

CULVERT SIZE (FEET)  SPAN X RISE	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.
3 x 3	21.23	10.61	14.15	21.23	20.49	10.25	13.66	20.49
3 x 4	28.86	14.43	19.24	28.86	28.40	14.20	18.93	28.40
4 x 3	28.62	14.31	19.08	28.62	27.00	13.50	18.00	27.00
4 x 4	37.80	18.90	25.20	37.80	36.59	18.29	24.39	36.59
4 x 5	47.90	23.95	31.93	47.90	47.13	23.57	31.42	47.13
4 x 6	58.29	29.15	38.86	58.29	58.62	29.31	39.08	58.62
5 x 3	36.50	18.25	24.33	36.50	34.13	17.06	22.75	34.13
5 x 4	47.48	23.74	31.65	47.48	45.00	22.50	30.00	45.00
5 x 5	59.12	29.56	39.41	59.12	57.02	28.51	38.01	57.02
5 x 6	71.21	35.60	47.47	71.21	69.96	34.98	46.64	69.96
5 x 7	84.50	42.25	56.33	84.50	83.87	41.93	55.91	83.87
6 x 4	57.96	28.98	38.64	57.96	54.21	27.11	36.14	54.21
6 x 5	71.10	35.55	47.40	71.10	67.56	33.78	45.04	67.56
6 x 6	84.93	42.47	56.62	84.93	81.98	40.99	54.65	81.98
6 x 7	98.39	49.19	65.59	98.39	97.32	48.66	64.88	97.32
6 x 8	114.72	57.36	76.48	114.72	113.61	56.81	75.74	113.61
7 x 4	69.17	34.58	46.11	69.17	64.10	32.05	42.73	64.10
7 x 6	99.45	49.73	66.30	99.45	30.18	15.09	20.12	30.18
7 x 8	197.39	98.69	131.59	197.39	129.15	64.58	86.10	129.15
7 x 10	168.27	84.14	112.18	168.27	166.35	83.18	110.90	166.35
8 x 4	81.11	40.55	54.07	81.11	74.67	37.34	49.78	74.67
8 x 6	114.65	57.32	76.43	114.65	107.91	53.96	71.94	107.91
8 x 8	151.22	75.61	100.81	151.22	145.86	72.93	97.24	145.86
8 x 10	189.95	94.97	126.63	189.95	175.11	87.56	116.74	175.11
9 x 4	93.83	46.91	62.55	93.83	85.89	42.95	57.26	85.89
9 x 6	130.80	65.40	87.20	130.80	122.04	61.02	81.36	122.04
9 x 8	164.18	82.09	109.45	164.18	162.57	81.29	108.38	162.57
9 x 10	212.37	106.19	141.58	212.37	218.42	109.21	145.61	218.42
9 x 12	257.54	128.77	171.69	257.54	294.63	147.32	196.42	294.63
10 x 4	107.30	53.65	71.53	107.30	97.77	48.89	65.18	97.77
10 x 6	147.71	73.85	98.47	147.71	136.83	68.42	91.22	136.83
10 x 8	189.98	94.99	126.65	189.98	179.93	89.96	119.95	179.93
10 x 10	236.03	118.01	157.35	236.03	227.48	113.74	151.65	227.48
10 x 12	284.91	142.46	189.94	284.91	278.81	139.40	185.87	278.81
12 x 6	182.94	91.47	121.96	182.94	169.17	84.59	112.78	169.17
12 x 8	232.17	116.09	154.78	232.17	216.80	108.40	144.53	216.80
12 x 10	284.42	142.21	189.61	284.42	270.21	135.11	180.14	270.21
12 x 12	340.26	170.13	226.84	340.26	327.83	163.91	218.55	327.83

**TABLE D-17 CULVERT OUTLET PROTECTION FOR BOX CULVERT ST'D BCS-02 THRU BCS-50 (15° SKEW)**

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

\* Rev. 7/10