

PIPE ARCH SPAN RISE (in)	1 ½ : 1 Slope				2 : 1 Slope			
	EC-3 Type B	Depth (T) (18")	Depth (T) (24")	Depth (T) (36")	EC-3 Type B	Depth (T) (18")	Depth (T) (24")	Depth (T) (36")
		Class A1	Class I	Class II		Class A1	Class I	Class II
	Sq. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.	Sq. Yds.	Cu. Yds.	Cu. Yds.	Cu. Yds.
17 x 13	2.73	1.36	1.82	2.73	2.59	1.30	1.73	2.59
21 x 15	3.93	1.96	2.62	3.93	3.67	1.84	2.45	3.67
24 x 18	8.34	4.17	5.56	8.34	4.99	2.50	3.33	4.99
28 x 20	6.97	3.49	4.65	6.97	6.51	3.25	4.34	6.51
35 x 24	10.59	5.29	7.06	10.59	9.88	4.94	6.59	9.88
42 x 29	24.74	12.37	16.49	24.74	23.27	11.63	15.51	23.27
49 x 33	33.14	16.57	22.09	33.14	31.14	15.57	20.76	31.14
57 x 38	44.43	22.22	29.62	44.43	41.73	20.87	27.82	41.73
64 x 43	56.52	28.26	37.68	56.52	53.12	26.56	35.41	53.12
71 x 47	69.42	34.71	46.28	69.42	65.24	32.62	43.49	65.24

**TABLE D-3 CULVERT OUTLET PROTECTION WITH ST'D. ES-3 END SECTIONS**

Quantities To Be Used Only For Computations of Dry Rip Rap For Outlet Protection.\*