

SPAN		HGHT		REINFORCING STEEL											QUAN./LF		HEADWALLS							WINGWALL		
(FT.)	(FT.)	SIZE	SPACING C-C	a	b	c	d	e	f	g	LENGTH	NO. BL1 BARS	NO. BL2 BARS	REINFORCING STEEL (LBS./LONG. JT)	CONCRETE CLASS A4 (CY/LF)	REINFORCING STEEL (LBS./LF)	HEADWALL LENGTH	SIZE	LENGTH	NO. HW2 BARS	NO. HW3 BARS	INLET CONCRETE CL. A4 (CY)	INLET REINFORCING STEEL (LBS)		OUTLET CONCRETE CL. A4 (CY)	OUTLET REINFORCING STEEL (LBS)
3	3	4	12"	2'- 8 3/8"	0'- 4 1/2"	1'- 6 5/8"	0'- 5 3/8"	0'- 3 3/4"	11'- 3 3/8"	1'- 5 3/8"	11'-10"	44	16	42.388	0.989	109.333	13'- 2"	6	12'-10"	2	8	1.827	102.932	1.808	77.103	A
3	4	4	12"	2'- 8 3/8"	0'- 4 1/2"	1'- 6 5/8"	0'- 5 3/8"	0'- 3 3/4"	11'- 3 3/8"	1'- 5 3/8"	11'-10"	44	24	45.212	1.087	117.685	13'- 2"	6	12'-10"	2	10	1.932	109.835	1.901	77.103	C
4	3	4	12"	3'- 6 1/2"	0'- 4 1/2"	1'-11 1/2"	0'- 5 3/8"	0'- 3 3/4"	14'- 4"	2'- 1"	14'-10"	56	16	52.408	1.136	129.262	16'- 2"	6	15'-10"	2	8	2.131	120.956	2.121	95.127	A
4	4	4	12"	3'- 6 1/2"	0'- 4 1/2"	1'-11 1/2"	0'- 5 3/8"	0'- 3 3/4"	14'- 4"	2'- 1"	14'-10"	56	24	55.232	1.234	137.614	16'- 2"	6	15'-10"	2	10	2.236	127.859	2.214	95.127	C
4	5	4	12"	3'- 6 1/2"	0'- 4 1/2"	1'-11 1/2"	0'- 5 3/8"	0'- 3 3/4"	14'- 4"	2'- 1"	14'-10"	56	32	58.056	1.332	145.966	16'- 2"	6	15'-10"	2	12	2.341	134.761	2.307	95.127	E
4	6	4	12"	3'- 6 1/2"	0'- 4 1/2"	1'-11 1/2"	0'- 5 3/8"	0'- 3 3/4"	14'- 4"	2'- 1"	14'-10"	56	40	60.880	1.430	154.318	16'- 2"	6	15'-10"	2	14	2.446	141.664	2.399	95.127	G
5	3	4	12"	4'- 4 1/8"	0'- 4 1/2"	2'- 4 1/4"	0'- 5 3/8"	0'- 3 3/4"	17'- 4"	2'- 8 1/4"	17'-10"	68	16	62.428	1.281	162.105	19'- 2"	6	18'-10"	2	8	2.434	138.980	2.435	113.151	A
5	4	4	12"	4'- 4 1/8"	0'- 4 1/2"	2'- 4 1/4"	0'- 5 3/8"	0'- 3 3/4"	17'- 4"	2'- 8 1/4"	17'-10"	68	24	65.252	1.380	170.457	19'- 2"	6	18'-10"	2	10	2.539	145.883	2.527	113.151	C
5	5	4	12"	4'- 4 1/8"	0'- 4 1/2"	2'- 4 1/4"	0'- 5 3/8"	0'- 3 3/4"	17'- 4"	2'- 8 1/4"	17'-10"	68	32	68.076	1.478	178.809	19'- 2"	6	18'-10"	2	12	2.644	152.785	2.620	113.151	E
5	6	4	12"	4'- 4 1/8"	0'- 4 1/2"	2'- 4 1/4"	0'- 5 3/8"	0'- 3 3/4"	17'- 4"	2'- 8 1/4"	17'-10"	68	40	70.900	1.576	187.161	19'- 2"	6	18'-10"	2	14	2.750	159.688	2.713	113.151	G
5	7	4	12"	4'- 4 1/8"	0'- 4 1/2"	2'- 4 1/4"	0'- 5 3/8"	0'- 3 3/4"	17'- 4"	2'- 8 1/4"	17'-10"	68	48	73.724	1.674	195.513	19'- 2"	6	18'-10"	2	16	2.855	166.591	2.806	113.151	I
6	4	4	12"	5'- 1 3/4"	0'- 4 1/2"	2'- 9"	0'- 5 3/8"	0'- 3 3/4"	20'- 4"	3'- 3 1/2"	20'-10"	80	24	75.272	1.527	186.936	22'- 2"	6	21'-10"	2	10	2.843	163.907	2.841	131.175	C
6	5	4	12"	5'- 1 3/4"	0'- 4 1/2"	2'- 9"	0'- 5 3/8"	0'- 3 3/4"	20'- 4"	3'- 3 1/2"	20'-10"	80	32	78.096	1.625	196.281	22'- 2"	6	21'-10"	2	12	2.948	170.809	2.934	131.175	E
6	6	4	12"	5'- 1 3/4"	0'- 4 1/2"	2'- 9"	0'- 5 3/8"	0'- 3 3/4"	20'- 4"	3'- 3 1/2"	20'-10"	80	40	80.920	1.723	205.626	22'- 2"	6	21'-10"	2	14	3.053	177.712	3.026	131.175	G
6	7	4	12"	5'- 1 3/4"	0'- 4 1/2"	2'- 9"	0'- 5 3/8"	0'- 3 3/4"	20'- 4"	3'- 3 1/2"	20'-10"	80	48	83.744	1.821	214.971	22'- 2"	6	21'-10"	2	16	3.158	184.615	3.119	131.175	I
6	8	4	11"	5'- 1 3/4"	0'- 4 1/2"	2'- 9"	0'- 5 3/8"	0'- 3 3/4"	20'- 4"	3'- 3 1/2"	20'-10"	80	56	86.568	1.918	236.347	22'- 2"	6	21'-10"	2	18	3.263	191.517	3.212	131.175	K
7	4	4	9"	5'-11 3/8"	0'- 4 1/2"	3'- 1 7/8"	0'- 5 3/8"	0'- 3 3/4"	23'- 4 1/8"	3'-10 5/8"	23'-10"	92	24	85.292	1.669	255.887	25'- 2"	6	24'-10"	2	10	3.146	181.931	3.154	149.199	C
7	6	4	9"	5'-11 3/8"	0'- 4 1/2"	3'- 1 7/8"	0'- 5 3/8"	0'- 3 3/4"	23'- 4 1/8"	3'-10 5/8"	23'-10"	92	40	90.940	1.866	274.551	25'- 2"	6	24'-10"	2	14	3.357	195.736	3.340	149.199	G
7	8	4	9"	5'-11 3/8"	0'- 4 1/2"	3'- 1 7/8"	0'- 5 3/8"	0'- 3 3/4"	23'- 4 1/8"	3'-10 5/8"	23'-10"	92	56	96.588	2.062	293.214	25'- 2"	6	24'-10"	2	18	3.567	209.541	3.525	149.199	K
7	10	4	9"	5'-11 3/8"	0'- 4 1/2"	3'- 1 7/8"	0'- 5 3/8"	0'- 3 3/4"	23'- 4 1/8"	3'-10 5/8"	23'-10"	92	72	102.236	2.256	335.211	25'- 2"	6	24'-10"	2	22	3.777	223.347	3.711	149.199	O
8	4	5	11"	6'- 8 3/8"	0'- 4 5/8"	3'- 6 5/8"	0'- 6"	0'- 3 3/4"	26'- 3 3/8"	4'- 5 3/8"	26'-10"	104	24	95.312	1.813	320.767	28'- 2"	6	27'-10"	2	10	3.450	199.955	3.468	167.223	C
8	6	5	11"	6'- 8 3/8"	0'- 4 5/8"	3'- 6 5/8"	0'- 6"	0'- 3 3/4"	26'- 3 3/8"	4'- 5 3/8"	26'-10"	104	40	100.960	2.008	348.499	28'- 2"	6	27'-10"	2	14	3.660	213.760	3.653	167.223	G
8	8	5	11"	6'- 8 3/8"	0'- 4 5/8"	3'- 6 5/8"	0'- 6"	0'- 3 3/4"	26'- 3 3/8"	4'- 5 3/8"	26'-10"	104	56	106.608	2.204	370.289	28'- 2"	6	27'-10"	2	18	3.870	227.565	3.839	167.223	K
8	10	5	11"	6'- 8 3/8"	0'- 4 5/8"	3'- 6 5/8"	0'- 6"	0'- 3 3/4"	26'- 3 3/8"	4'- 5 3/8"	26'-10"	104	72	112.256	2.399	406.452	28'- 2"	6	27'-10"	2	22	4.081	241.371	4.024	167.223	O
9	4	5	11"	7'- 5 3/8"	0'- 5 3/8"	3'-10 1/4"	0'- 7 3/4"	0'- 5"	29'- 4"	4'-11 3/4"	30'- 0"	116	24	105.332	2.186	369.608	31'- 2"	6	30'-10"	2	10	3.682	217.979	3.710	185.247	D
9	6	5	10"	7'- 5 3/4"	0'- 6 1/8"	3'-10"	0'- 8 1/8"	0'- 5 1/4"	29'- 4"	4'-11 1/2"	30'- 1"	116	40	110.980	2.426	404.837	31'- 2"	6	30'-10"	2	14	3.874	231.784	3.877	185.247	H
9	8	5	10"	7'- 5 3/4"	0'- 6 1/8"	3'-10"	0'- 8 1/8"	0'- 5 1/4"	29'- 4"	4'-11 1/2"	30'- 1"	116	56	116.628	2.621	440.889	31'- 2"	6	30'-10"	2	18	4.084	245.589	4.063	185.247	L
9	10	5	9"	7'- 5 3/4"	0'- 6 1/8"	3'-10"	0'- 8 1/8"	0'- 5 1/4"	29'- 4"	4'-11 1/2"	30'- 1"	116	72	122.276	2.814	496.333	31'- 2"	6	30'-10"	2	22	4.295	259.395	4.248	185.247	P
9	12	5	9"	7'- 5 3/4"	0'- 6 3/8"	3'- 9 3/4"	0'- 8 3/8"	0'- 5 1/2"	29'- 4"	4'-11 1/4"	30'- 1"	116	88	127.924	3.056	516.468	31'- 2"	6	30'-10"	2	26	4.487	273.200	4.416	185.247	T
10	4	5	9"	8'- 3 3/8"	0'- 6 1/8"	4'- 2 3/4"	0'- 8 1/8"	0'- 5 1/4"	32'- 4"	5'- 6 3/4"	33'- 1"	128	24	115.352	2.403	426.263	34'- 2"	6	33'-10"	2	10	3.953	236.003	3.991	203.271	D
10	6	5	10"	8'- 3 3/8"	0'- 6 1/8"	4'- 2 3/4"	0'- 8 1/8"	0'- 5 1/4"	32'- 4"	5'- 6 3/4"	33'- 1"	128	40	121.000	2.599	442.363	34'- 2"	6	33'-10"	2	14	4.164	249.808	4.177	203.271	H
10	8	5	9"	8'- 3 3/8"	0'- 6 1/8"	4'- 2 3/4"	0'- 8 1/8"	0'- 5 1/4"	32'- 4"	5'- 6 3/4"	33'- 1"	128	56	126.648	2.793	496.153	34'- 2"	6	33'-10"	2	18	4.374	263.613	4.362	203.271	L
10	10	5	9"	8'- 3 3/4"	0'- 6 3/8"	4'- 2 1/2"	0'- 8 3/8"	0'- 5 1/2"	32'- 4"	5'- 6 1/2"	33'- 1"	128	72	132.296	3.039	516.127	34'- 2"	6	33'-10"	2	22	4.564	277.419	4.527	203.271	P
10	12	6	12"	8'- 3 3/4"	0'- 6 1/2"	4'- 2 1/2"	0'- 8 1/2"	0'- 5 1/2"	32'- 4"	5'- 6 1/2"	33'- 1"	128	88	137.944	3.234	554.648	34'- 2"	6	33'-10"	2	26	4.774	291.224	4.713	203.271	T
12	6	5	9"	9'-10 3/8"	0'- 6 5/8"	4'-11 7/8"	0'- 8 3/4"	0'- 5 3/4"	38'- 4 1/8"	6'- 8 5/8"	39'- 1"	152	40	141.040	3.064	541.194	40'- 2"	6	39'-10"	2	14	4.693	285.856	4.726	239.319	H
12	8	6	12"	9'-10 3/8"	0'- 6 3/4"	4'-11 7/8"	0'- 8 3/4"	0'- 5 3/4"	38'- 4 1/8"	6'- 8 5/8"	39'- 1"	152	56	146.688	3.257	592.676	40'- 2"	6	39'-10"	2	18	4.903	299.661	4.912	239.319	L
12	10	5	8"	9'-10 3/8"	0'- 6 5/8"	4'-11 7/8"	0'- 8 3/4"	0'- 5 3/4"	38'- 4 1/8"	6'- 8 5/8"	39'- 1"	152	72	152.336	3.451	645.781	40'- 2"	6	39'-10"	2	22	5.114	313.467	5.097	239.319	P
12	12	6	11"	9'-10 1/4"	0'- 7"	4'-11 5/8"	0'- 9 1/4"	0'- 6"	38'- 4 1/8"	6'- 8 3/8"	39'- 2"	152	88	157.984	3.706	677.964	40'- 2"	6	39'-10"	2	26	5.299	327.272	5.257	239.319	T

STRUCTURE AND BRIDGE DIVISION

TRIPLE BOX CULVERTS

2 TO 5 FT. FILLS

VIRGINIA DEPARTMENT OF TRANSPORTATION

1004.07