

FOR TYPICAL SECTION, NOTES AND OTHER DETAILS, REFER TO STANDARD BCQ-DT.

BCQ-50

SPAN		HIGHT		REINFORCING STEEL											QUAN./LF		HEADWALLS													
(FT.)	(FT.)	SIZE	SPACING C-C	BTI											NO. BL1 #4 BARS	NO. BL2 #3 BARS	REINFORCING STEEL (LBS./LONG. JT)	CONCRETE CLASS A4 (CY/LF)	REINFORCING STEEL (LBS./LF)	G		HW1		NO. HW2 BARS	NO. HW3 BARS	INLET CONCRETE CL. A4 (CY)	INLET REINFORCING STEEL (LBS)	OUTLET CONCRETE CL. A4 (CY)	OUTLET REINFORCING STEEL (LBS)	WINGWALL
				a	b	c	d	e	f	g	LENGTH	HEADWALL LENGTH	SIZE	LENGTH																
3	3	4	12"	2'-6"	0'-5"	1'-10"	0'-6 5/8"	0'-4 1/4"	15'-0"	1'-1"	15'-10"	60	20	57.160	1,378	142.459	16'-10"	6	16'-6"	3	12	2.194	137.876	2.163	99.132	A				
3	4	4	12"	2'-6"	0'-5"	1'-10"	0'-6 5/8"	0'-4 1/4"	15'-0"	1'-1"	15'-10"	60	30	60.690	1,501	152.899	16'-10"	6	16'-6"	3	15	2.305	148.230	2.256	99.132	C				
4	3	4	12"	3'-1"	0'-7 1/2"	2'-3"	0'-10 1/8"	0'-6 3/4"	19'-0"	1'-3"	20'-4"	76	20	70.520	1,896	172.650	20'-10"	6	20'-6"	3	12	2.525	161.908	2.507	123.164	B				
4	4	4	12"	3'-1"	0'-7 1/4"	2'-3"	0'-9 3/4"	0'-6 1/2"	19'-0"	1'-3"	20'-3"	76	30	74.050	1,989	182.743	20'-10"	6	20'-6"	3	15	2.626	172.262	2.590	123.164	D				
4	5	4	12"	3'-2"	0'-7"	2'-3"	0'-9 3/8"	0'-6 1/4"	19'-0"	1'-4"	20'-3"	76	40	77.580	2,082	197.711	20'-10"	6	20'-6"	3	18	2.747	182.616	2.693	123.164	F				
4	6	4	12"	3'-1"	0'-7 1/4"	2'-3"	0'-9 3/4"	0'-6 1/2"	19'-0"	1'-3"	20'-3"	76	50	81.110	2,232	229.690	20'-10"	6	20'-6"	3	21	2.849	192.970	2.775	123.164	H				
5	3	4	10"	3'-8"	0'-9 3/4"	2'-8"	1'-1 1/4"	0'-9"	23'-0"	1'-5"	24'-10"	92	20	83.880	2,500	223.900	24'-10"	6	24'-6"	3	12	2.774	185.940	2.770	147.196	B				
5	4	4	9"	3'-9"	0'-9 1/2"	2'-8"	1'-1"	0'-8 3/4"	23'-0"	1'-6"	24'-9"	92	30	87.410	2,586	248.666	24'-10"	6	24'-6"	3	15	2.886	196.294	2.863	147.196	D				
5	5	4	9"	3'-9"	0'-9 1/2"	2'-8"	1'-1"	0'-8 3/4"	23'-0"	1'-6"	24'-9"	92	40	90.940	2,708	264.739	24'-10"	6	24'-6"	3	18	2.997	206.648	2.955	147.196	F				
5	6	4	10"	3'-9"	0'-9 1/2"	2'-8"	1'-1"	0'-8 3/4"	23'-0"	1'-6"	24'-9"	92	50	94.470	2,831	275.931	24'-10"	6	24'-6"	3	21	3.108	217.002	3.048	147.196	H				
5	7	4	10"	3'-9"	0'-9 1/2"	2'-8"	1'-1"	0'-8 3/4"	23'-1"	1'-6"	24'-10"	92	60	98.000	2,981	299.076	24'-10"	6	24'-6"	3	24	3.220	227.356	3.141	147.196	J				
6	4	4	9"	4'-4"	1'-1/2"	3'-0"	1'-5 1/8"	0'-11 3/4"	27'-0"	1'-8"	29'-4"	108	30	100.770	3,420	314.735	28'-10"	6	28'-6"	3	15	3.082	220.326	3.072	171.228	E				
6	5	4	9"	4'-4"	1'-1/2"	3'-0"	1'-5 1/8"	0'-11 3/4"	27'-0"	1'-8"	29'-4"	108	40	104.300	3,542	331.548	28'-10"	6	28'-6"	3	18	3.193	230.680	3.165	171.228	G				
6	6	4	9"	4'-4"	1'-1/2"	3'-0"	1'-5 1/8"	0'-11 3/4"	27'-0"	1'-8"	29'-4"	108	50	107.830	3,665	348.168	28'-10"	6	28'-6"	3	21	3.305	241.034	3.258	171.228	I				
6	7	4	9"	4'-4"	1'-0"	3'-0"	1'-4 1/2"	0'-11 1/4"	27'-0"	1'-9"	29'-3"	108	60	111.360	3,701	385.056	28'-10"	6	28'-6"	3	24	3.400	251.388	3.334	171.228	K				
6	8	4	9"	4'-6"	1'-0"	3'-0"	1'-4 1/2"	0'-11 1/4"	27'-3"	1'-9"	29'-6"	108	70	114.890	3,921	414.988	28'-10"	6	28'-6"	3	27	3.544	261.742	3.460	171.228	M				
7	4	5	8"	4'-11"	1'-3"	3'-5"	1'-8 5/8"	1'-2 1/8"	31'-0"	1'-10"	33'-10"	124	30	114.130	4,300	458.908	32'-10"	6	32'-6"	3	15	3.217	244.358	3.221	195.260	E				
7	6	5	8"	4'-11"	1'-2 1/2"	3'-5"	1'-7 1/8"	1'-1 5/8"	31'-0"	1'-11"	33'-9"	124	50	121.190	4,448	493.091	32'-10"	6	32'-6"	3	21	3.459	265.066	3.426	195.260	I				
7	8	5	9"	5'-1"	1'-2 1/2"	3'-5"	1'-7 1/8"	1'-1 5/8"	31'-3"	1'-11"	34'-0"	124	70	128.250	4,795	525.762	32'-10"	6	32'-6"	3	27	3.682	285.774	3.611	195.260	M				
7	10	5	9"	5'-3"	1'-2"	3'-5"	1'-7 1/8"	1'-1 1/8"	31'-7"	2'-0"	34'-3"	124	90	135.310	5,118	597.629	32'-10"	6	32'-6"	3	33	3.746	306.482	3.637	195.260	Q				
8	4	6	9"	5'-7"	1'-5"	3'-10"	1'-11 1/4"	1'-4"	35'-0"	2'-2"	38'-3"	140	30	127.490	5,198	560.606	36'-10"	6	36'-6"	3	15	3.275	268.390	3.292	219.292	E				
8	6	6	9"	5'-7"	1'-5"	3'-10"	1'-11 1/4"	1'-4"	35'-0"	2'-2"	38'-3"	140	50	134.550	5,442	597.229	36'-10"	6	36'-6"	3	21	3.498	289.098	3.477	219.292	I				
8	8	6	9"	5'-8"	1'-5"	3'-10"	1'-11 1/4"	1'-4"	35'-1"	2'-2"	38'-5"	140	70	141.610	5,754	674.797	36'-10"	6	36'-6"	3	27	3.743	309.806	3.685	219.292	M				
8	10	6	9"	5'-11"	1'-4 1/2"	3'-10"	1'-10 5/8"	1'-3 1/2"	35'-6"	2'-3"	38'-8"	140	90	148.670	6,106	736.173	36'-10"	6	36'-6"	3	33	3.822	330.514	3.726	219.292	Q				
9	4	6	9"	6'-2"	1'-7 1/2"	4'-3"	2'-2 1/8"	1'-6 1/2"	39'-0"	2'-4"	42'-9"	156	30	140.850	6,315	667.572	40'-10"	6	40'-6"	3	15	3.289	292.422	3.319	243.324	F				
9	6	6	9"	6'-2"	1'-7 1/2"	4'-3"	2'-2 1/8"	1'-6 1/2"	39'-0"	2'-4"	42'-9"	156	50	147.910	6,559	708.128	40'-10"	6	40'-6"	3	21	3.512	313.130	3.505	243.324	J				
9	8	6	9"	6'-3"	1'-7"	4'-3"	2'-2 1/8"	1'-6"	39'-0"	2'-5"	42'-9"	156	70	154.970	6,716	772.935	40'-10"	6	40'-6"	3	27	3.760	333.838	3.716	243.324	N				
9	10	6	9"	6'-6"	1'-7"	4'-3"	2'-2 1/8"	1'-6"	39'-6"	2'-5"	43'-3"	156	90	162.030	7,219	854.017	40'-10"	6	40'-6"	3	33	3.835	354.546	3.752	243.324	R				
9	12	6	9"	6'-8"	1'-7"	4'-3"	2'-2 1/8"	1'-6"	40'-0"	2'-5"	43'-8"	156	110	169.090	7,747	939.496	40'-10"	6	40'-6"	3	39	3.941	375.254	3.820	243.324	V				
10	4	7	9"	6'-9"	1'-10"	4'-8"	2'-6 1/4"	1'-8 3/4"	43'-0"	2'-6"	47'-2"	172	30	154.210	7,549	867.051	44'-10"	6	44'-6"	3	15	3.280	316.454	3.324	267.356	F				
10	6	6	9"	6'-9"	1'-10"	4'-8"	2'-6 3/8"	1'-9"	43'-0"	2'-6"	47'-3"	172	50	161.270	7,802	778.346	44'-10"	6	44'-6"	3	21	3.532	337.162	3.538	267.356	J				
10	8	6	9"	6'-9"	1'-10"	4'-8"	2'-6 3/8"	1'-9"	43'-0"	2'-6"	47'-3"	172	70	168.330	8,043	853.629	44'-10"	6	44'-6"	3	27	3.754	357.870	3.723	267.356	N				
10	10	6	9"	7'-0"	1'-10"	4'-8"	2'-6 3/8"	1'-9"	43'-6"	2'-6"	47'-9"	172	90	175.390	8,551	921.651	44'-10"	6	44'-6"	3	33	3.826	378.578	3.756	267.356	R				
10	12	6	9"	7'-3"	1'-10"	4'-8"	2'-6 3/8"	1'-9"	44'-0"	2'-6"	48'-3"	172	110	182.450	9,132	981.141	44'-10"	6	44'-6"	3	39	3.903	399.286	3.796	267.356	V				
12	6	7	9"	7'-11"	2'-3"	5'-5"	3'-1 3/8"	2'-1 3/4"	51'-0"	2'-11"	56'-3"	204	50	187.990	10,642	1154.370	52'-10"	6	52'-6"	3	21	3.286	385.226	3.319	315.420	K				
12	8	7	9"	8'-0"	2'-2 1/2"	5'-5"	3'-5/8"	2'-1/4"	51'-0"	3'-0"	56'-2"	204	70	195.050	10,724	1228.555	52'-10"	6	52'-6"	3	27	3.509	405.934	3.504	315.420	O				
12	10	7	9"	8'-1"	2'-2 1/2"	5'-5"	3'-5/8"	2'-1/4"	51'-3"	3'-0"	56'-5"	204	90	202.110	11,128	1309.696	52'-10"	6	52'-6"	3	33	3.572	426.642	3.529	315.420	S				
12	12	7	8"	8'-4"	2'-3"	5'-5"	3'-1 3/8"	2'-1 3/4"	51'-9"	2'-11"	57'-1"	204	110	209.170	11,884	1519.696	52'-10"	6	52'-6"	3	39	3.582	447.350	3.500	315.420	W				

A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.

SPECIFICATION REFERENCE	<h2>QUADRUPLE BOX CULVERTS</h2> <h3>40 TO 50 FT. FILLS</h3> <p>VIRGINIA DEPARTMENT OF TRANSPORTATION</p>	 ROAD AND BRIDGE STANDARDS	REVISION DATE	SHEET 2 OF 2
			07/11	1005.18