

2016 ROAD & BRIDGE STANDARDS

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

BCT-30

SPAN		REINFORCING STEEL		BT1											QUAN./LF		HEADWALLS									
(FT.)	(FT.)	SIZE	SPACING C-C	a	b	c	d	e	f	g	LENGTH	NO. BLT #4 BARS	NO. BL2 #3 BARS	REINFORCING STEEL (LBS./LONG. JT)	CONCRETE CLASS #4 (CY/LF)	REINFORCING STEEL (LBS./LF)	G HEADWALL LENGTH	HW1 SIZE	HW1 LENGTH	NO. HW2 BARS	NO. HW3 BARS	INLET CONCRETE CL. #4 (CY)	INLET REINFORCING STEEL (LBS)	OUTLET CONCRETE CL. #4 (CY)	OUTLET REINFORCING STEEL (LBS)	WINGWALL
3	3	4	12"	2'-7"	0'-4"	1'-10"	0'-5 1/8"	0'-3 1/4"	11'-3"	1'-3"	11'-9"	44	16	42.388	0.989	108.604	13'-2"	6	12'-10"	2	8	1.827	102.932	1.808	77.103	A
3	4	4	12"	2'-7"	0'-4"	1'-10"	0'-5 1/8"	0'-3 1/4"	11'-3"	1'-3"	11'-9"	44	24	45.212	1.087	116.956	13'-2"	6	12'-10"	2	10	1.932	109.835	1.901	77.103	C
4	3	4	12"	3'-4"	0'-4 1/2"	2'-3"	0'-5 1/8"	0'-3 3/4"	14'-3"	1'-9"	14'-10"	56	16	52.408	1.181	129.180	16'-2"	6	15'-10"	2	8	2.118	120.956	2.108	95.127	A
4	4	4	12"	3'-4"	0'-4 1/2"	2'-3"	0'-5 1/8"	0'-3 3/4"	14'-3"	1'-9"	14'-10"	56	24	55.232	1.279	137.532	16'-2"	6	15'-10"	2	10	2.223	127.859	2.201	95.127	C
4	5	4	12"	3'-4"	0'-4 1/2"	2'-3"	0'-5 1/8"	0'-3 3/4"	14'-3"	1'-9"	14'-10"	56	32	58.056	1.377	145.884	16'-2"	6	15'-10"	2	12	2.328	134.761	2.294	95.127	E
4	6	4	12"	3'-4"	0'-4 1/2"	2'-3"	0'-5 1/8"	0'-3 3/4"	14'-3"	1'-9"	14'-10"	56	40	60.880	1.475	159.548	16'-2"	6	15'-10"	2	14	2.433	141.664	2.387	95.127	G
5	3	4	12"	4'-0"	0'-6"	2'-8"	0'-8"	0'-5 1/4"	17'-4"	2'-1"	18'-0"	68	16	62.428	1.500	158.051	19'-2"	6	18'-10"	2	8	2.383	138.980	2.383	113.151	B
5	4	4	12"	4'-0"	0'-6"	2'-8"	0'-8"	0'-5 1/4"	17'-4"	2'-1"	18'-0"	68	24	65.252	1.598	166.403	19'-2"	6	18'-10"	2	10	2.488	145.883	2.476	113.151	D
5	5	4	12"	4'-0"	0'-6 1/4"	2'-8"	0'-8 3/8"	0'-5 1/2"	17'-4"	2'-0"	18'-0"	68	32	68.076	1.723	175.587	19'-2"	6	18'-10"	2	12	2.584	152.785	2.560	113.151	F
5	6	4	12"	4'-0"	0'-6"	2'-8"	0'-8"	0'-5 1/4"	17'-4"	2'-1"	18'-0"	68	40	70.900	1.793	195.997	19'-2"	6	18'-10"	2	14	2.698	159.688	2.662	113.151	H
5	7	4	12"	4'-0"	0'-6"	2'-8"	0'-8"	0'-5 1/4"	17'-4"	2'-1"	18'-0"	68	48	73.724	1.891	206.168	19'-2"	6	18'-10"	2	16	2.803	166.591	2.754	113.151	J
6	4	4	10"	4'-8"	0'-8"	3'-0"	0'-10 1/8"	0'-7 1/4"	20'-4"	2'-5"	21'-3"	80	24	75.272	2.035	200.609	22'-2"	6	21'-10"	2	10	2.684	163.907	2.683	131.175	D
6	5	4	10"	4'-8"	0'-8 1/8"	3'-0"	0'-11 1/8"	0'-7 1/2"	20'-4"	2'-4"	21'-4"	80	32	78.096	2.165	209.517	22'-2"	6	21'-10"	2	12	2.779	170.809	2.764	131.175	F
6	6	4	10"	4'-8"	0'-8 1/8"	3'-0"	0'-11 1/8"	0'-7 1/2"	20'-4"	2'-4"	21'-4"	80	40	80.920	2.264	218.137	22'-2"	6	21'-10"	2	14	2.884	177.712	2.857	131.175	H
6	7	4	10"	4'-9"	0'-7 1/2"	3'-0"	0'-10 1/8"	0'-6 3/4"	20'-4"	2'-6"	21'-3"	80	48	83.744	2.265	243.488	22'-2"	6	21'-10"	2	16	3.022	184.615	2.983	131.175	J
6	8	4	10"	4'-8"	0'-7 3/4"	3'-0"	0'-10 1/2"	0'-7"	20'-4"	2'-5"	21'-3"	80	56	86.568	2.394	262.965	22'-2"	6	21'-10"	2	18	3.116	191.517	3.065	131.175	L
7	4	4	9"	5'-4"	0'-9 1/8"	3'-5"	1'-5/8"	0'-8 1/2"	23'-4"	2'-9"	24'-5"	92	24	85.292	2.436	262.329	25'-2"	6	24'-10"	2	10	2.884	181.931	2.892	149.199	D
7	6	4	9"	5'-4"	0'-9 1/8"	3'-5"	1'-5/8"	0'-8 1/2"	23'-4"	2'-9"	24'-5"	92	40	90.940	2.632	279.924	25'-2"	6	24'-10"	2	14	3.094	195.736	3.078	149.199	H
7	8	4	9"	5'-4"	0'-9 1/8"	3'-5"	1'-5/8"	0'-8 1/2"	23'-4"	2'-9"	24'-5"	92	56	96.588	2.826	325.580	25'-2"	6	24'-10"	2	18	3.305	209.541	3.263	149.199	L
7	10	4	9"	5'-6"	0'-9 1/8"	3'-5"	1'-5/8"	0'-8 1/2"	23'-7"	2'-9"	24'-8"	92	72	102.236	3.132	384.973	25'-2"	6	24'-10"	2	22	3.515	223.347	3.448	149.199	P
8	4	5	9"	6'-0"	0'-11"	3'-10"	1'-3"	0'-10 1/8"	26'-4"	3'-1"	27'-8"	104	24	95.312	2.963	345.960	28'-2"	6	27'-10"	2	10	3.029	199.955	3.047	167.223	D
8	6	5	9"	6'-0"	0'-11"	3'-10"	1'-3"	0'-10 1/8"	26'-4"	3'-1"	27'-8"	104	40	100.960	3.159	363.554	28'-2"	6	27'-10"	2	14	3.239	213.760	3.233	167.223	H
8	8	5	9"	6'-0"	0'-11"	3'-10"	1'-3"	0'-10 1/8"	26'-4"	3'-1"	27'-8"	104	56	106.608	3.353	408.729	28'-2"	6	27'-10"	2	18	3.450	227.565	3.418	167.223	L
8	10	5	9"	6'-2"	0'-11"	3'-10"	1'-3"	0'-10 1/8"	26'-7"	3'-1"	27'-11"	104	72	112.256	3.661	471.397	28'-2"	6	27'-10"	2	22	3.660	241.371	3.604	167.223	P
9	4	5	8"	6'-8"	1'-1/2"	4'-3"	1'-5 1/8"	0'-11 5/8"	29'-4"	3'-5"	30'-10"	116	24	105.332	3.510	414.630	31'-2"	6	30'-10"	2	10	3.178	217.979	3.206	185.247	E
9	6	5	9"	6'-8"	1'-1/2"	4'-3"	1'-5 1/8"	0'-11 5/8"	29'-4"	3'-5"	30'-10"	116	40	110.980	3.709	398.624	31'-2"	6	30'-10"	2	14	3.389	231.784	3.392	185.247	I
9	8	5	8"	6'-8"	1'-1/2"	4'-3"	1'-5 1/8"	0'-11 5/8"	29'-4"	3'-5"	30'-10"	116	56	116.628	3.900	480.975	31'-2"	6	30'-10"	2	18	3.599	245.589	3.577	185.247	M
9	10	5	8"	6'-9"	1'-1/2"	4'-3"	1'-5 1/8"	0'-11 5/8"	29'-6"	3'-5"	31'-0"	116	72	122.276	4.171	546.825	31'-2"	6	30'-10"	2	22	3.809	259.395	3.763	185.247	Q
9	12	6	9"	6'-11"	1'-3/4"	4'-3"	1'-5 1/4"	0'-11 3/4"	29'-10"	3'-5"	31'-5"	116	88	127.924	4.597	702.070	31'-2"	6	30'-10"	2	26	3.979	273.200	3.907	185.247	U
10	4	6	9"	7'-4"	1'-2 1/4"	4'-8"	1'-7 3/8"	1'-1 1/4"	32'-3"	3'-9"	34'-1"	128	24	115.352	4.159	539.178	34'-2"	6	33'-10"	2	10	3.261	236.003	3.299	203.271	E
10	6	6	9"	7'-4"	1'-2 1/4"	4'-8"	1'-7 3/8"	1'-1 1/4"	32'-3"	3'-9"	34'-1"	128	40	121.000	4.355	557.259	34'-2"	6	33'-10"	2	14	3.471	249.808	3.484	203.271	I
10	8	6	9"	7'-4"	1'-2 1/4"	4'-8"	1'-7 3/8"	1'-1 1/4"	32'-3"	3'-9"	34'-1"	128	56	126.648	4.549	604.709	34'-2"	6	33'-10"	2	18	3.681	263.613	3.670	203.271	M
10	10	6	9"	7'-5"	1'-2 1/2"	4'-8"	1'-7 3/4"	1'-1 1/2"	32'-6"	3'-9"	34'-3"	128	72	132.296	4.872	673.407	34'-2"	6	33'-10"	2	22	3.871	277.419	3.835	203.271	Q
10	12	6	9"	7'-7"	1'-2 1/2"	4'-8"	1'-7 3/4"	1'-1 1/2"	32'-9"	3'-9"	34'-7"	128	88	137.944	5.262	748.499	34'-2"	6	33'-10"	2	26	4.036	291.224	3.974	203.271	U
12	6	6	8"	8'-9"	1'-5 1/2"	5'-5"	2'-0"	1'-4 1/2"	38'-3"	4'-6"	40'-6"	152	40	141.040	5.794	714.963	40'-2"	6	39'-10"	2	14	3.583	285.856	3.616	239.319	J
12	8	6	8"	8'-9"	1'-5 1/2"	5'-5"	2'-0"	1'-4 1/2"	38'-3"	4'-6"	40'-6"	152	56	146.688	5.988	768.946	40'-2"	6	39'-10"	2	18	3.793	299.661	3.801	239.319	N
12	10	6	8"	8'-9"	1'-5 1/2"	5'-5"	2'-0"	1'-4 1/2"	38'-4"	4'-6"	40'-7"	152	72	152.336	6.222	839.825	40'-2"	6	39'-10"	2	22	4.003	313.467	3.987	239.319	R
12	12	6	8"	8'-11"	1'-5 3/4"	5'-5"	2'-3/8"	1'-4 3/4"	38'-9"	4'-5"	41'-1"	152	88	157.984	6.722	893.420	40'-2"	6	39'-10"	2	26	4.141	327.272	4.099	239.319	V

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

SPECIFICATION REFERENCE	<p style="text-align: center;">TRIPLE BOX CULVERTS 20 TO 30 FT. FILLS</p> <p style="text-align: center;">VIRGINIA DEPARTMENT OF TRANSPORTATION</p>	<p style="text-align: center;">ROAD AND BRIDGE STANDARDS</p>	REVISION DATE	SHEET 2 OF 2
			07/11	1004.14