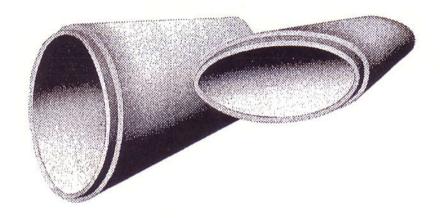
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ELLIPTICAL CONCRETE PIPE



ASTM 507 REINFORCED CONCRETE ELLIPTICAL CULVERT, STORM DRAIN AND SEWER PIPE					
EQUIVALENT ROUND SIZE (INCHES)	HEIGHT INSIDE (INCHES)	WIDTH INSIDE (INCHES)	WALL THICKNESS (INCHES)	WATERWAY AREA (SQ. FT.)	WEIGHT POUNDS PER FOOT
18	14	23	23/4	1.8	211
24	19	30	31/4	3.3	319
30	24	38	33/4	5.1	452
36	29	45	41/2	7.4	625
42	34	23	5	10.2	853
48	38	60	51/2	12.9	1,061
54	43	68	6	16.6	1,235
60	48	76	61/2	20.5	1,475
72	58	91	71/2	29.5	2,040
84	68	106	81/2	40.1	2,680

Horizontal elliptical concrete pipe offers the hydraulic advantage of greater capacity for the same depth of flow than most other structures of equivalent water way area.

Elliptical concrete pipe (C-507) carries approximately 25% more water than concrete arch pipe (C-506) due to the greater water way area and hydraulic radius. Elliptical pipe has a slightly greater capacity than round pipe.

The term "round equivalent" is a misnomer, and elliptical and arch pipe should not be considered equal alternates. The designer may refer to the "concrete pipe design manual" for flow coefficient values.