

ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
Inside Diameter of Pipe (Inches)	Payline Width of Trench (Inches)	Payline Width of Trench (Feet)	Pay-Volumes cu ft per ft Concrete Encasement	Inside Dimensions of Pipe (Inches)	Payline Width of Trench (Inches)	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	35	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	8.66
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	56	4.67	11.43	32 x 49	71	5.92	13.14
DISCONTINUED							
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	21.59
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	29.39	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	44.45
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 NO. 1
PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE**

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

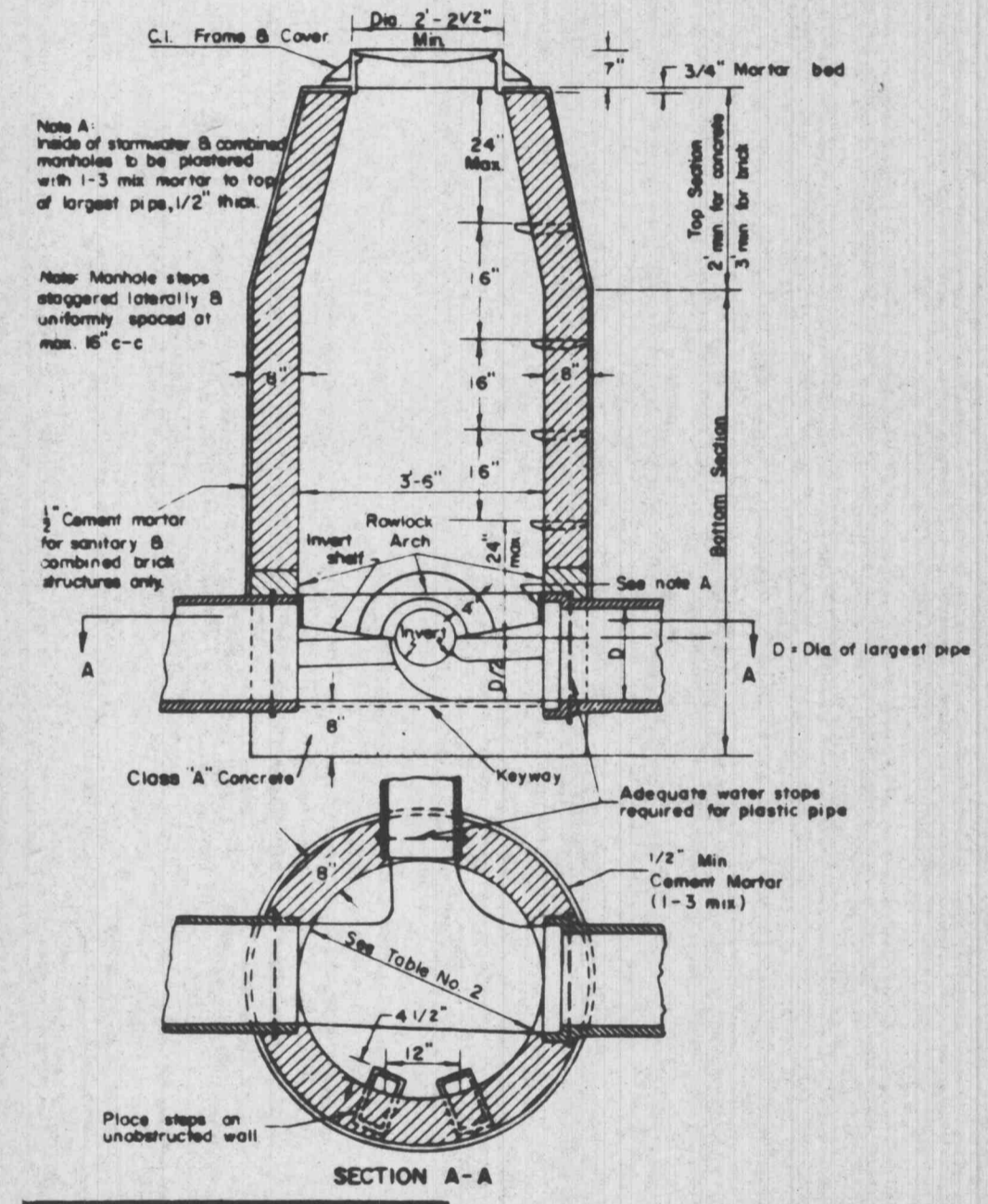
**PIPE BEDDING CLASS "C"
(MODIFIED FOR REINFORCED CONCRETE PIPE)**

CONCRETE ENCASEMENT

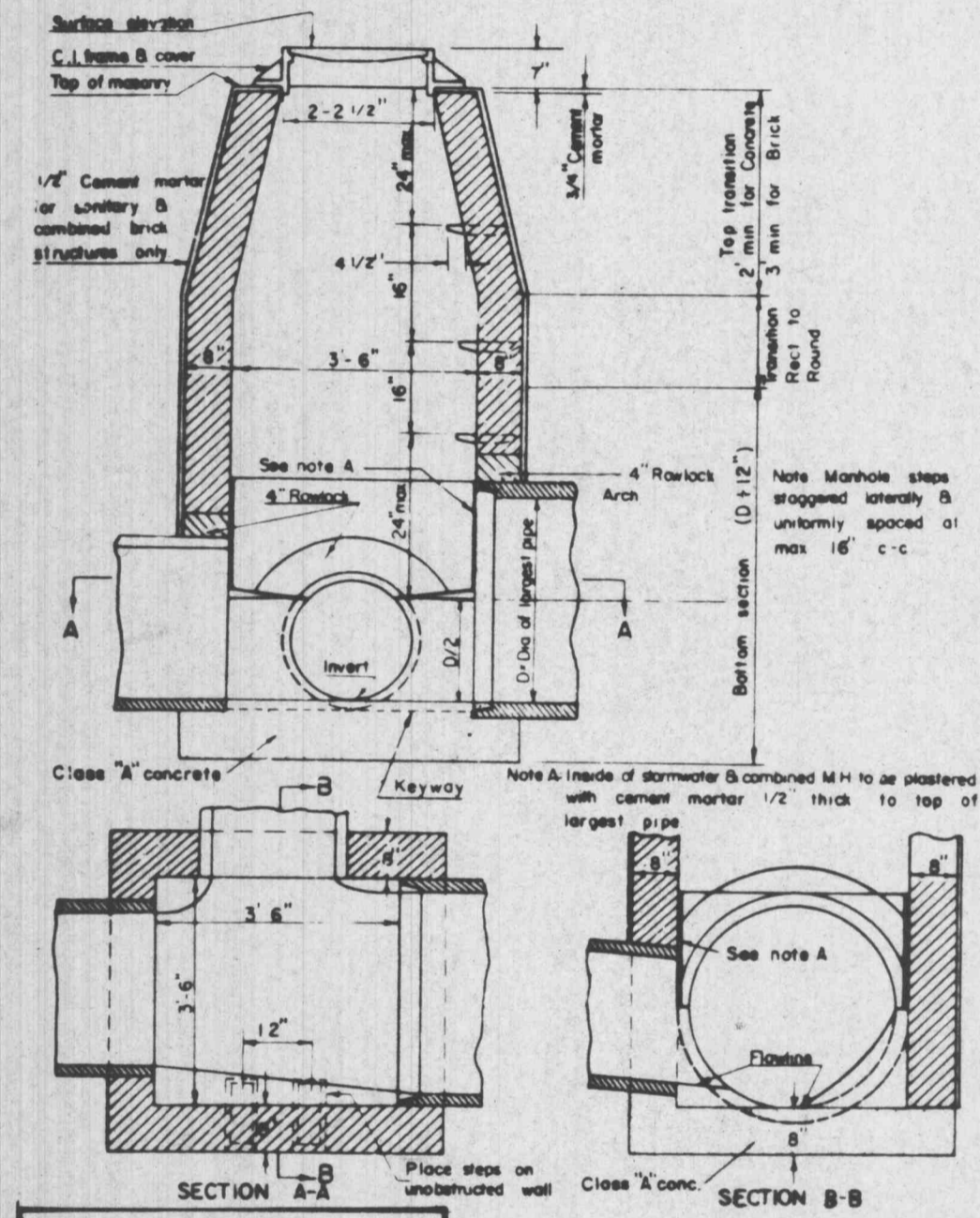
CONCRETE CRADLE

**TABLE NO. 2
STANDARD MANHOLE DIMENSIONS**

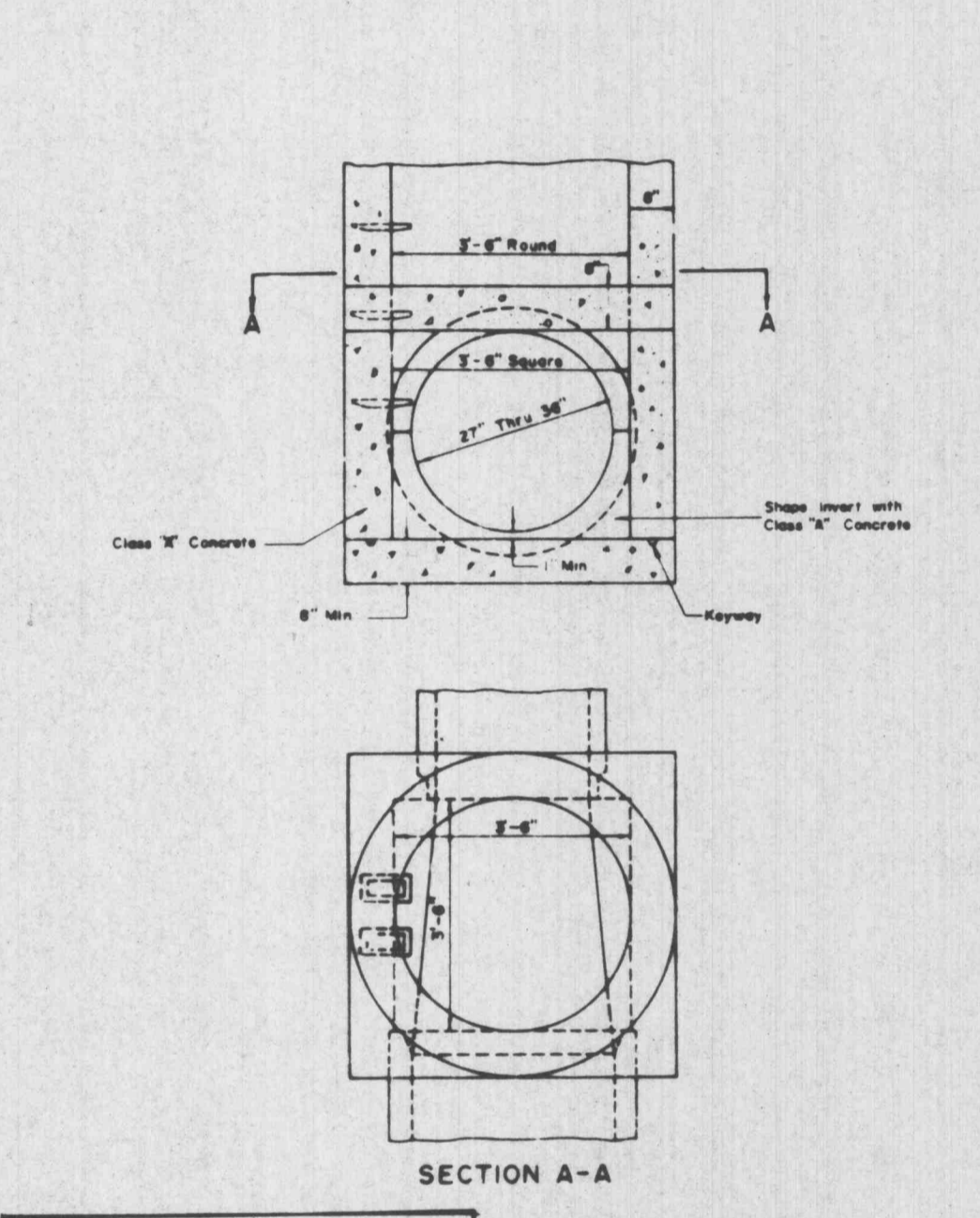
Section of Manhole	Dimension
Top	Upper 2'-2 1/2" Dia.
Transition	Lower 3'-6" Dia.
Bottom Section	8" thru 24" Dia. Pipe
Bottom Section	27" thru 36" Dia. Pipe
	3'-6" Square



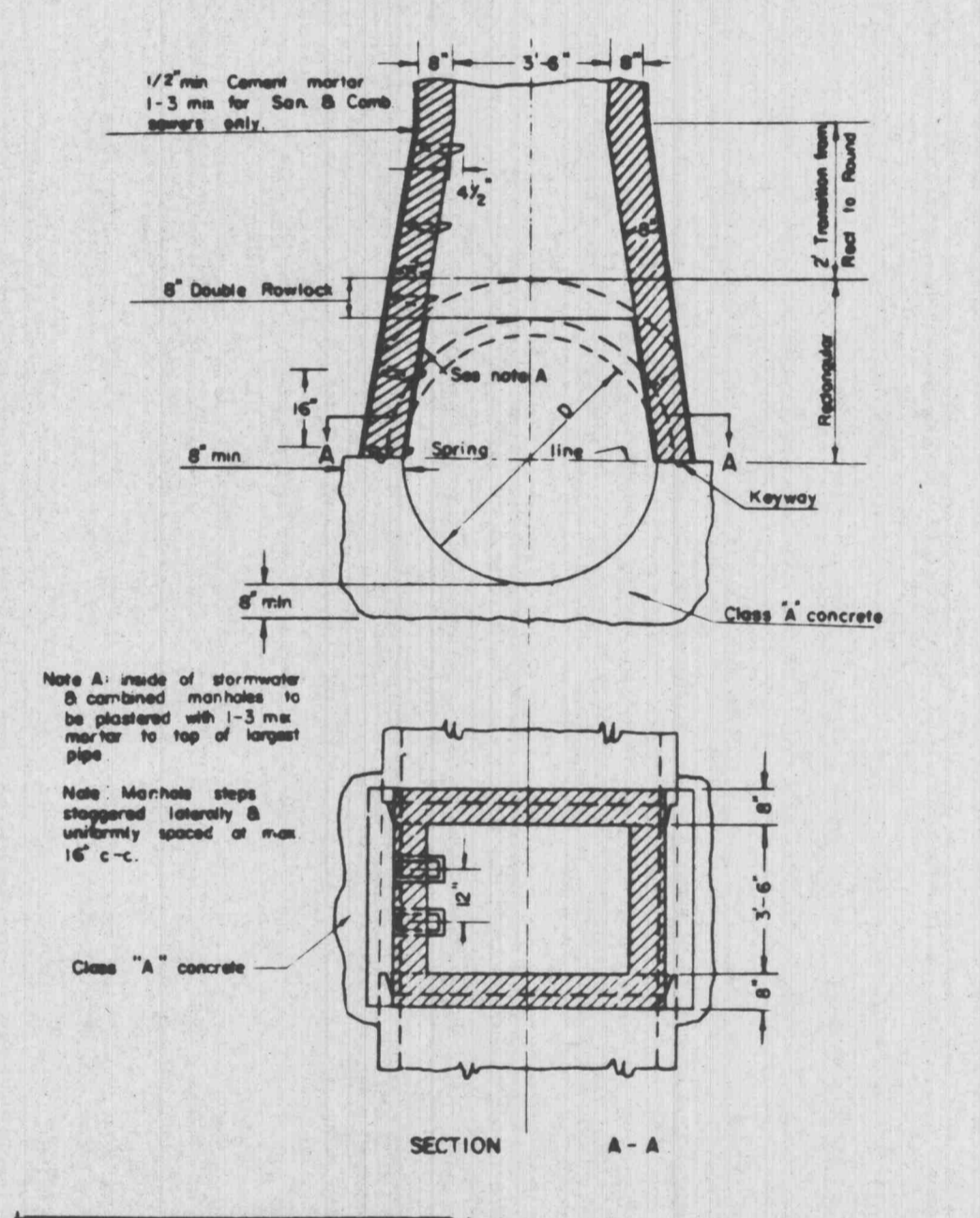
**LINE MANHOLE
PIPE SEWERS 8"-24" DIA.**



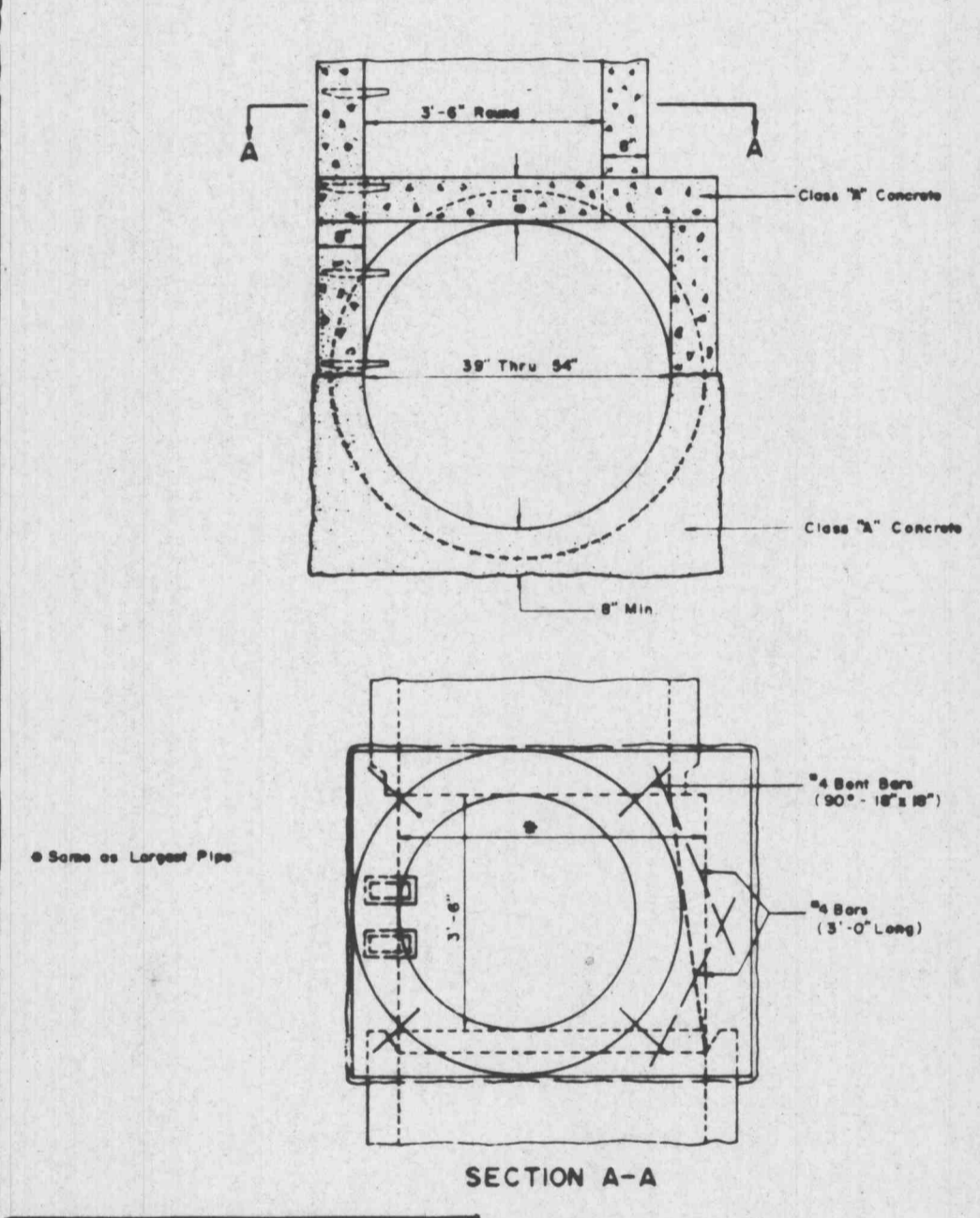
**TYPICAL LINE MANHOLE
ON PIPE SEWER 27" THRU
36" IN DIAMETER**



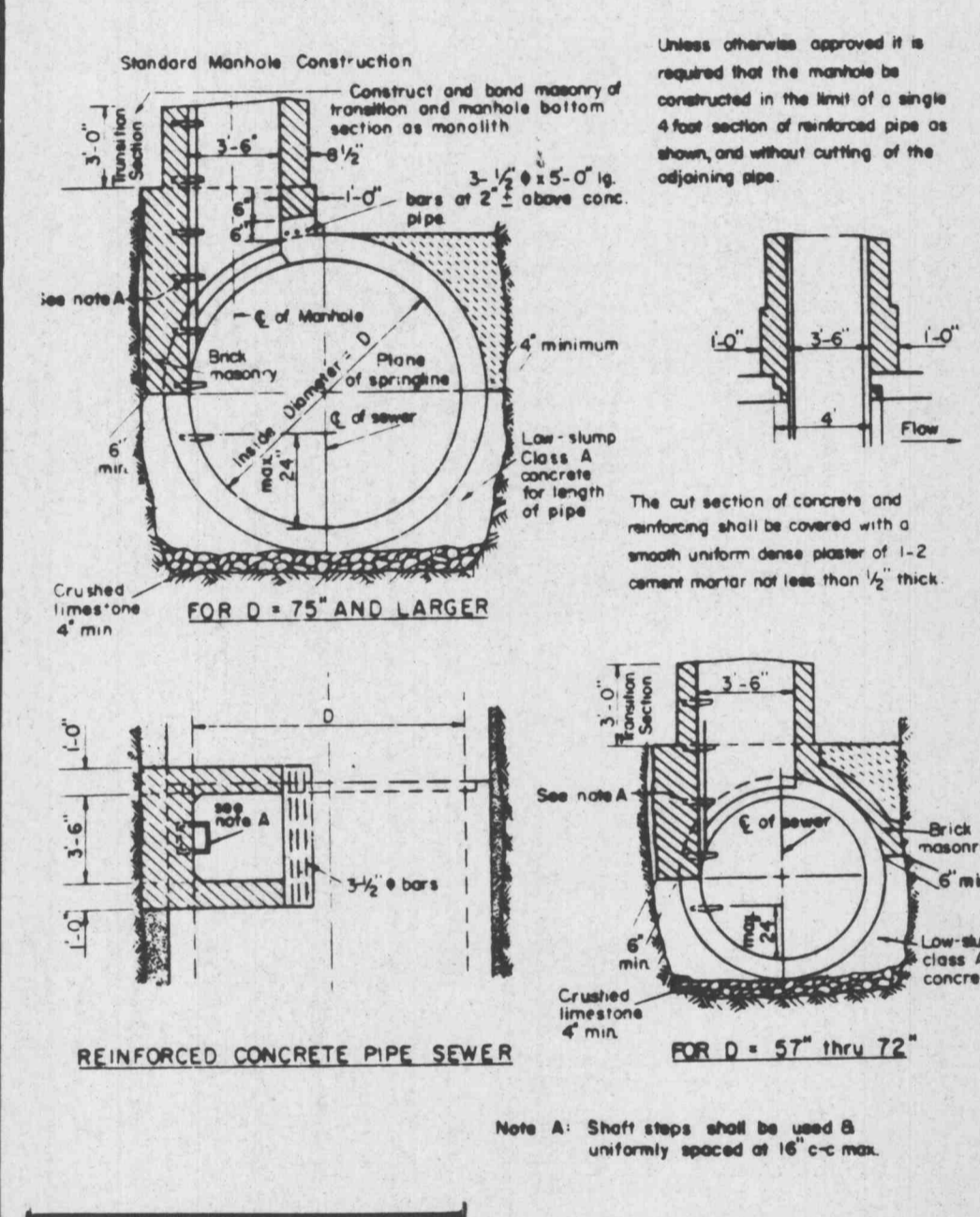
**MANHOLE ON PIPE SEWER
27" THRU 36" (ALTERNATE)**



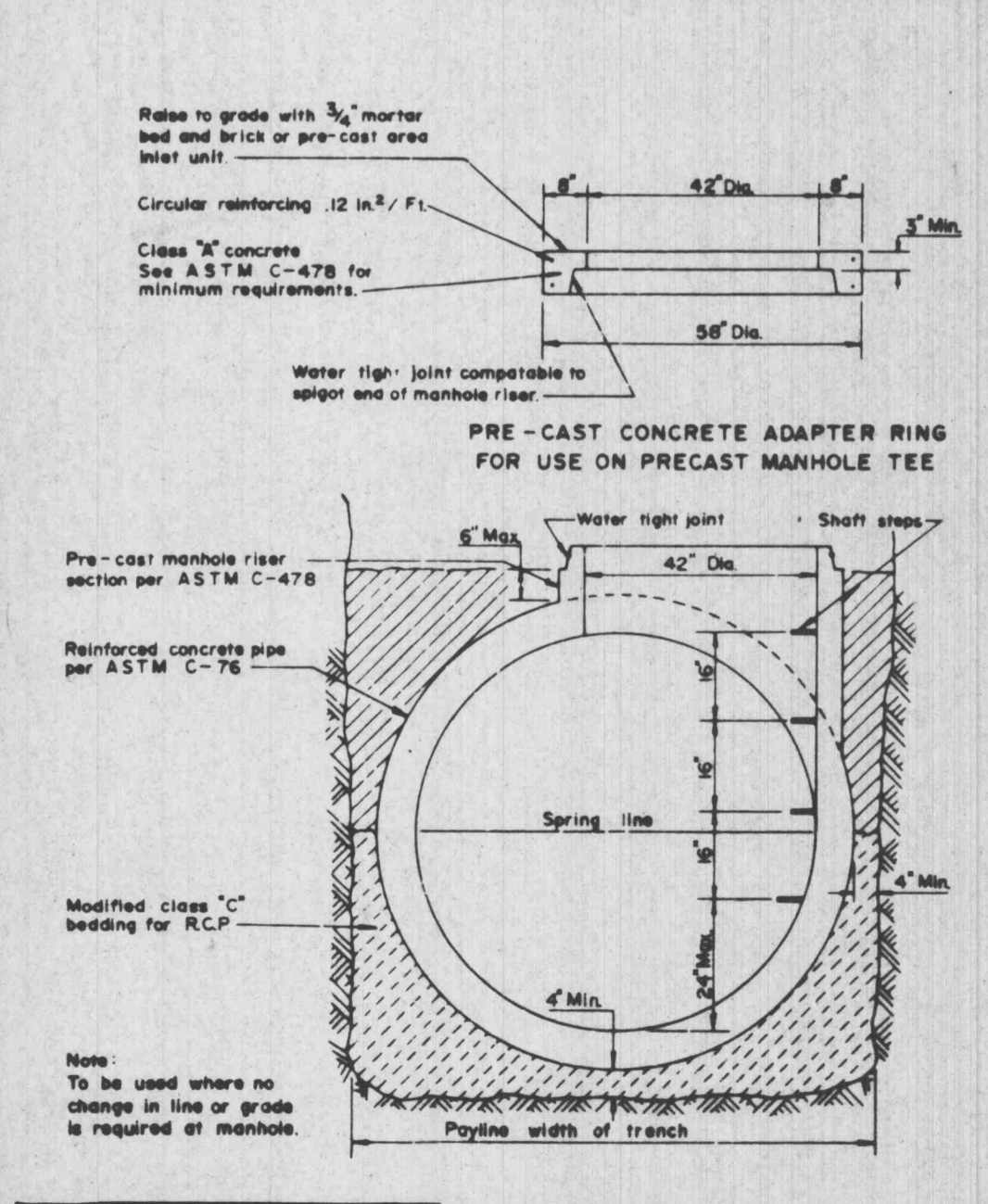
**MANHOLE ON CONCRETE PIPE
SEWERS 39" THRU 54" DIAMETER**



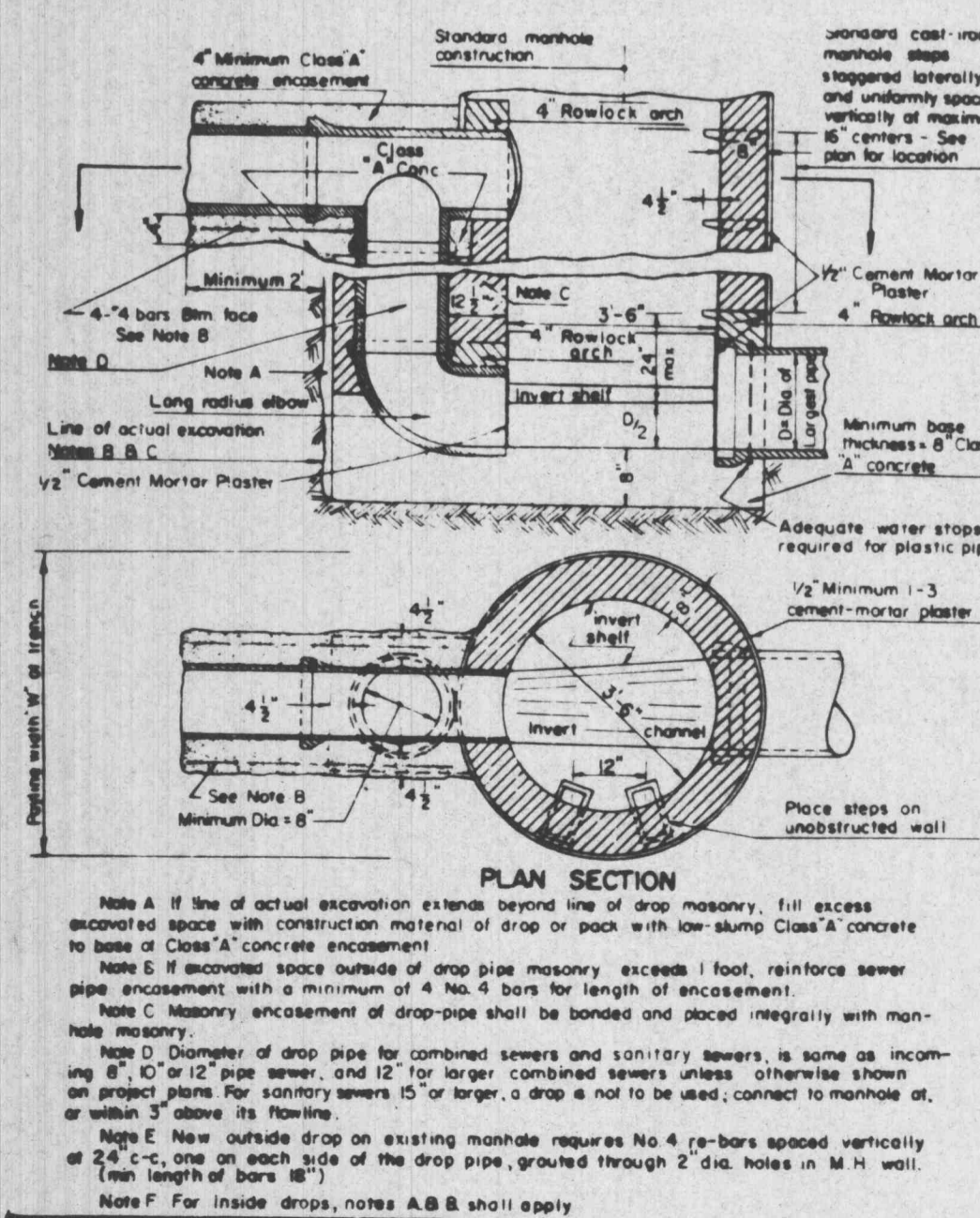
**MANHOLE ON CONC PIPE
39" THRU 54" (ALTERNATE)**



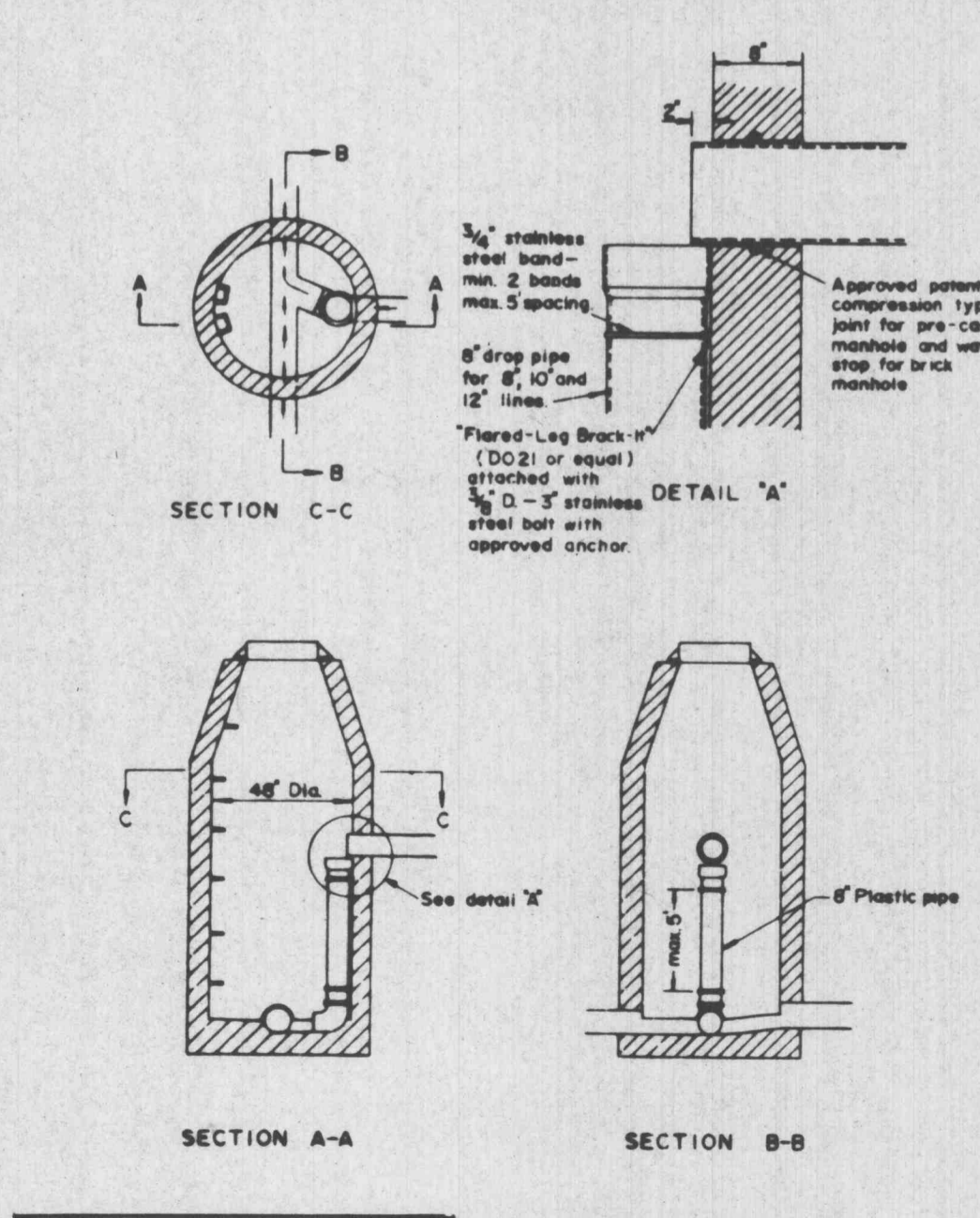
**TYPICAL MANHOLE BASE
REINFORCED CONCRETE PIPE
SEWERS 57" AND LARGER
IN DIAMETER**



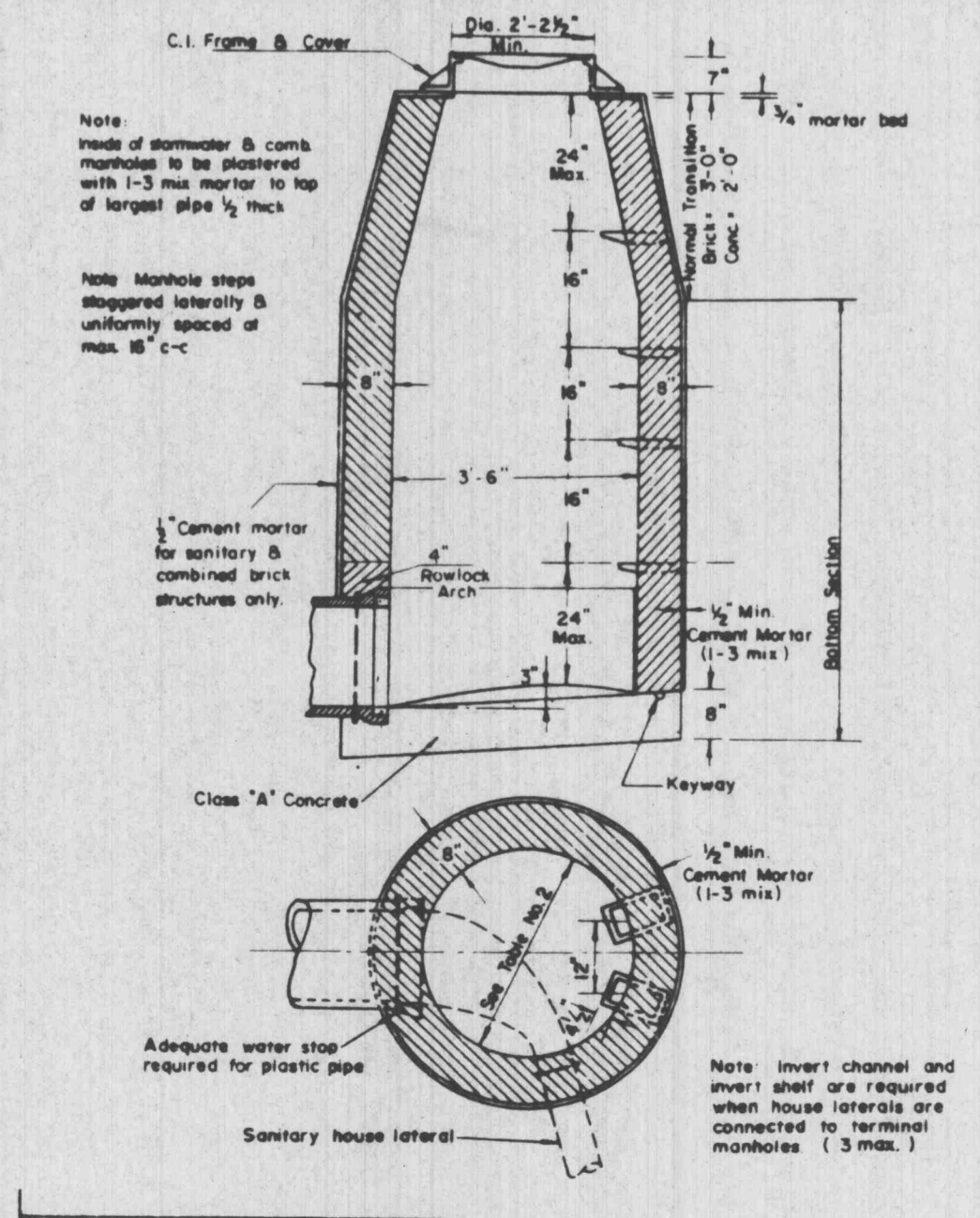
**TYPICAL PRE-CAST M.H. TEE
FOR REINFORCED CONCRETE
PIPE SEWERS 48" AND
LARGER IN DIAMETER**



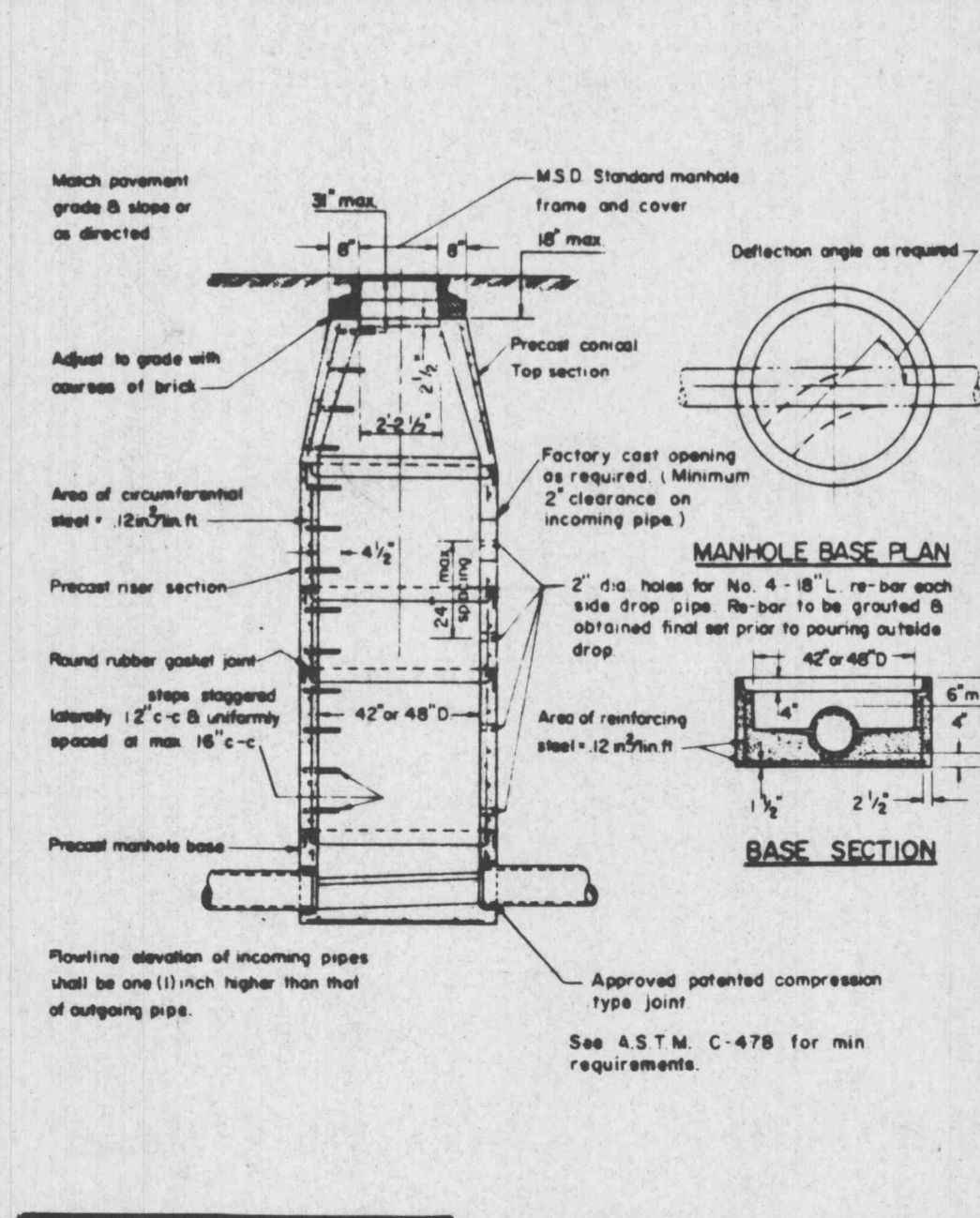
**DROP MANHOLE OF BRICK MASONRY
ON COMBINED, STORM OR
SANITARY SEWERS**



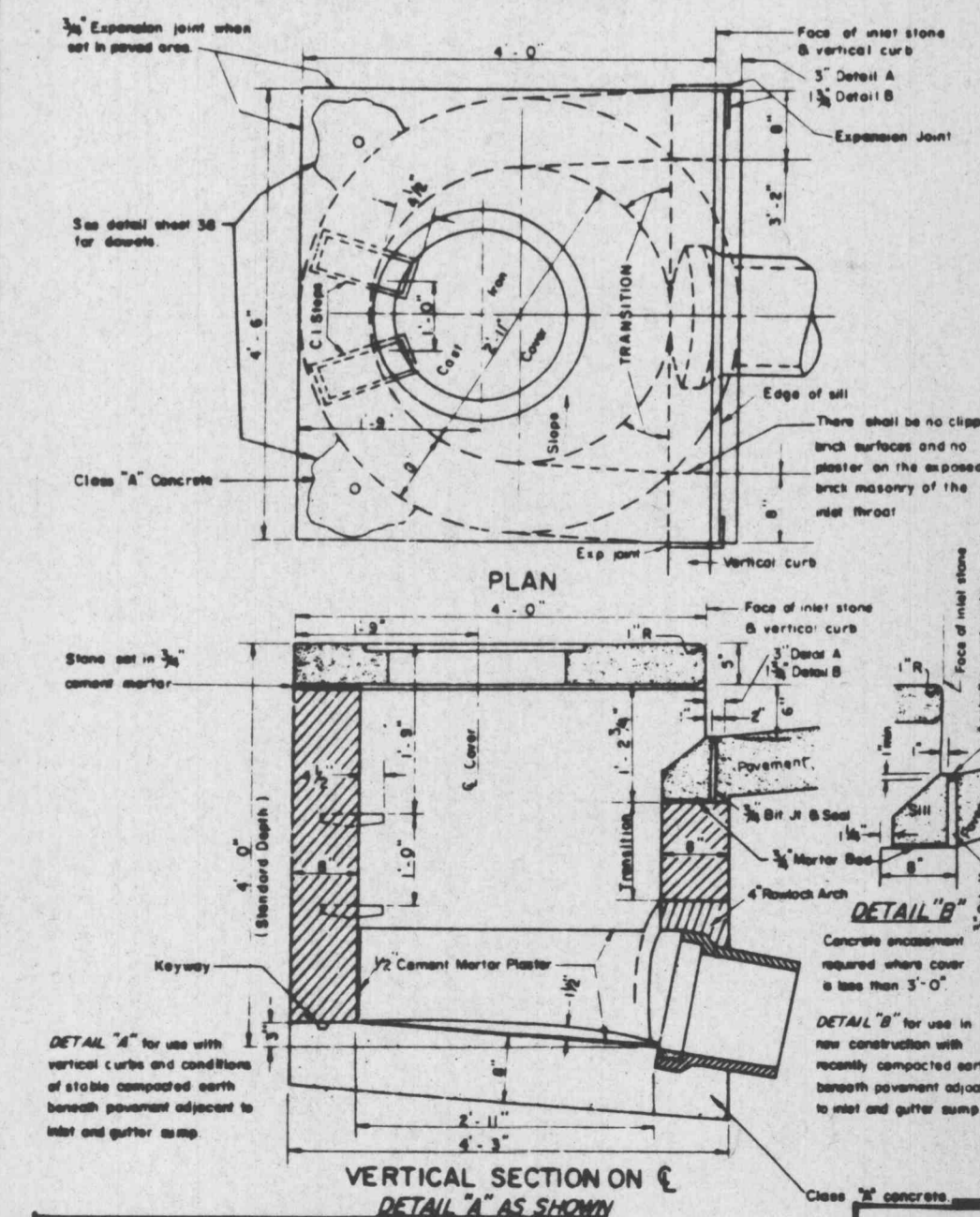
**INSIDE DROP MANHOLE
FOR
PLASTIC PIPE**



TERMINAL MANHOLE



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



**UNTRAPPED STREET INLET
BRICK CONSTRUCTION**