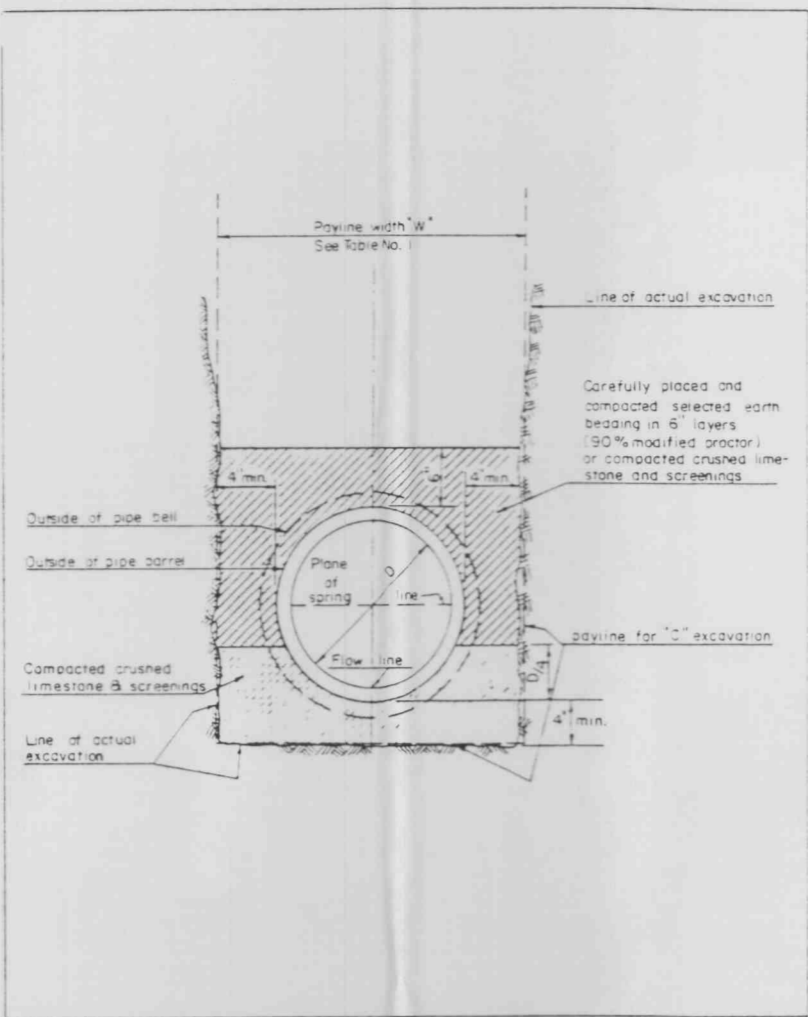
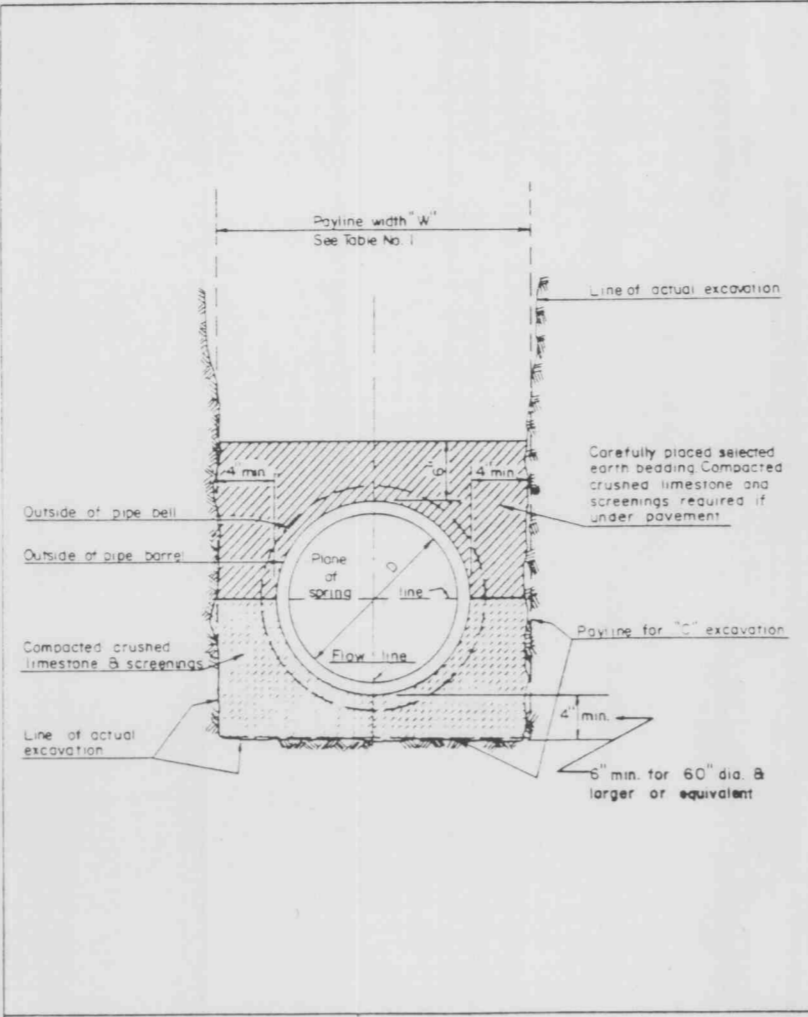


ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
Outside Diameter (Inches)	Payline Width of Trench (Feet)	Payline Width of Excavation (Feet)	Payline Width of Concrete Encasement (Feet)	Outside Diameter (Inches)	Payline Width of Trench (Feet)	Payline Width of Excavation (Feet)	Payline Width of Concrete Encasement (Feet)
4	2.6	3.3	3.0				
6	2.8	3.5	3.2				
8	3.0	3.7	3.4				
10	3.2	3.9	3.6				
12	3.4	4.1	3.8				
14	3.6	4.3	4.0				
16	3.8	4.5	4.2				
18	4.0	4.7	4.4				
20	4.2	4.9	4.6				
22	4.4	5.1	4.8				
24	4.6	5.3	5.0				
26	4.8	5.5	5.2				
28	5.0	5.7	5.4				
30	5.2	5.9	5.6				
32	5.4	6.1	5.8				
34	5.6	6.3	6.0				
36	5.8	6.5	6.2				
38	6.0	6.7	6.4				
40	6.2	6.9	6.6				
42	6.4	7.1	6.8				
44	6.6	7.3	7.0				
46	6.8	7.5	7.2				
48	7.0	7.7	7.4				
50	7.2	7.9	7.6				
52	7.4	8.1	7.8				
54	7.6	8.3	8.0				
56	7.8	8.5	8.2				
58	8.0	8.7	8.4				
60	8.2	8.9	8.6				
62	8.4	9.1	8.8				
64	8.6	9.3	9.0				
66	8.8	9.5	9.2				
68	9.0	9.7	9.4				
70	9.2	9.9	9.6				
72	9.4	10.1	9.8				
74	9.6	10.3	10.0				
76	9.8	10.5	10.2				
78	10.0	10.7	10.4				
80	10.2	10.9	10.6				
82	10.4	11.1	10.8				
84	10.6	11.3	11.0				
86	10.8	11.5	11.2				
88	11.0	11.7	11.4				
90	11.2	11.9	11.6				
92	11.4	12.1	11.8				
94	11.6	12.3	12.0				
96	11.8	12.5	12.2				
98	12.0	12.7	12.4				
100	12.2	12.9	12.6				
102	12.4	13.1	12.8				
104	12.6	13.3	13.0				
106	12.8	13.5	13.2				
108	13.0	13.7	13.4				
110	13.2	13.9	13.6				
112	13.4	14.1	13.8				
114	13.6	14.3	14.0				
116	13.8	14.5	14.2				
118	14.0	14.7	14.4				
120	14.2	14.9	14.6				
122	14.4	15.1	14.8				
124	14.6	15.3	15.0				
126	14.8	15.5	15.2				
128	15.0	15.7	15.4				
130	15.2	15.9	15.6				
132	15.4	16.1	15.8				
134	15.6	16.3	16.0				
136	15.8	16.5	16.2				
138	16.0	16.7	16.4				
140	16.2	16.9	16.6				
142	16.4	17.1	16.8				
144	16.6	17.3	17.0				
146	16.8	17.5	17.2				
148	17.0	17.7	17.4				
150	17.2	17.9	17.6				
152	17.4	18.1	17.8				
154	17.6	18.3	18.0				
156	17.8	18.5	18.2				
158	18.0	18.7	18.4				
160	18.2	18.9	18.6				
162	18.4	19.1	18.8				
164	18.6	19.3	19.0				
166	18.8	19.5	19.2				
168	19.0	19.7	19.4				
170	19.2	19.9	19.6				
172	19.4	20.1	19.8				
174	19.6	20.3	20.0				
176	19.8	20.5	20.2				
178	20.0	20.7	20.4				
180	20.2	20.9	20.6				
182	20.4	21.1	20.8				
184	20.6	21.3	21.0				
186	20.8	21.5	21.2				
188	21.0	21.7	21.4				
190	21.2	21.9	21.6				
192	21.4	22.1	21.8				
194	21.6	22.3	22.0				
196	21.8	22.5	22.2				
198	22.0	22.7	22.4				
200	22.2	22.9	22.6				
202	22.4	23.1	22.8				
204	22.6	23.3	23.0				
206	22.8	23.5	23.2				
208	23.0	23.7	23.4				
210	23.2	23.9	23.6				
212	23.4	24.1	23.8				
214	23.6	24.3	24.0				
216	23.8	24.5	24.2				
218	24.0	24.7	24.4				
220	24.2	24.9	24.6				
222	24.4	25.1	24.8				
224	24.6	25.3	25.0				
226	24.8	25.5	25.2				
228	25.0	25.7	25.4				
230	25.2	25.9	25.6				
232	25.4	26.1	25.8				
234	25.6	26.3	26.0				
236	25.8	26.5	26.2				
238	26.0	26.7	26.4				
240	26.2	26.9	26.6				
242	26.4	27.1	26.8				
244	26.6	27.3	27.0				
246	26.8	27.5	27.2				
248	27.0	27.7	27.4				
250	27.2	27.9	27.6				
252	27.4	28.1	27.8				
254	27.6	28.3	28.0				
256	27.8	28.5	28.2				
258	28.0	28.7	28.4				
260	28.2	28.9	28.6				
262	28.4	29.1	28.8				
264	28.6	29.3	29.0				
266	28.8	29.5	29.2				
268	29.0	29.7	29.4				
270	29.2	29.9	29.6				
272	29.4	30.1	29.8				
274	29.6	30.3	30.0				
276	29.8	30.5	30.2				
278	30.0	30.7	30.4				
280	30.2	30.9	30.6				
282	30.4	31.1	30.8				
284	30.6	31.3	31.0				
286	30.8	31.5	31.2				
288	31.0	31.7	31.4				
290	31.2	31.9	31.6				
292	31.4	32.1	31.8				
294	31.6	32.3	32.0				
296	31.8	32.5	32.2				
298	32.0	32.7	32.4				
300	32.2	32.9	32.6				

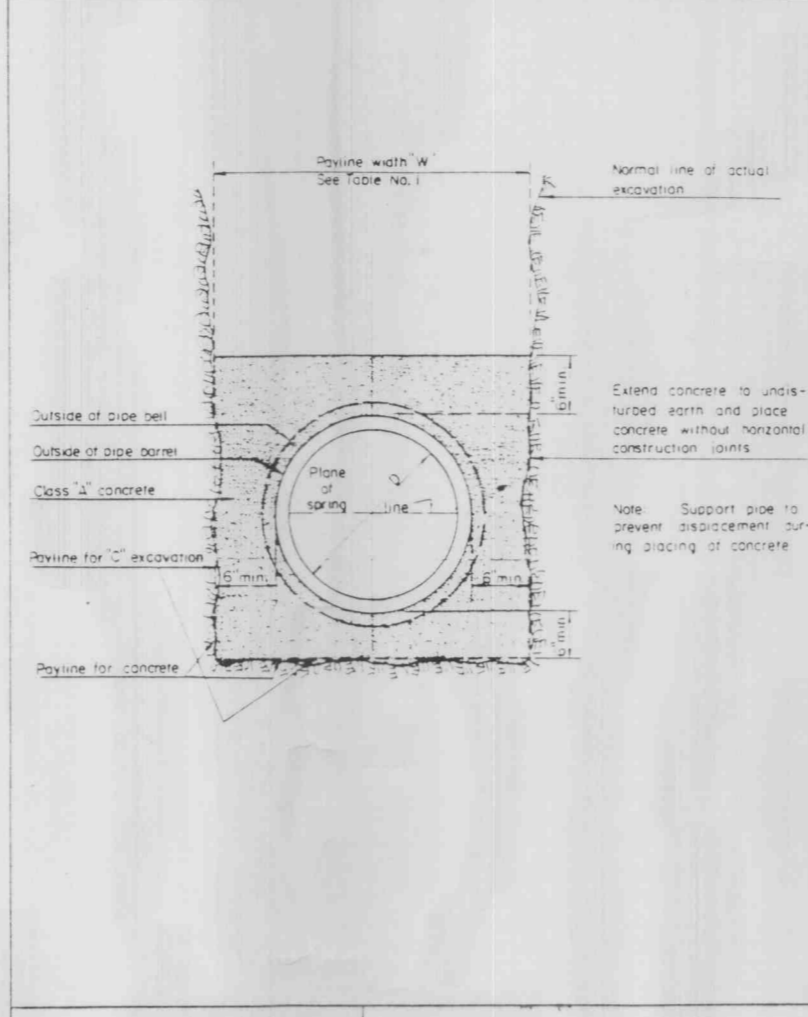
TABLE NO. 1
PAYLINE WIDTHS OF TRENCH AND PAY QUANTITIES OF CONCRETE



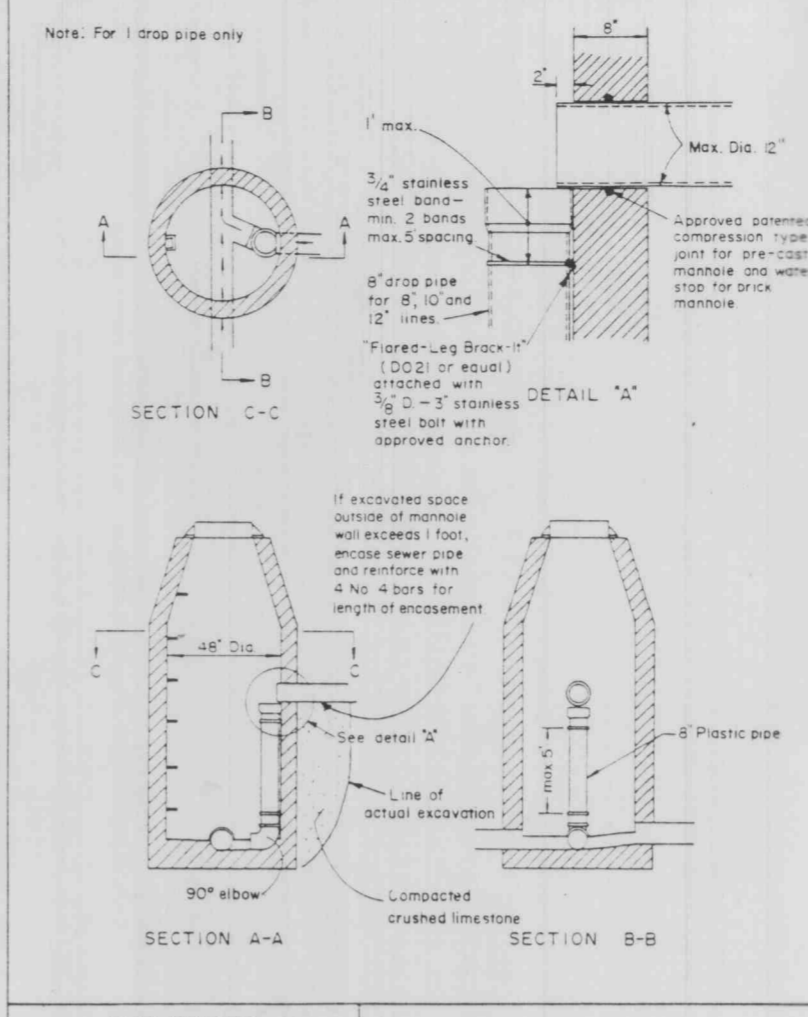
PIPE BEDDING CLASS "A"
(FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)



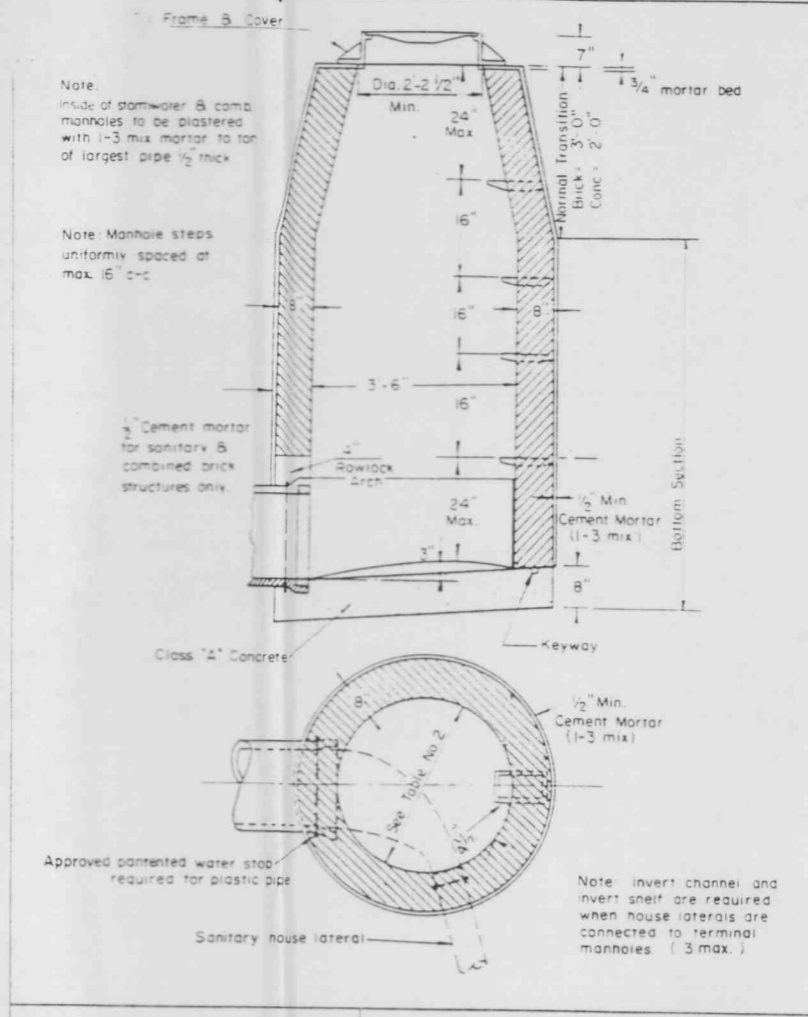
PIPE BEDDING CLASS "B"
(MODIFIED FOR REINFORCED CONCRETE PIPE)



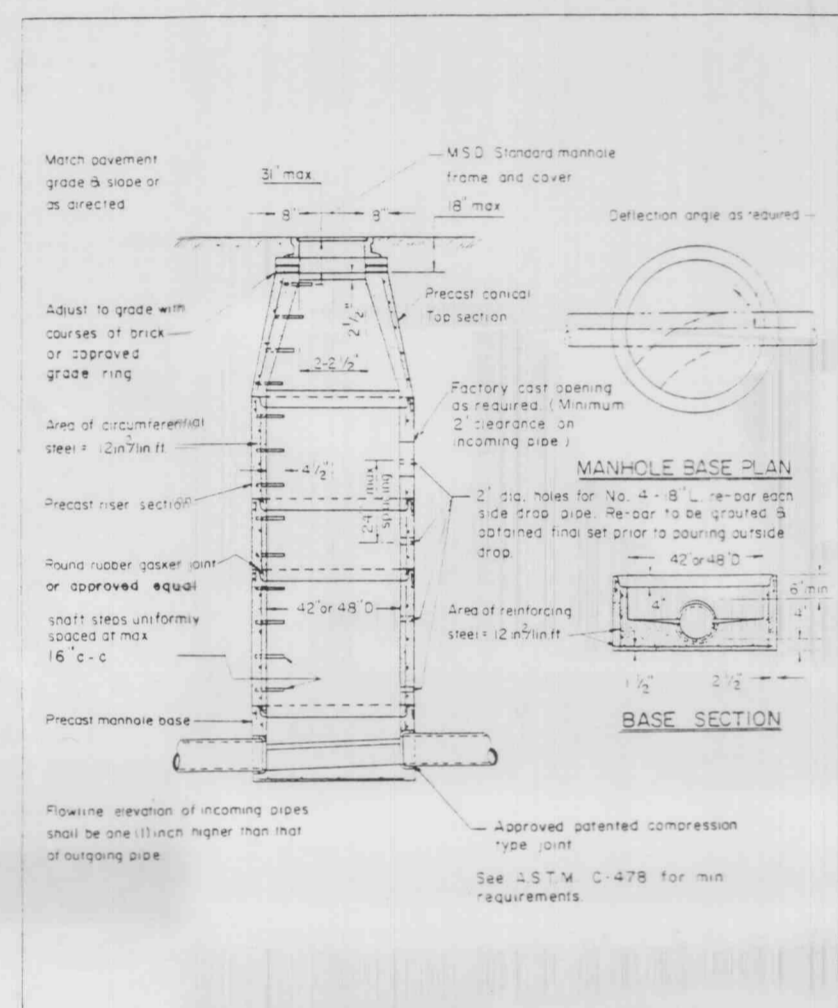
CONCRETE ENCASUREMENT



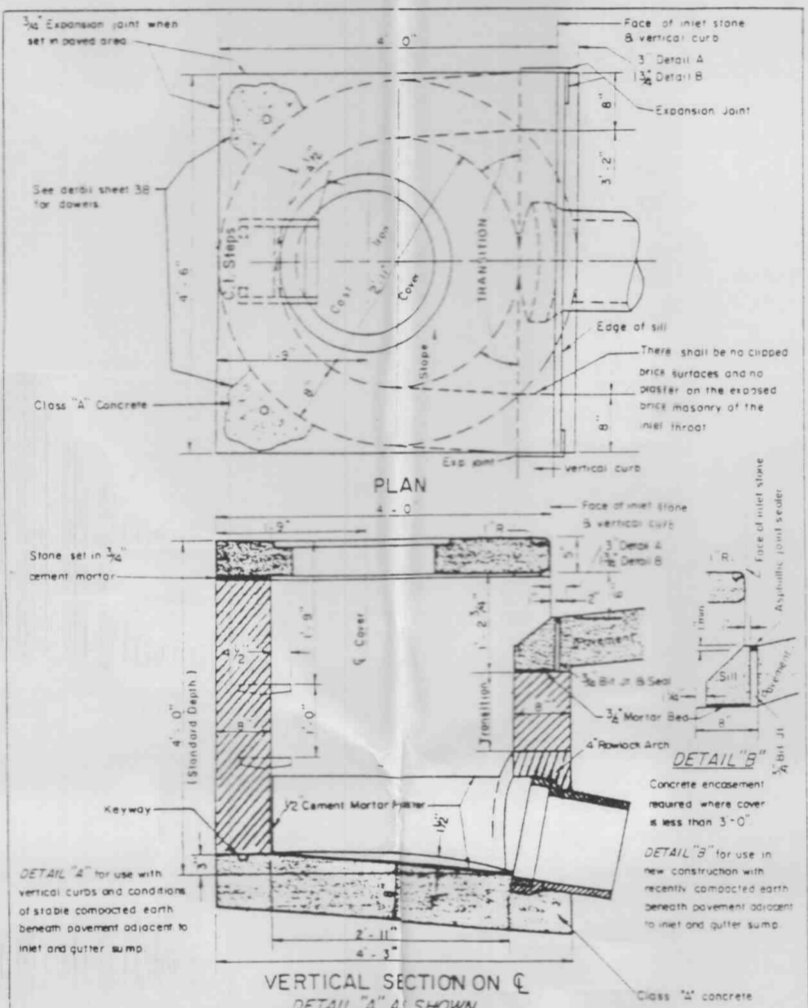
FOULWATER INSIDE DROP MANHOLE FOR PLASTIC PIPE



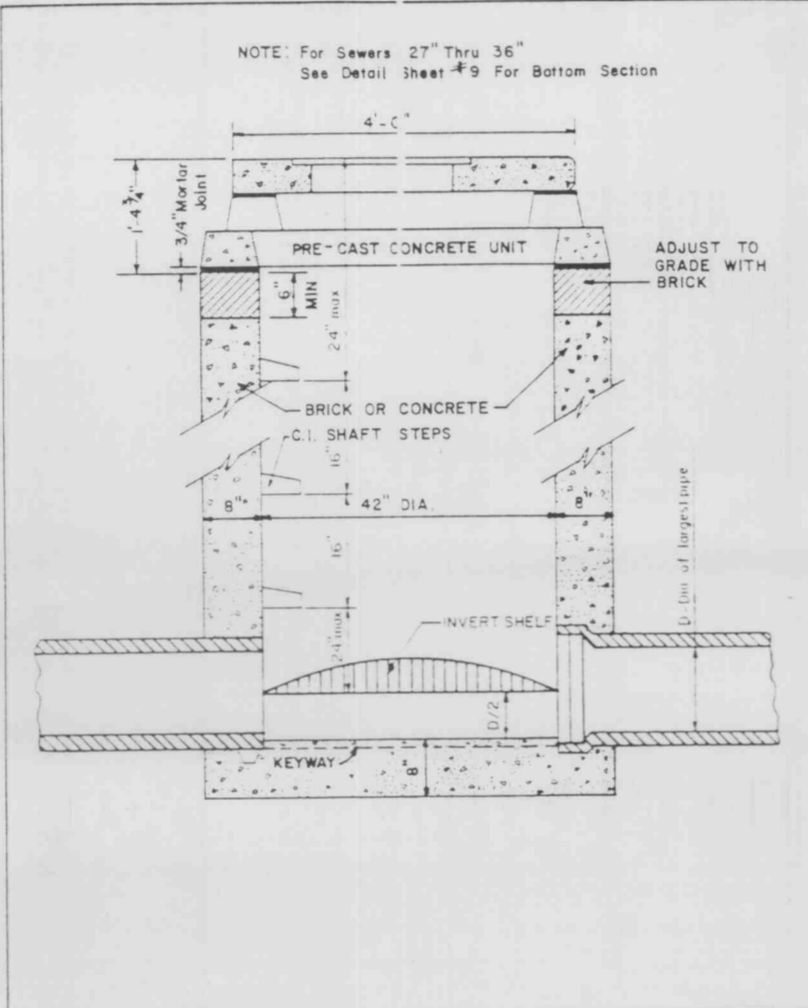
TERMINAL MANHOLE



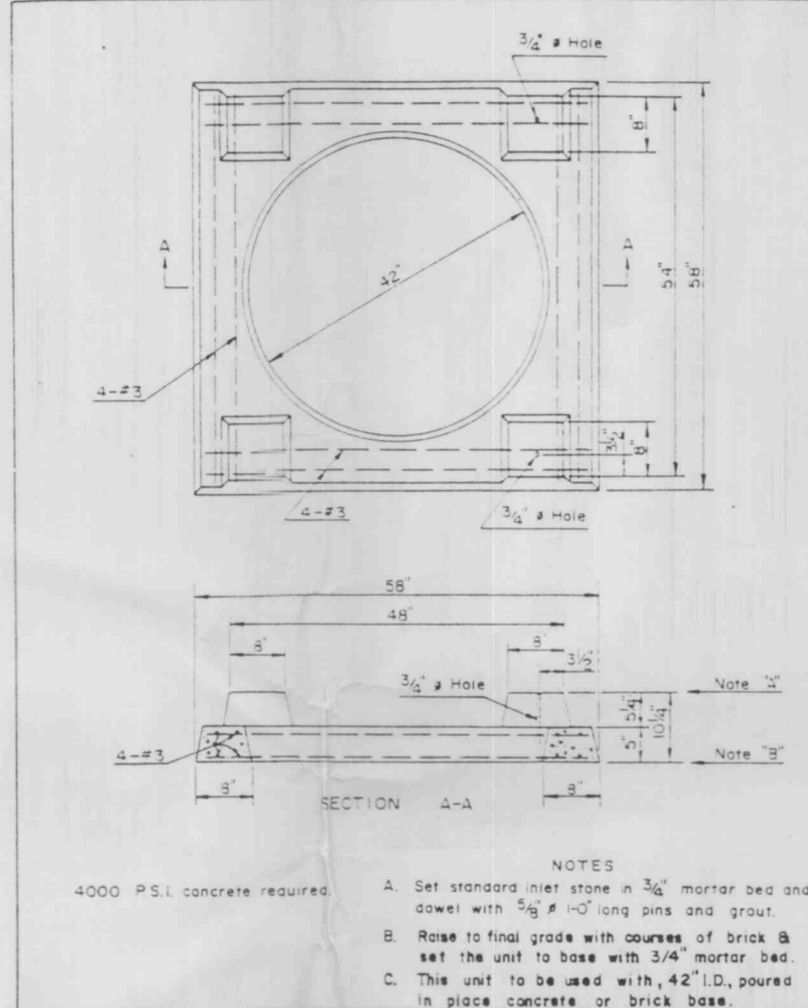
PRE-CAST CONCRETE MANHOLE FOR SEWERS 6" THROUGH 12"



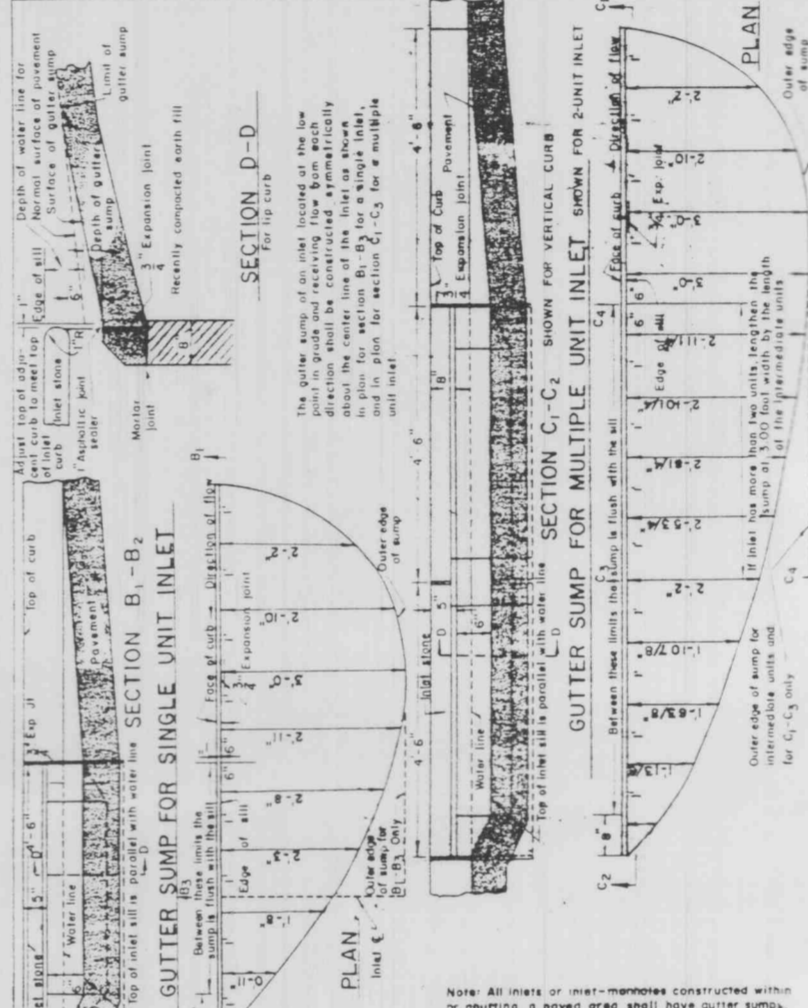
UNTRAPPED STREET INLET BRICK CONSTRUCTION



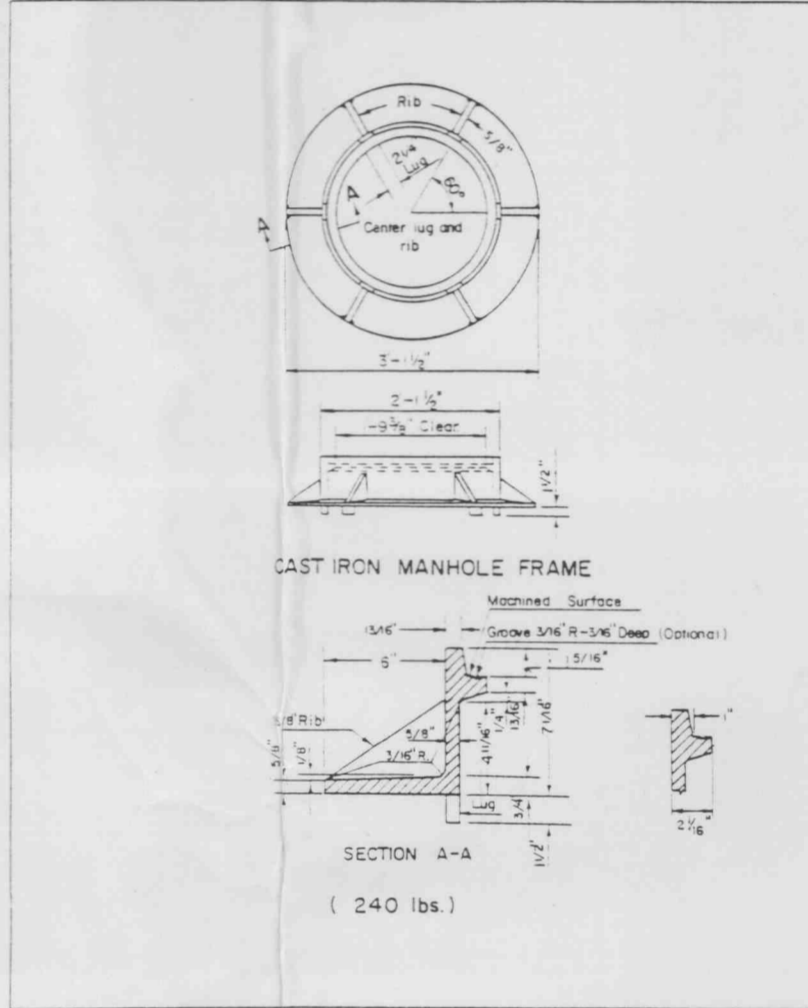
AREA INLET (12" thru 24")



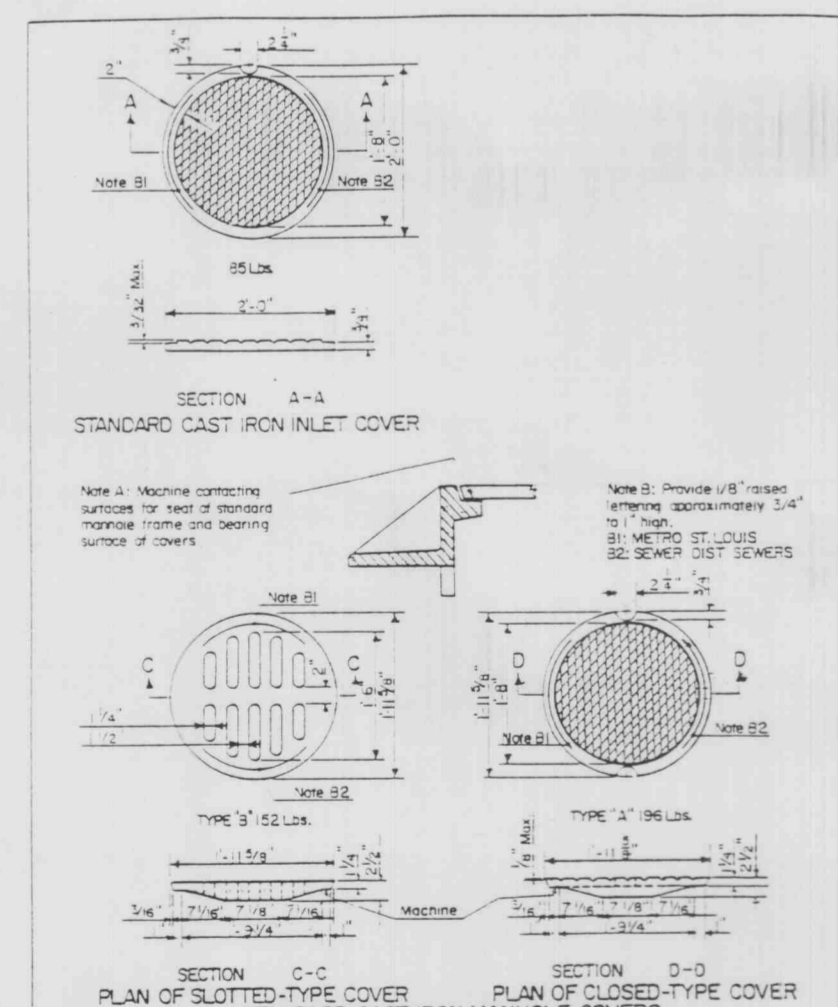
PRE-CAST CONCRETE UNIT FOR 4 WAY AREA INLET



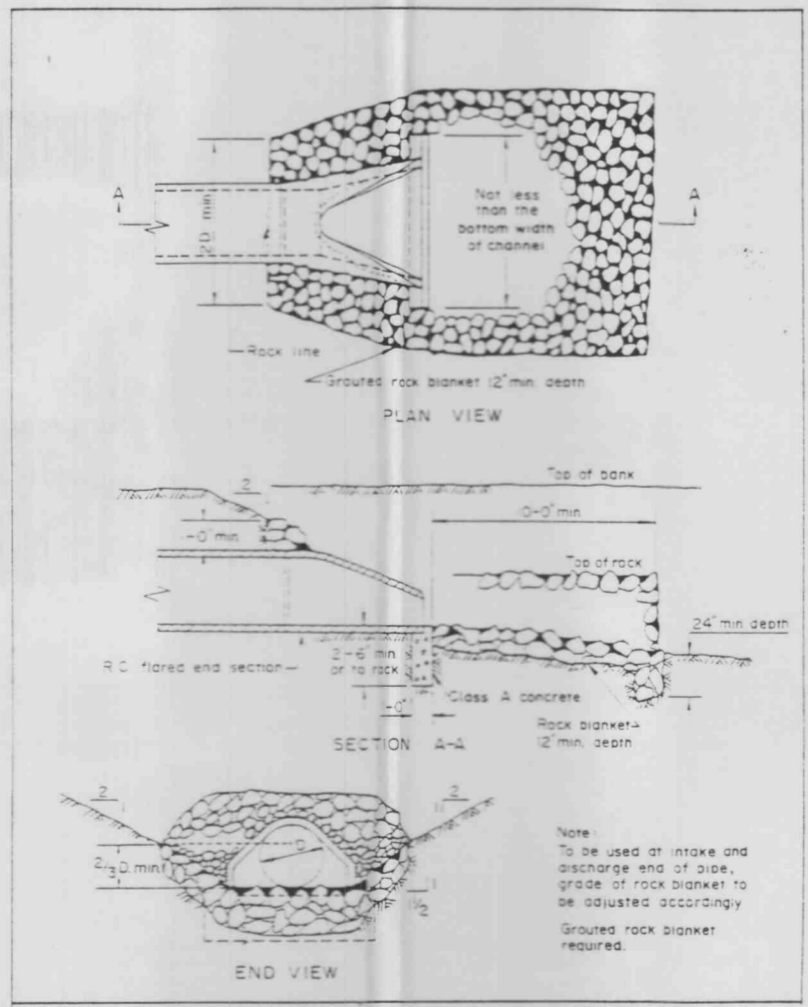
GUTTER SUMPS FOR VERTICAL CURB



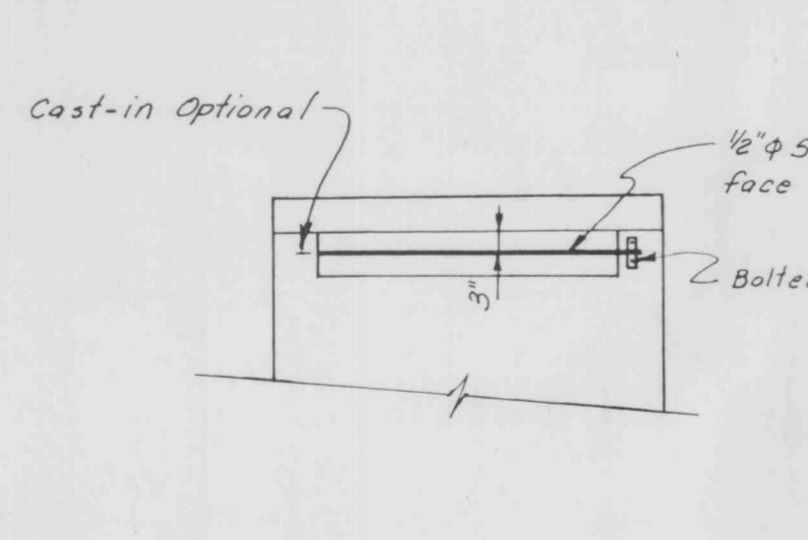
CAST IRON MANHOLE FRAME (240 lbs.)



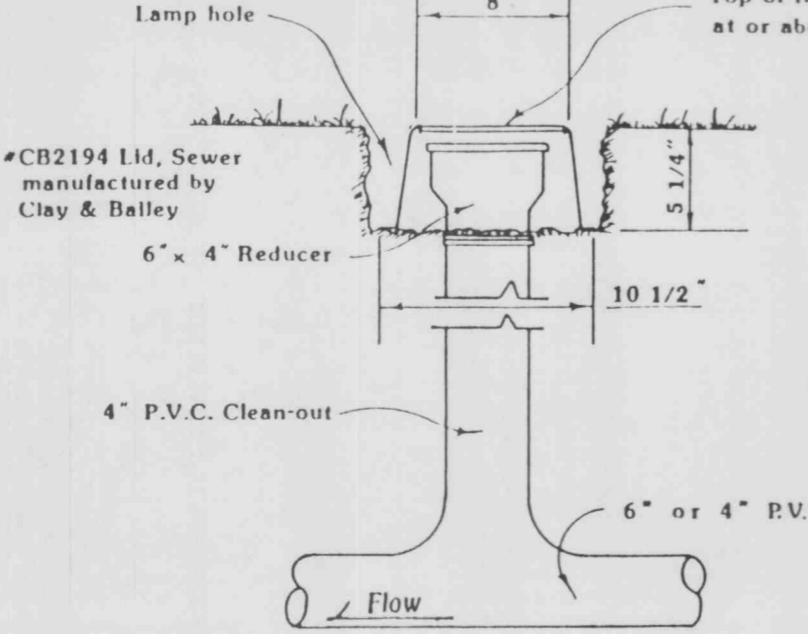
CAST IRON COVERS MANHOLES AND INLETS



FLARED END SECTION



INLET SAFETY BAR DETAIL N.T.S.



CLEAN-OUT DETAIL Not to Scale