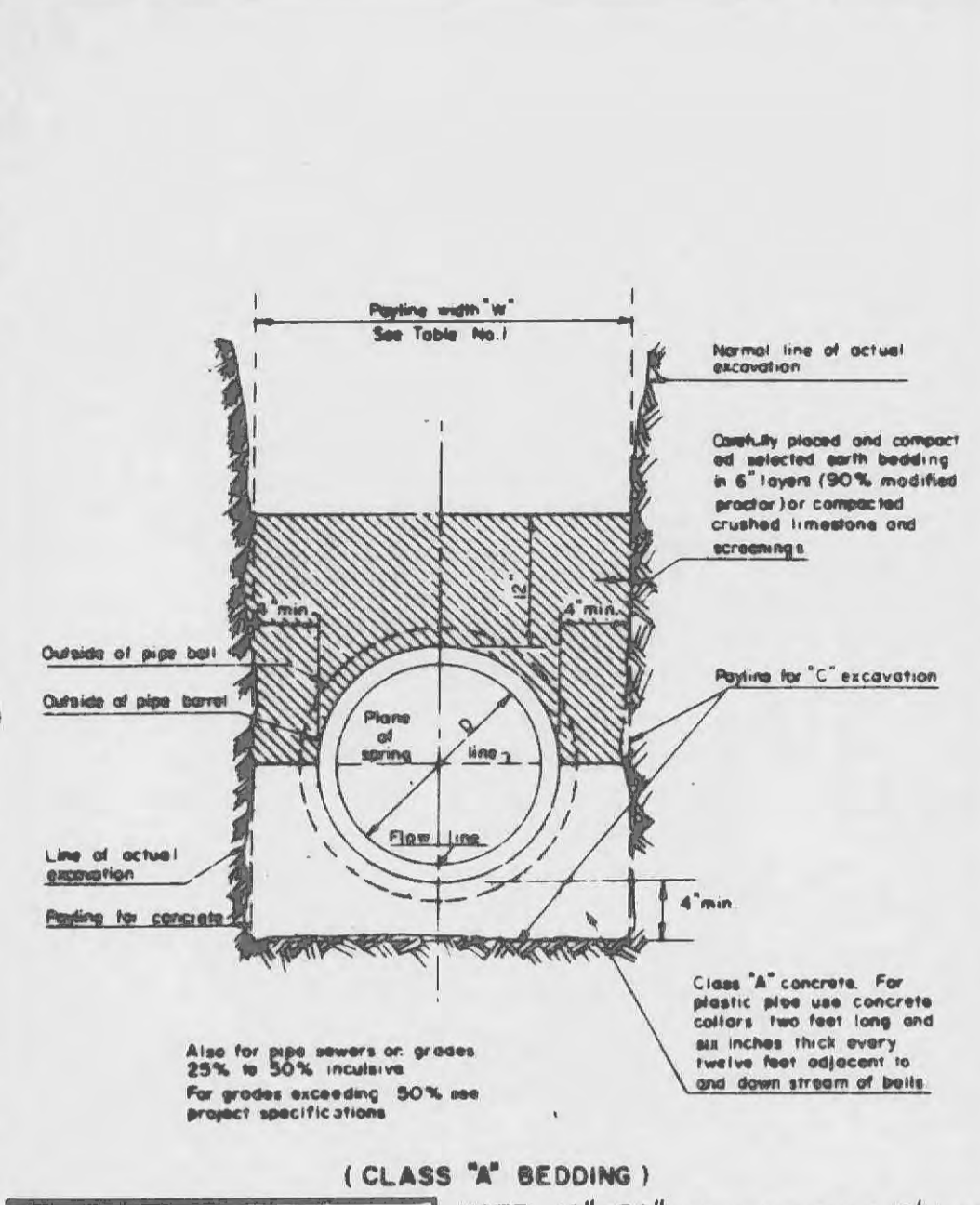
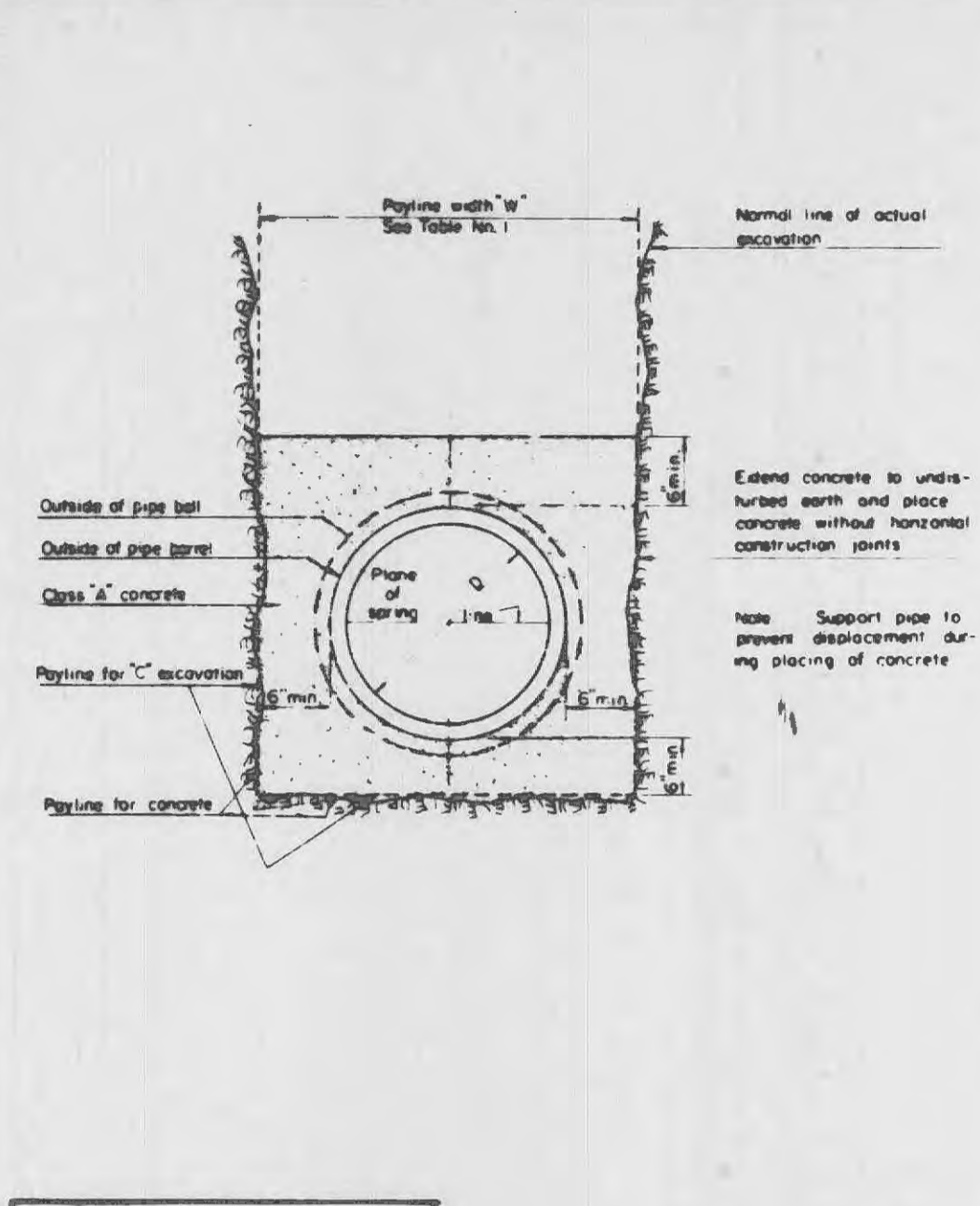
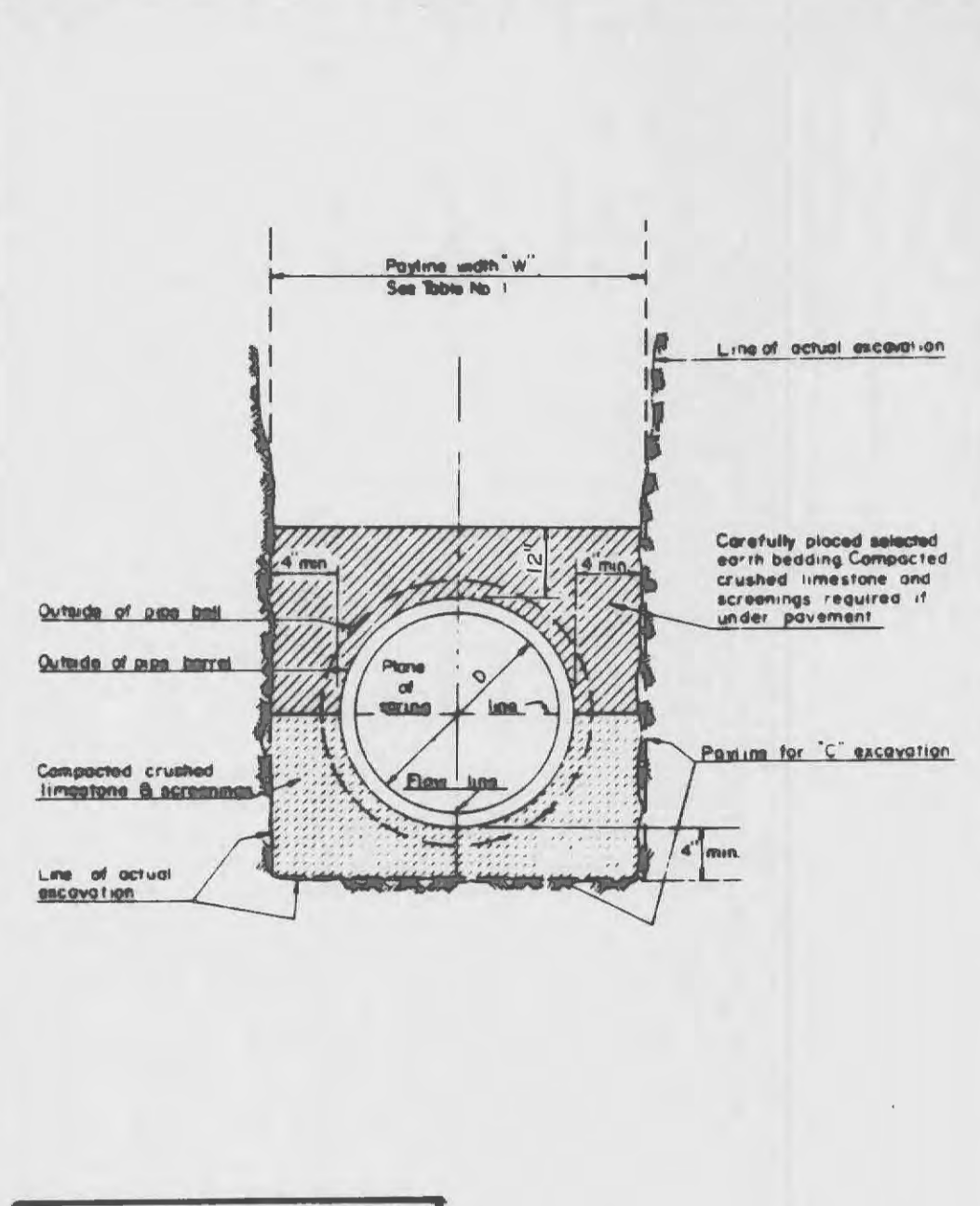
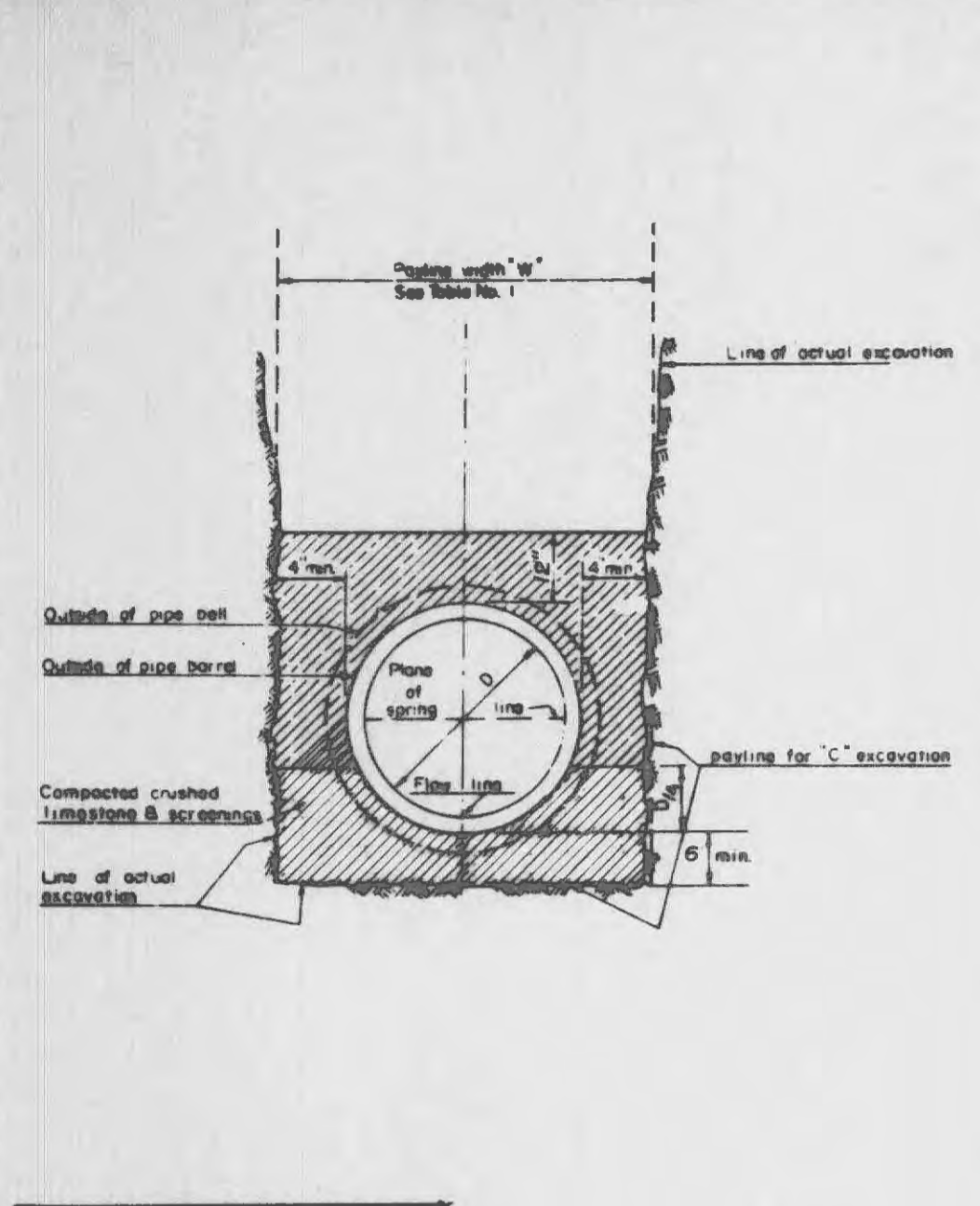


CONSTRUCTION DETAILS

ROUND PIPE			HORIZONTAL ELLIPTICAL PIPE		
Inside Diameter of Pipe (Inches)	Payline Width of Trench (Inches)	Payline Width of Trench (Feet)	1" Inside Dimension of Pipe (Inches)	1" Payline Width of Trench (Inches)	1" Payline Width of Trench (Feet)
4	28	2.33			
6	28	2.33			
8	28	2.33			
10	28	2.33			
12	28	2.33			
15	32	2.67			
18	35	2.92			
21	39	3.25			
24	42	3.50			
27	45	3.75			
30	49	4.08			
33	53	4.42			
36	56	4.67			
39	DISCONTINUED				
42	63	5.25	14 x 23	41	3.42
48	70	5.83	19 x 30	49	4.08
54	77	6.42	22 x 34	53	4.42
60	84	7.00	24 x 38	58	4.83
66	91	7.58	27 x 42	62	5.17
72	98	8.17	29 x 45	66	5.50
78	105	8.75	31 x 49	71	5.92
84	112	9.33	34 x 53	75	6.25
90	119	9.92	36 x 60	83	6.82
96	126	10.50	43 x 68	92	7.67
102	133	11.08	48 x 76	101	8.42
108	140	11.67	53 x 83	109	9.08
114	147	12.25	58 x 91	118	9.83
120	154	12.83	63 x 99	126	10.50
126	161	13.42	68 x 106	135	11.25
132	168	14.00	72 x 113	143	11.92
138	175	14.58	77 x 121	152	12.67
144	182	15.17	82 x 129	160	13.33
			87 x 136	168	14.00
			92 x 143	176	14.67
			97 x 151	185	15.42
			106 x 166	202	16.83
			116 x 180	218	18.17



**TABLE NO. 2
STANDARD MANHOLE DIMENSIONS**

Section of Manhole	Dimension
Top	2'-2 1/2" Dia.
Transition	Upper: 3'-6" 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. 1
PAYLINE WIDTHS OF TRENCH AND QUANTITIES OF CONCRETE**

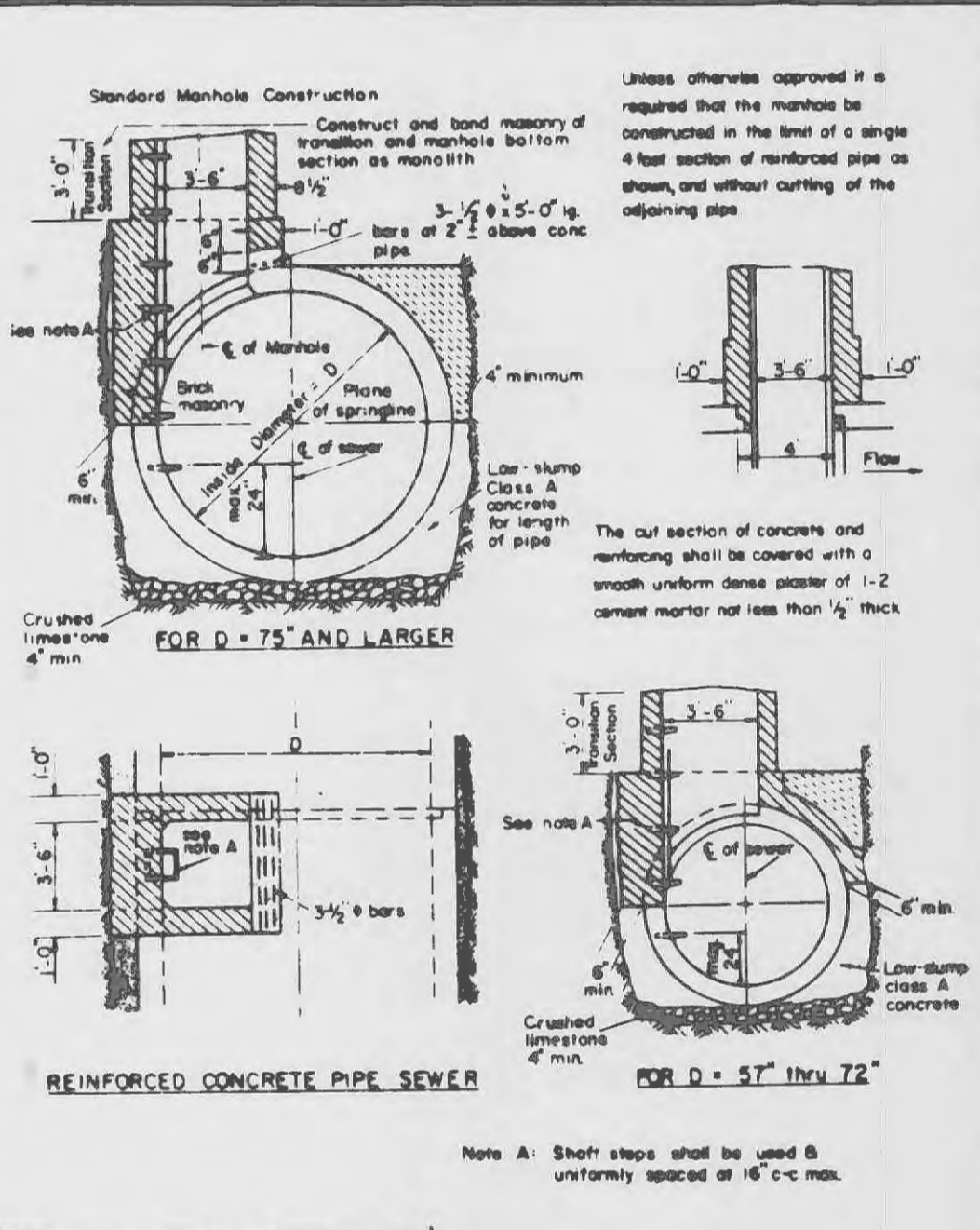
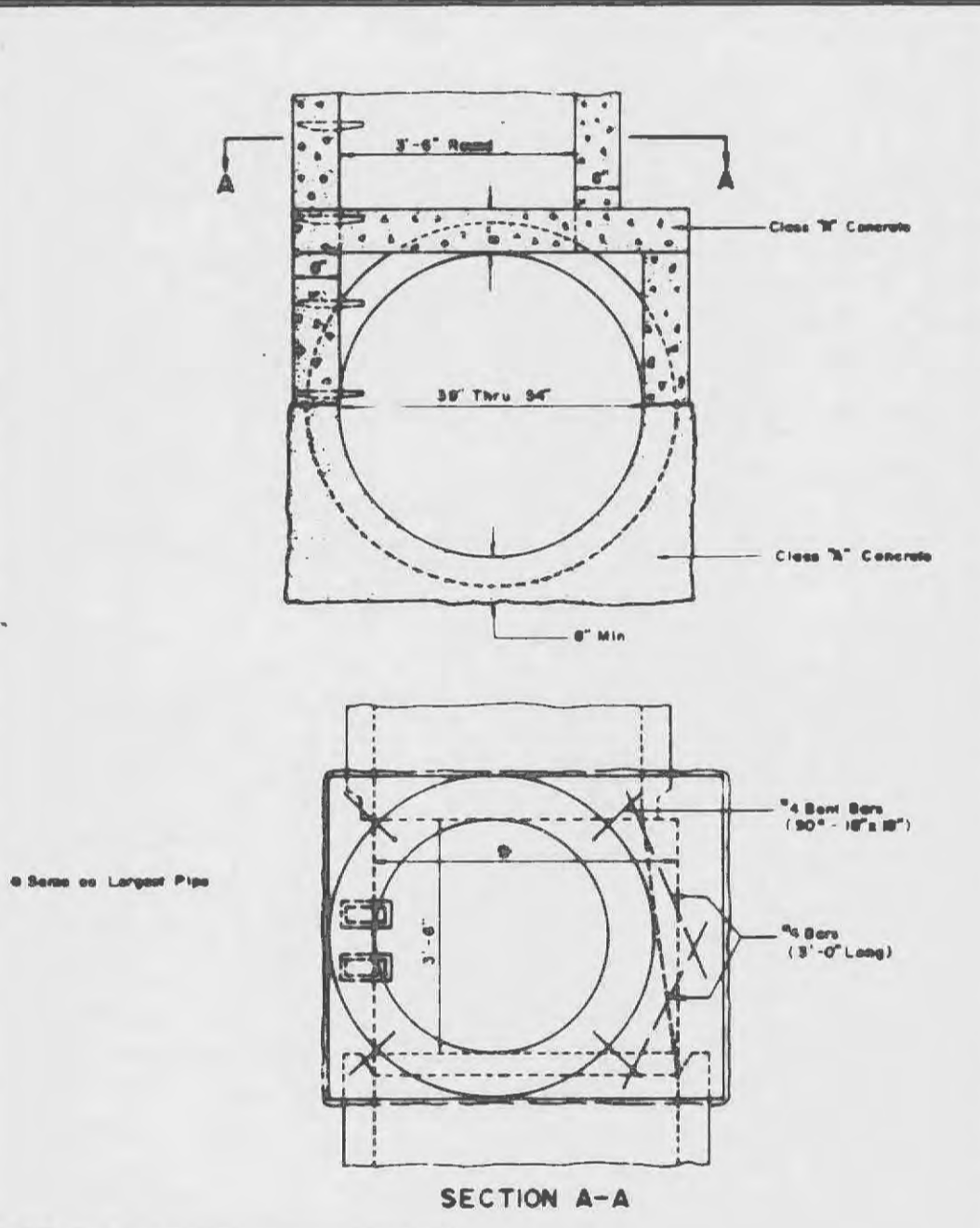
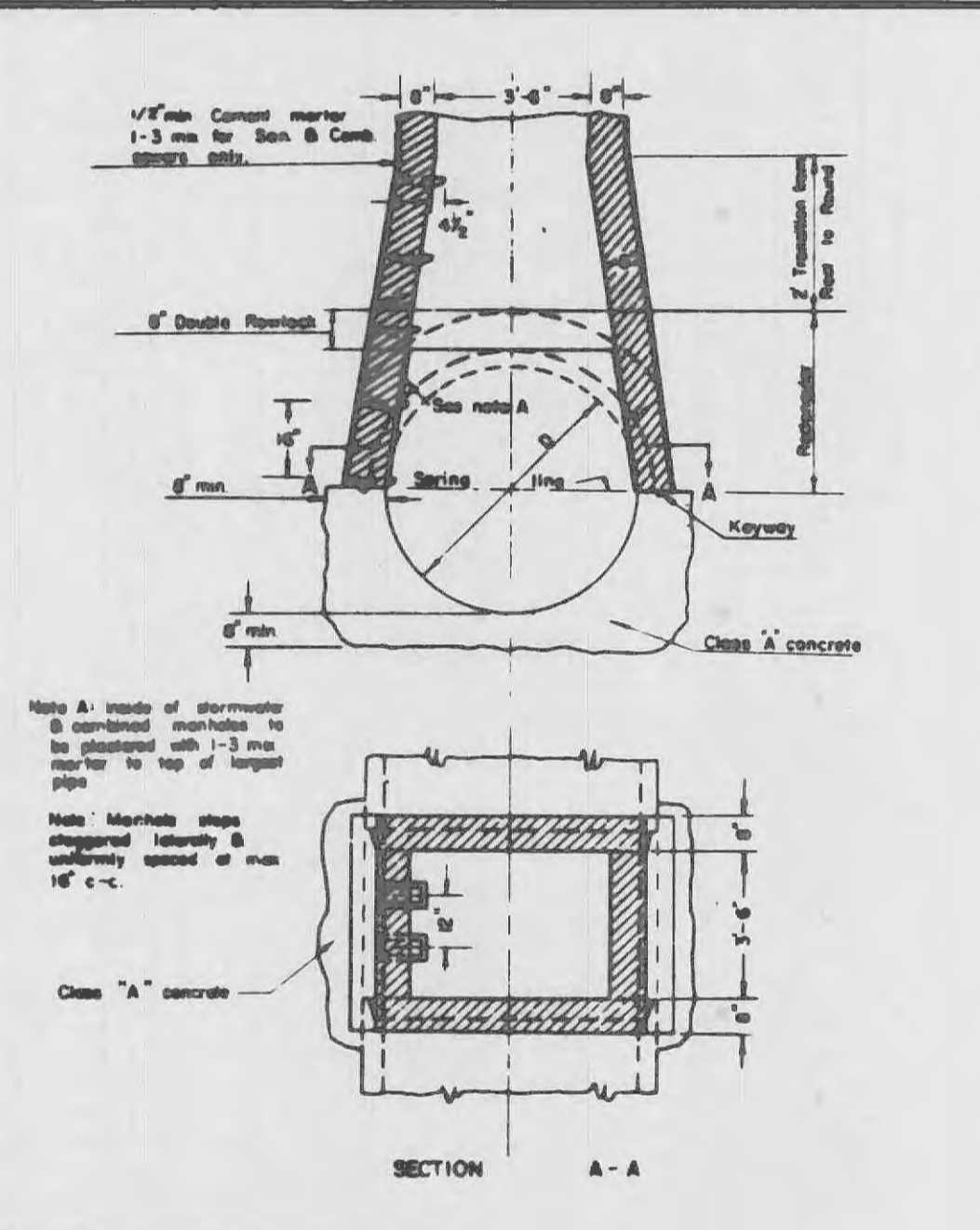
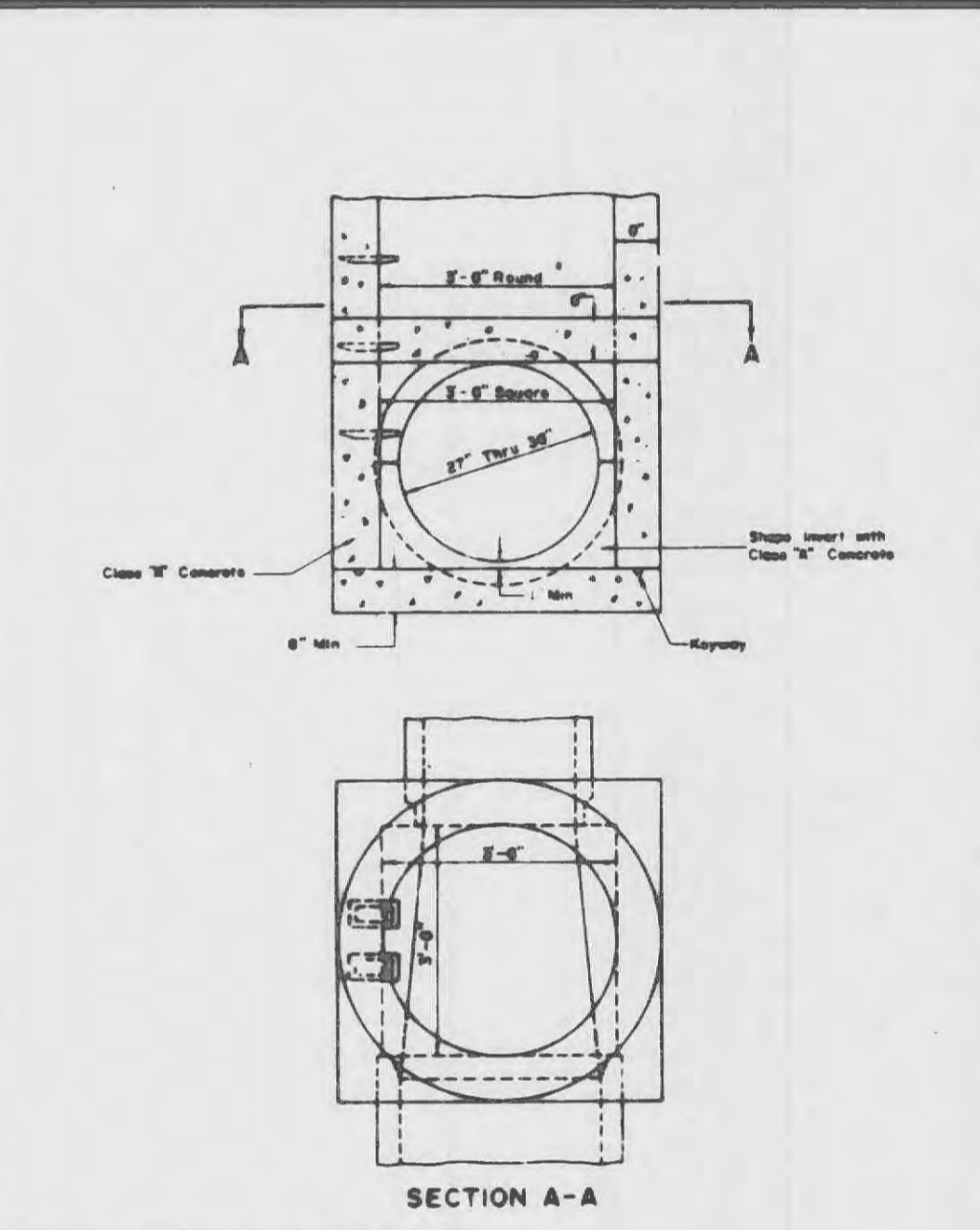
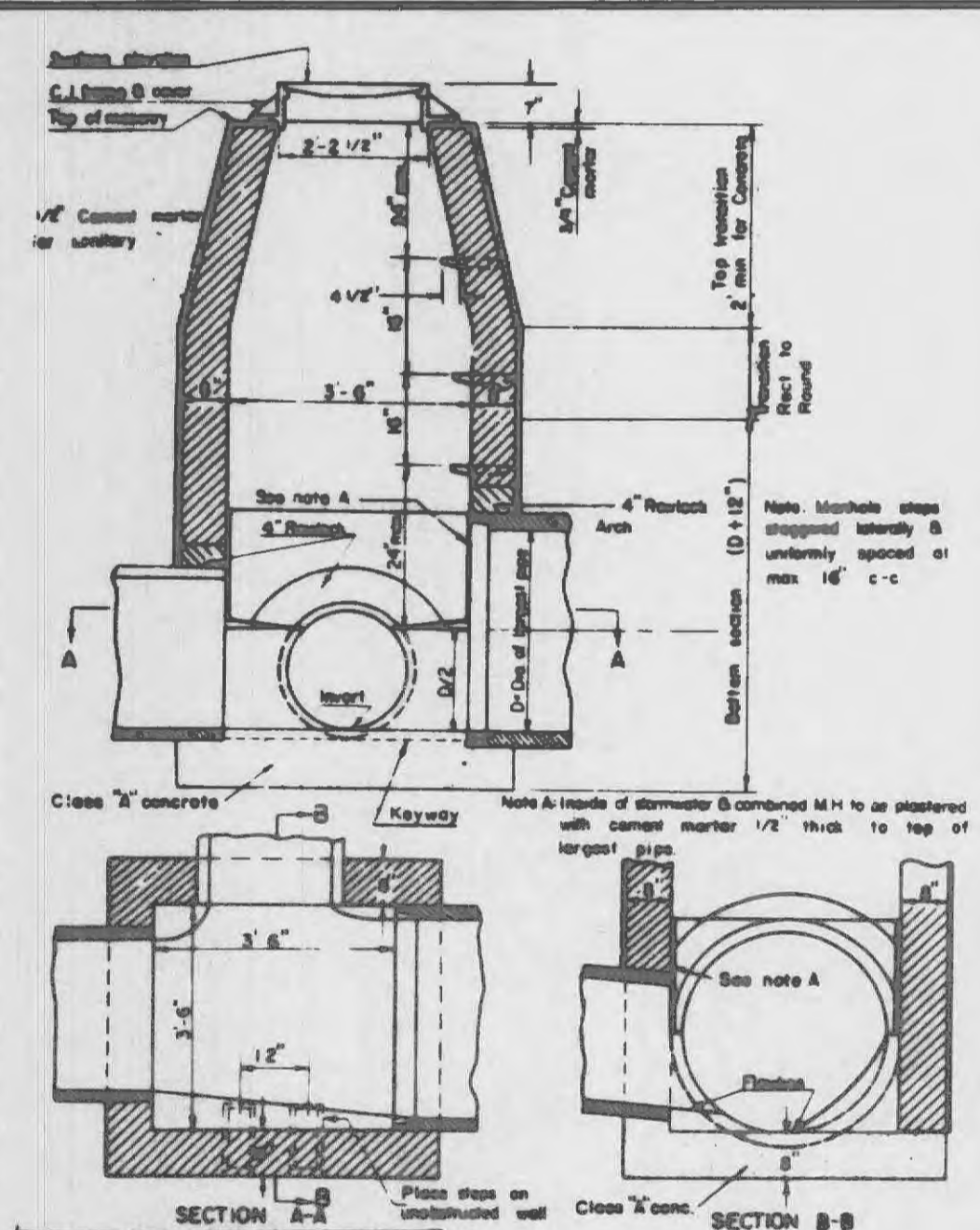
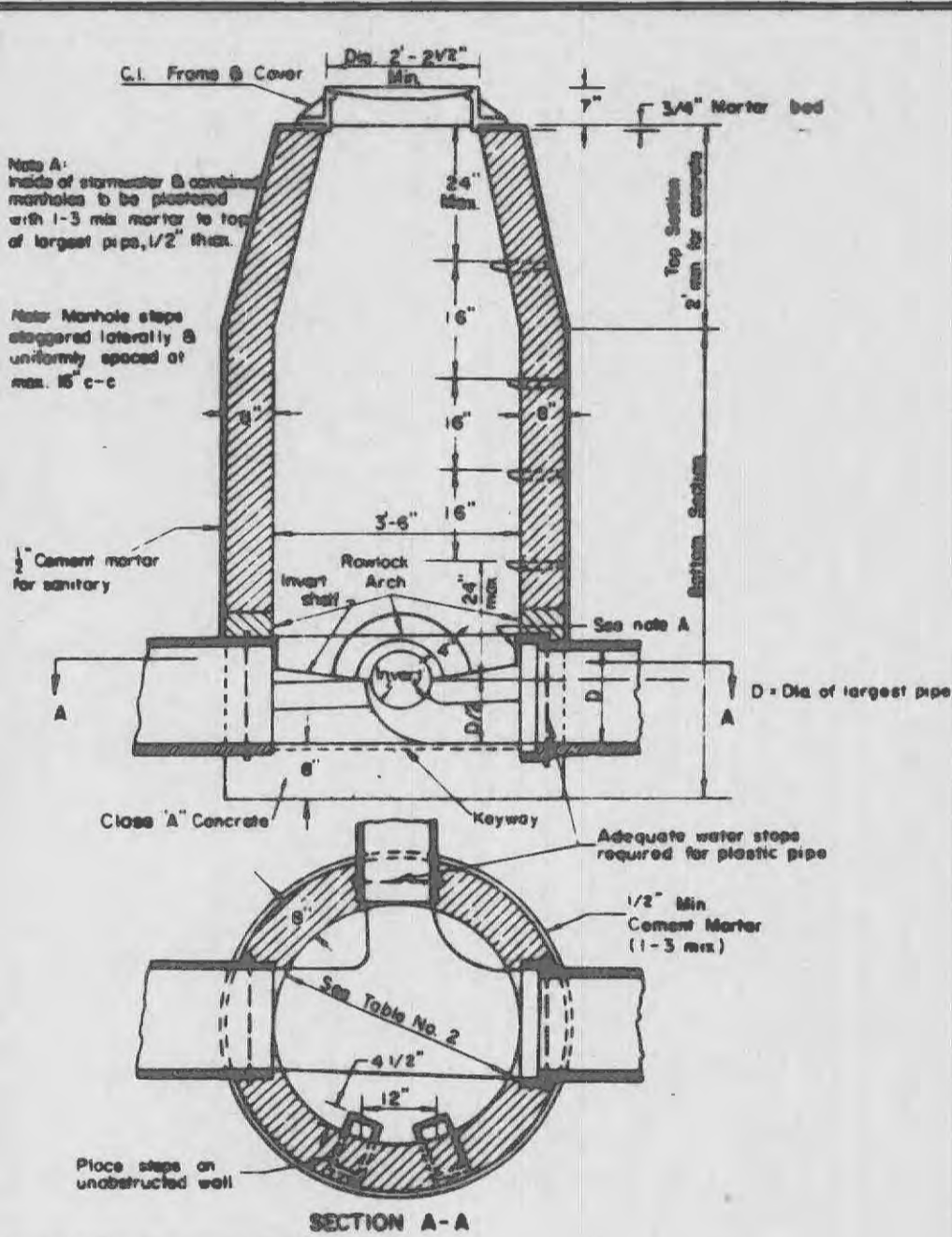
PIPE BEDDING CLASS "C" (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)

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

SANITARY SEWER CONCRETE ENCASEMENT

STORM SEWER CONCRETE CRADLE

**TABLE NO. 2
STANDARD MANHOLE DIMENSIONS**



LINE MANHOLE PIPE SEWERS 8" - 24" DIA.

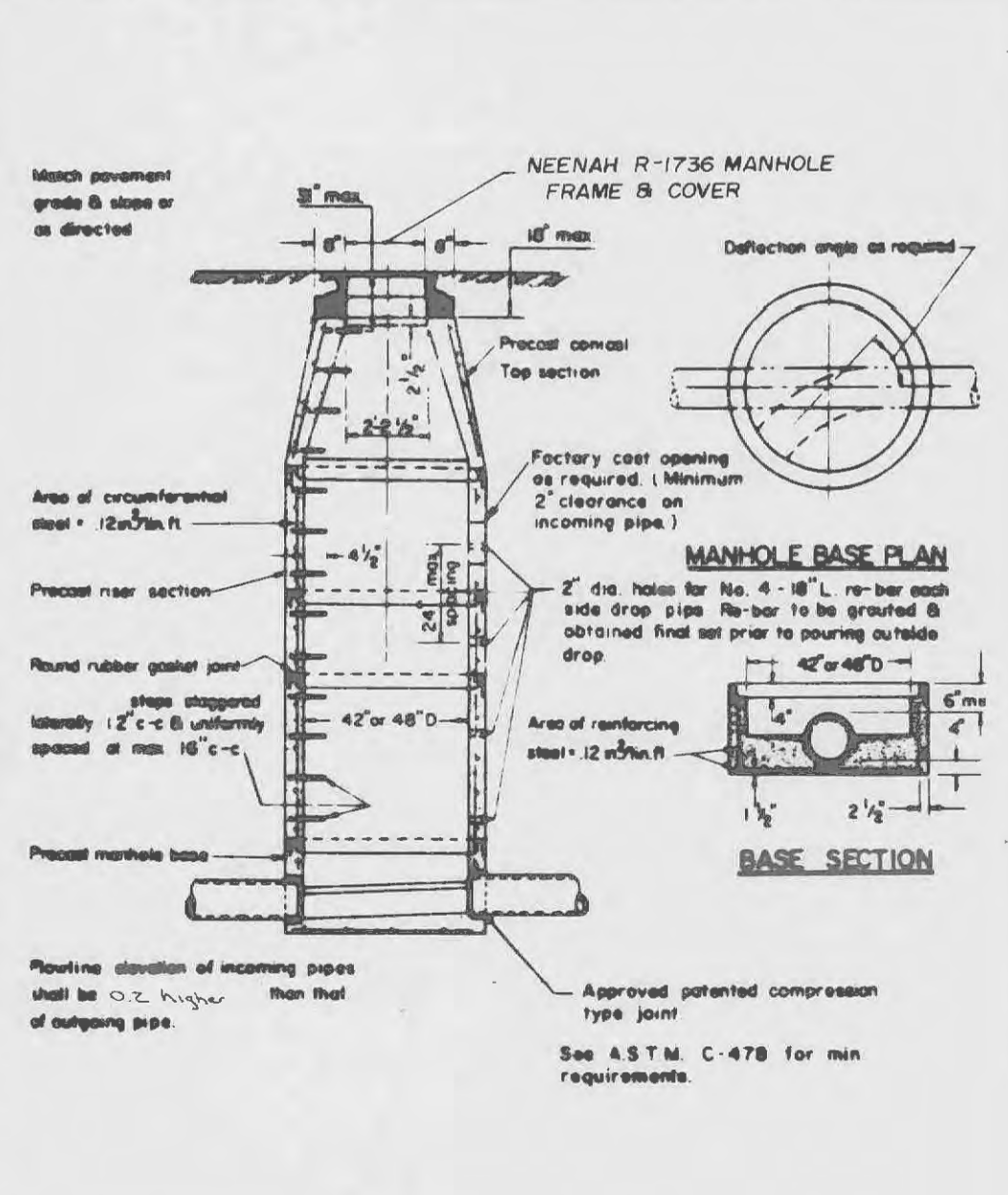
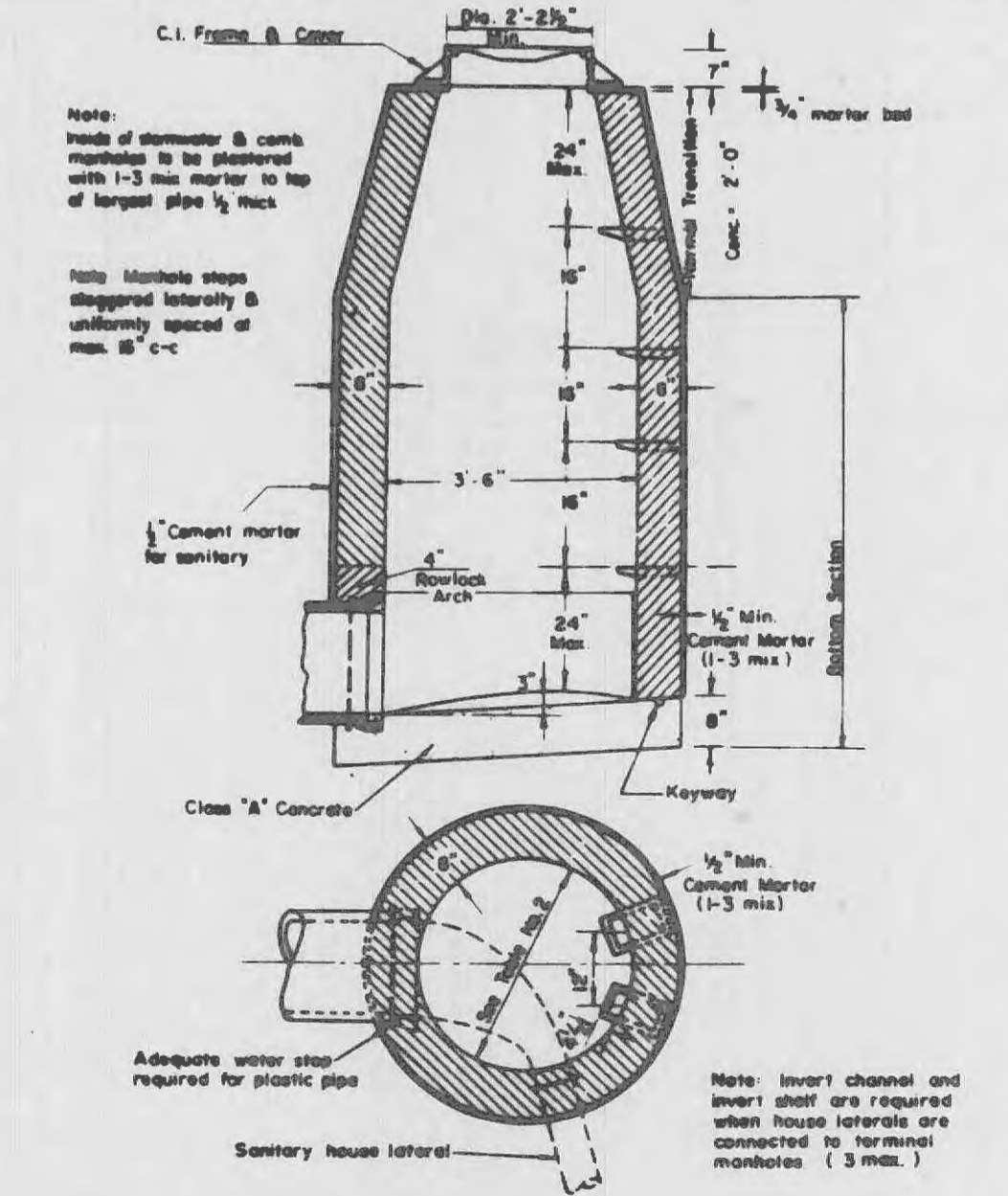
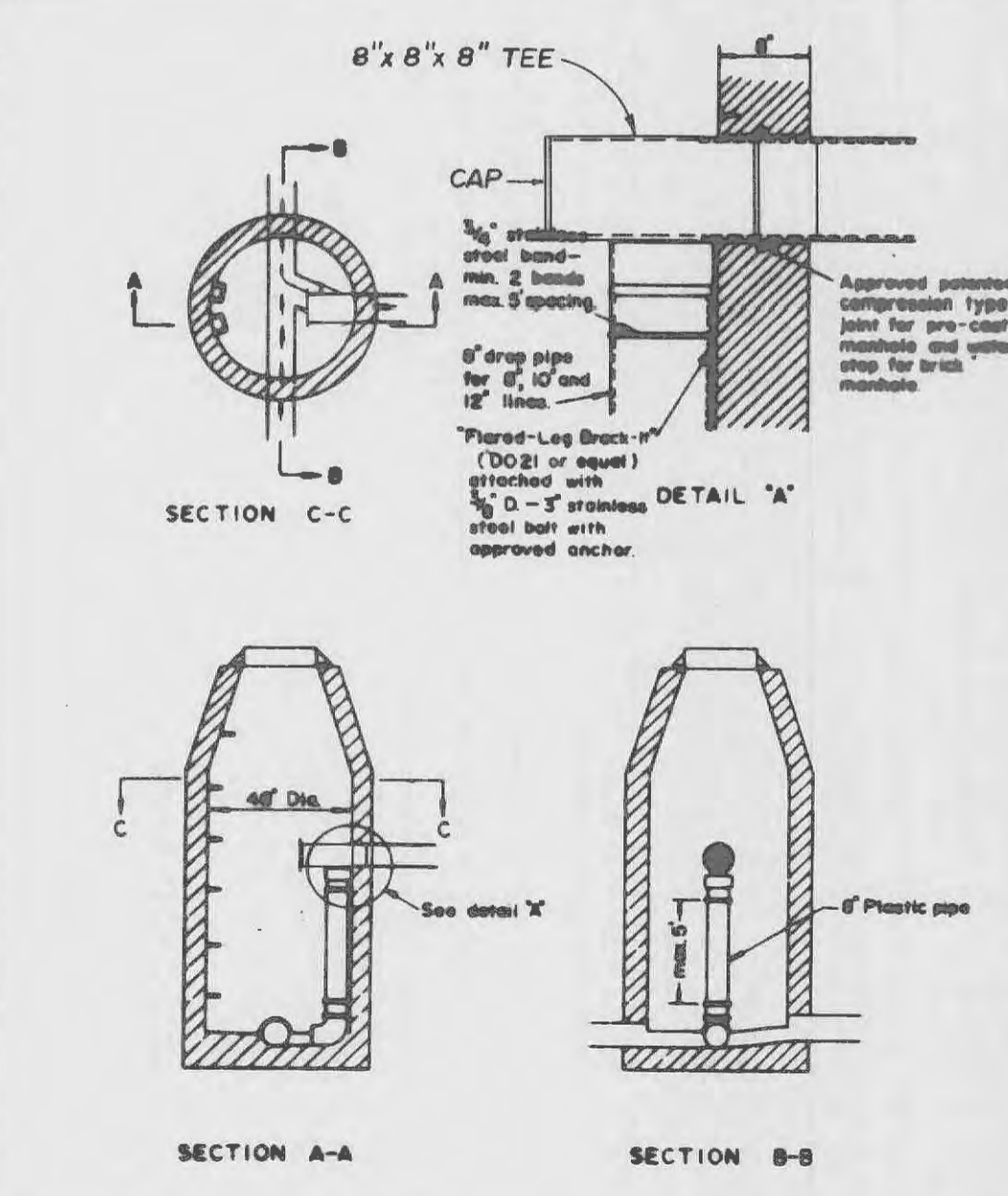
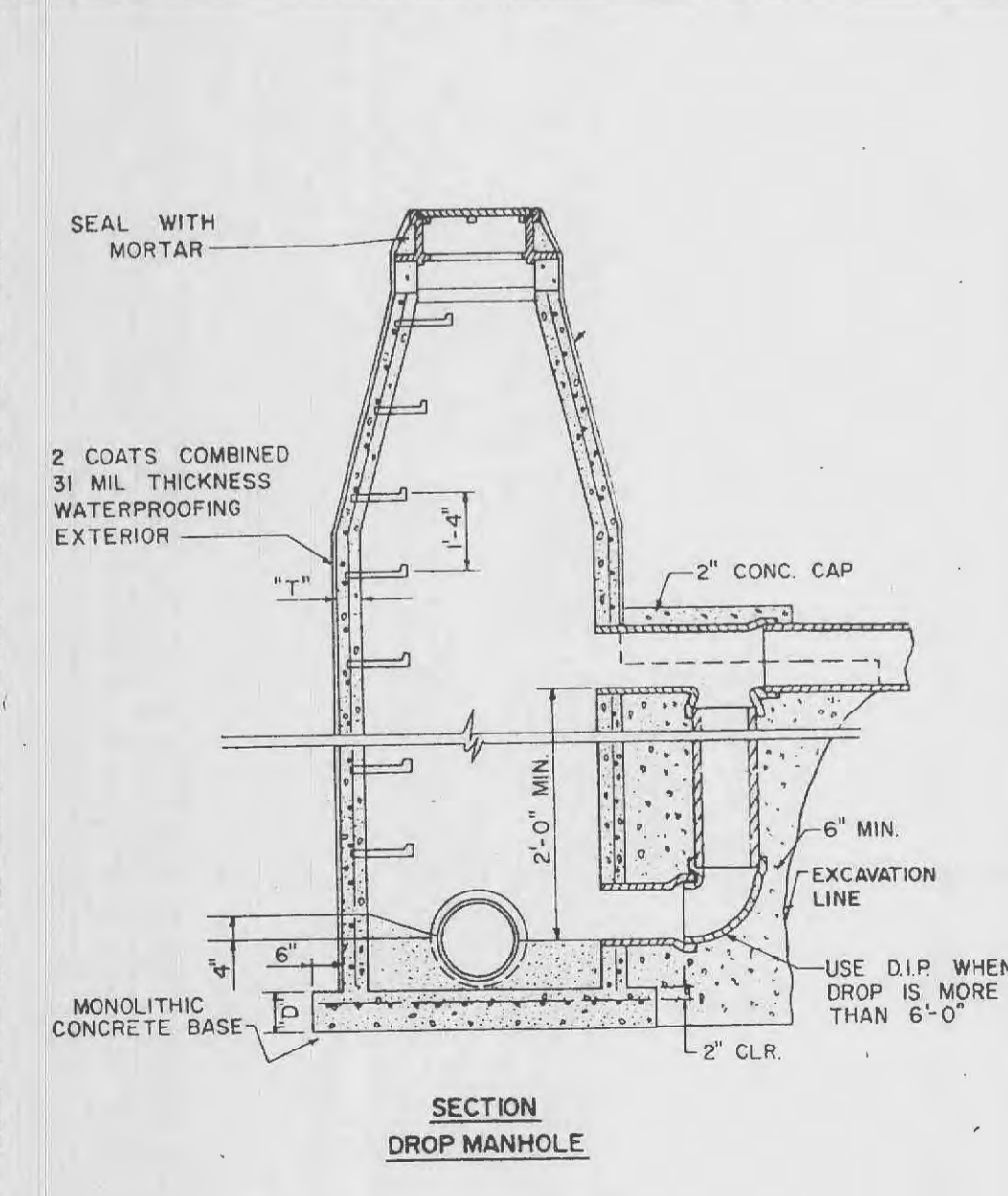
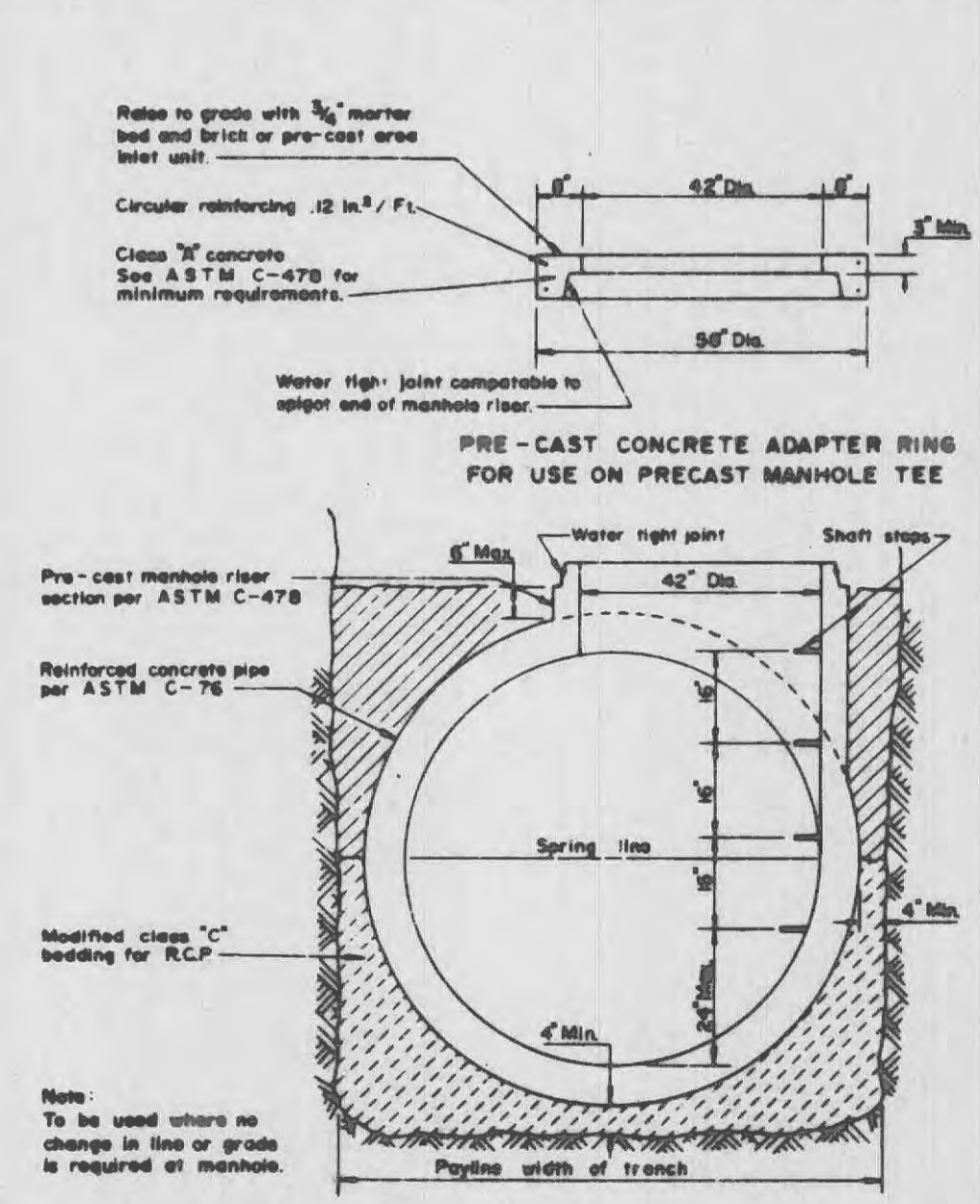
TYPICAL LINE MANHOLE ON PIPE SEWER 27" THRU 36" IN DIAMETER

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

MANHOLE ON CONCRETE PIPE SEWERS 36" THRU 54" DIAMETER

MANHOLE ON CONCRETE PIPE 36" 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

INSIDE DROP MANHOLE FOR PLASTIC PIPE

INSIDE DROP MANHOLE FOR PLASTIC PIPE

TERMINAL MANHOLE

PRE-CAST CONCRETE MANHOLE FOR SEWERS 6" THROUGH 27"

PRE-CAST CONCRETE MANHOLE FOR SEWERS 6" THROUGH 27"