MANHOLE BASE
REINFORCED CONCRETE PIPE
SEWERS 60" AND LARGER
IN DIAMETER

DETAIL 12



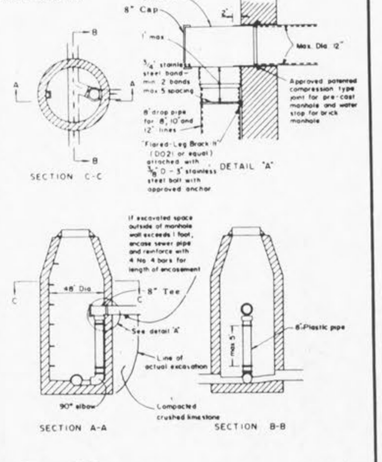
TYPICAL PRE-CAST M.H. TEE
FOR REINFORCED CONCRETE
PIPE SEWERS 48" AND
LARGER IN DIAMETER

DETAIL 13



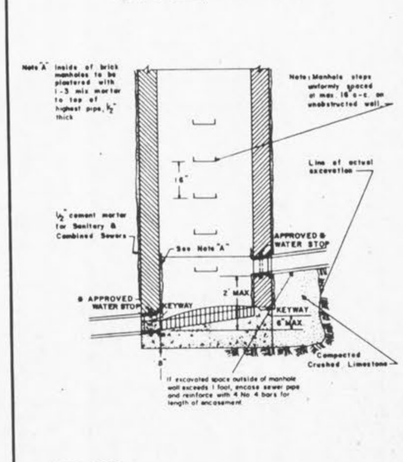
OUTSIDE FOULWATER
DROP MANHOLE

DETAIL 14



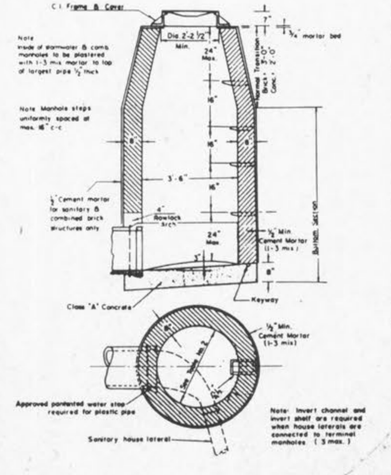
FOULWATER
INSIDE DROP MANHOLE
FOR
PLASTIC PIPE

DETAIL 15



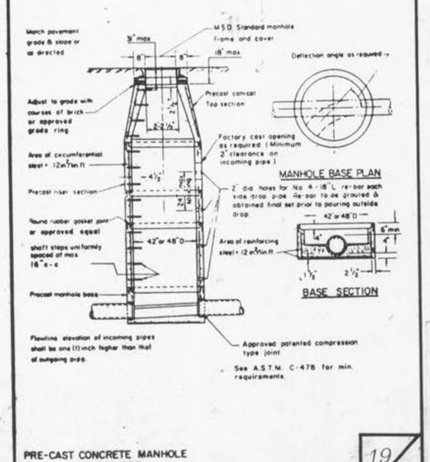
INSIDE DROP
(8" Thru 24" Dia Pipe)

DETAIL 16



TERMINAL MANHOLE

DETAIL 17



PRE-CAST CONCRETE MANHOLE
FOR SEWERS
8" THROUGH 12"

DETAIL 18

City of O'Fallon, Mo.