

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	21.12	10.56	14.08	21.12	20.39	10.19	13.59	20.39
3 x 4	28.71	14.36	19.14	28.71	28.26	14.13	18.84	28.26
4 x 3	28.49	14.24	18.99	28.49	26.85	13.43	17.90	26.85
4 x 4	37.61	18.80	25.07	37.61	36.41	18.20	24.27	36.41
4 x 5	47.66	23.83	31.77	47.66	46.86	23.43	31.24	46.86
4 x 6	58.01	29.00	38.67	58.01	58.34	29.17	38.89	58.34
5 x 3	36.62	18.31	24.41	36.62	33.95	16.97	22.63	33.95
5 x 4	47.25	23.63	31.50	47.25	44.78	22.39	29.85	44.78
5 x 5	58.82	29.41	39.21	58.82	56.72	28.36	37.81	56.72
5 x 6	70.86	35.43	47.24	70.86	69.62	34.81	46.41	69.62
5 x 7	84.08	42.04	56.05	84.08	83.45	41.72	55.63	83.45
6 x 4	57.68	28.84	38.45	57.68	53.93	26.96	35.95	53.93
6 x 5	70.74	35.37	47.16	70.74	67.20	33.60	44.80	67.20
6 x 6	84.50	42.25	56.33	84.50	81.54	40.77	54.36	81.54
6 x 7	97.89	48.95	65.26	97.89	96.83	48.41	64.55	96.83
6 x 8	114.17	57.08	76.11	114.17	113.04	56.52	75.36	113.04
7 x 4	68.82	34.41	45.88	68.82	63.77	31.88	42.51	63.77
7 x 6	98.96	49.48	65.97	98.96	94.10	47.05	62.73	94.10
7 x 8	132.47	66.23	88.31	132.47	128.49	64.25	85.66	128.49
7 x 10	167.46	83.73	111.64	167.46	165.53	82.76	110.35	165.53
8 x 4	80.73	40.37	53.82	80.73	74.30	37.15	49.53	74.30
8 x 6	114.09	57.05	76.06	114.09	107.36	53.68	71.57	107.36
8 x 8	150.47	75.23	100.31	150.47	145.11	72.56	96.74	145.11
8 x 10	189.00	94.50	126.00	189.00	174.18	87.09	116.12	174.18
9 x 4	93.39	46.70	62.26	93.39	85.47	42.74	56.98	85.47
9 x 6	130.17	65.09	86.78	130.17	121.41	60.71	80.94	121.41
9 x 8	163.32	81.66	108.88	163.32	161.72	80.86	107.81	161.72
9 x 10	211.31	105.65	140.87	211.31	217.35	108.68	144.90	217.35
9 x 12	256.28	128.14	170.85	256.28	293.36	146.68	195.57	293.36
10 x 4	106.83	53.42	71.22	106.83	97.31	48.65	64.87	97.31
10 x 6	147.00	73.50	98.00	147.00	136.13	68.06	90.75	136.13
10 x 8	189.03	94.52	126.02	189.03	179.00	89.50	119.33	179.00
10 x 10	234.86	117.43	156.57	234.86	226.31	113.15	150.87	226.31
10 x 12	283.50	141.75	189.00	283.50	277.40	138.70	184.93	277.40
12 x 6	182.09	91.04	121.39	182.09	168.32	84.16	112.21	168.32
12 x 8	231.05	115.52	154.03	231.05	215.67	107.84	143.78	215.67
12 x 10	283.01	141.50	188.67	283.01	268.80	134.40	179.20	268.80
12 x 12	338.57	169.28	225.71	338.57	326.13	163.07	217.42	326.13

**TABLE D-16 CULVERT OUTLET PROTECTION FOR BOX CULVERT ST'D BCS-02  
THRU BCS-50 (NO SKEW)**

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

\* Rev. 7/10