

BCD-40

DIMENSIONS										REINFORCING STEEL																						
SPAN	HGHT	T1	T2	T3	T4						BH1			BH2			BH3			BH4			BV1			BV2						
(FT.)	(FT.)	TOP SLAB	BOTTOM SLAB	EXTERIOR WALL (IN.)	INTERIOR WALL (IN.)	A	B	C	D	E	F	SIZE	SPACING C-C	LENGTH	SIZE	SPACING C-C	LENGTH	SIZE	SPACING C-C	a	LENGTH	SIZE	SPACING C-C	a	b	LENGTH	SIZE	SPACING C-C	LENGTH	SIZE	SPACING C-C	LENGTH
3	3	8"	8"	8"	8"	6	6'- 0"	6	6'- 0"	1	1'- 0"	4	12"	7'- 6"	4	12"	7'- 8"	4	12"	2'- 1 1/4"	3'- 11"	4	12"	2'- 1 1/4"	2'- 8"	4'- 6"	4	12"	4'- 0"	4	12"	4'- 0"
3	4	8"	8"	8"	8"	6	6'- 0"	6	6'- 0"	2	2'- 0"	4	12"	7'- 6"	4	12"	7'- 8"	3	12"	2'- 1 1/4"	4'- 0"	4	12"	2'- 1 1/4"	3'- 2"	5'- 0"	4	12"	5'- 0"	4	12"	5'- 0"
4	3	10"	10"	8"	8"	8	8'- 0"	8	8'- 0"	1	1'- 0"	4	12"	9'- 1"	4	12"	9'- 8"	--	--	----	----	4	12"	2'- 3 5/8"	2'- 10"	4'- 10"	4	12"	4'- 4"	4	12"	4'- 4"
4	4	10"	10"	8"	8"	8	8'- 0"	8	8'- 0"	2	2'- 0"	4	12"	9'- 1"	4	12"	9'- 8"	--	--	----	----	4	12"	2'- 3 5/8"	3'- 4"	5'- 4"	4	12"	5'- 4"	4	12"	5'- 4"
4	5	10"	10"	8"	8"	8	8'- 0"	8	8'- 0"	3	3'- 0"	4	12"	9'- 1"	4	12"	9'- 8"	--	--	----	----	4	12"	2'- 3 5/8"	3'- 10"	5'- 10"	4	12"	6'- 4"	4	12"	6'- 4"
4	6	10"	10"	8"	8"	8	8'- 0"	8	8'- 0"	4	4'- 0"	4	12"	9'- 1"	4	12"	9'- 8"	3	12"	2'- 3 5/8"	4'- 5"	4	12"	2'- 3 5/8"	4'- 4"	6'- 4"	4	12"	7'- 4"	4	12"	7'- 4"
5	3	12"	12"	8"	8"	10	10'- 0"	10	10'- 0"	1	1'- 0"	4	11"	10'- 8"	4	11"	11'- 8"	--	--	----	----	4	11"	2'- 6"	3'- 0"	5'- 3"	4	12"	4'- 8"	4	12"	4'- 8"
5	4	12"	12"	8"	8"	10	10'- 0"	10	10'- 0"	2	2'- 0"	4	11"	10'- 8"	4	11"	11'- 8"	--	--	----	----	4	11"	2'- 6"	3'- 6"	5'- 9"	4	12"	5'- 8"	4	12"	5'- 8"
5	5	12"	12"	8"	8"	10	10'- 0"	10	10'- 0"	3	3'- 0"	4	11"	10'- 8"	4	11"	11'- 8"	--	--	----	----	4	11"	2'- 6"	4'- 0"	6'- 3"	4	12"	6'- 8"	4	12"	6'- 8"
5	6	12 1/4"	12 1/4"	8"	8"	10	10'- 0"	10	10'- 0"	4	4'- 0"	4	11"	10'- 8"	4	11"	11'- 8"	3	11"	2'- 6"	4'- 10"	4	11"	2'- 6"	4'- 6 1/4"	6'- 9"	4	12"	7'- 9"	4	12"	7'- 9"
5	7	12 1/4"	12 1/4"	8"	8"	10	10'- 0"	10	10'- 0"	5	5'- 0"	4	11"	10'- 8"	4	11"	11'- 8"	4	11"	2'- 6"	4'- 9"	4	11"	2'- 6"	5'- 1/4"	7'- 3"	4	8"	8'- 9"	4	12"	8'- 9"
6	4	14 1/4"	14 1/4"	8"	8"	12	12'- 0"	12	12'- 0"	2	2'- 0"	4	9"	12'- 3"	4	9"	13'- 8"	--	--	----	----	4	9"	2'- 8 3/8"	3'- 8 1/4"	6'- 1"	4	12"	6'- 0"	4	12"	6'- 0"
6	5	14 1/2"	14 1/2"	8"	8"	12	12'- 0"	12	12'- 0"	3	3'- 0"	4	9"	12'- 3"	4	9"	13'- 8"	--	--	----	----	4	9"	2'- 8 3/8"	4'- 2 1/2"	6'- 8"	4	12"	7'- 1"	4	12"	7'- 1"
6	6	14 1/4"	14 1/4"	8"	8"	12	12'- 0"	12	12'- 0"	4	4'- 0"	4	9"	12'- 3"	4	9"	13'- 8"	--	--	----	----	4	9"	2'- 8 3/8"	4'- 8 1/4"	7'- 1"	4	12"	8'- 0"	4	12"	8'- 0"
6	7	14 1/4"	14 1/4"	8"	8"	12	12'- 0"	12	12'- 0"	5	5'- 0"	4	9"	12'- 3"	4	9"	13'- 8"	3	9"	2'- 8 3/8"	5'- 2"	4	9"	2'- 8 3/8"	5'- 2 1/4"	7'- 7"	4	8"	9'- 0"	4	12"	9'- 0"
6	8	14 1/4"	14 1/4"	8"	8"	12	12'- 0"	12	12'- 0"	6	6'- 0"	4	9"	12'- 3"	4	9"	13'- 8"	--	--	----	----	5	9"	2'- 8 3/8"	5'- 8 1/4"	8'- 1"	4	6"	10'- 0"	4	12"	10'- 0"
7	4	16 1/4"	16 1/4"	8"	8"	14	14'- 0"	14	14'- 0"	2	2'- 0"	5	8"	13'- 10"	4	8"	15'- 8"	--	--	----	----	4	8"	2'- 10 3/4"	3'- 10 1/4"	6'- 6"	4	12"	6'- 4"	4	11"	6'- 4"
7	6	16 1/4"	16 1/4"	8"	8"	14	14'- 0"	14	14'- 0"	4	4'- 0"	5	9"	13'- 10"	4	9"	15'- 8"	--	--	----	----	4	9"	2'- 10 3/4"	4'- 10 1/4"	7'- 6"	4	12"	8'- 4"	4	11"	8'- 4"
7	8	16 1/4"	16 1/4"	8"	8"	14	14'- 0"	14	14'- 0"	6	6'- 0"	5	9"	13'- 10"	5	9"	15'- 8"	3	9"	2'- 10 3/4"	5'- 7"	4	9"	2'- 10 3/4"	5'- 10 1/4"	8'- 6"	4	6"	10'- 4"	4	11"	10'- 4"
7	10	16 1/4"	16 1/4"	8 1/2"	8"	14	14'- 0"	14	14'- 0"	8	8'- 0"	5	9"	13'- 10"	5	9"	15'- 9"	3	9"	2'- 11 1/4"	5'- 8"	5	9"	2'- 11 1/4"	6'- 10 1/4"	9'- 6"	6	9"	12'- 4"	4	11"	12'- 4"
8	4	18 1/4"	18 1/4"	8"	8"	16	16'- 0"	16	16'- 0"	2	2'- 0"	6	9"	15'- 6"	5	9"	17'- 8"	--	--	----	----	4	9"	3'- 1 1/4"	4'- 1/4"	6'- 10"	4	12"	6'- 9"	4	10"	6'- 9"
8	6	18 1/2"	18 1/2"	8"	8"	16	16'- 0"	16	16'- 0"	4	4'- 0"	6	9"	15'- 6"	5	9"	17'- 8"	--	--	----	----	4	9"	3'- 1 1/4"	5'- 1/2"	7'- 11"	4	12"	8'- 9"	4	10"	8'- 9"
8	8	18 3/4"	18 3/4"	8"	8"	16	16'- 0"	16	16'- 0"	6	6'- 0"	6	9"	15'- 6"	5	9"	17'- 8"	--	--	----	----	5	9"	3'- 1 1/4"	6'- 3/4"	8'- 10"	4	6"	10'- 9"	4	10"	10'- 9"
8	10	18 1/2"	18 1/2"	8 1/2"	8"	16	16'- 0"	16	16'- 0"	8	8'- 0"	6	9"	15'- 6"	5	9"	17'- 9"	--	--	----	----	6	9"	3'- 1 3/4"	7'- 1/2"	9'- 9"	4	4"	12'- 9"	4	10"	12'- 9"
9	4	20 1/4"	20 1/4"	8"	8"	18	18'- 0"	18	18'- 0"	2	2'- 0"	6	9"	17'- 1"	5	9"	19'- 8"	--	--	----	----	4	9"	3'- 3 5/8"	4'- 2 1/4"	7'- 3"	4	12"	7'- 0"	4	10"	7'- 0"
9	6	20 1/4"	20 1/4"	8"	8"	18	18'- 0"	18	18'- 0"	4	4'- 0"	6	9"	17'- 1"	5	9"	19'- 8"	--	--	----	----	4	9"	3'- 3 5/8"	5'- 2 1/4"	8'- 3"	4	12"	9'- 0"	4	10"	9'- 0"
9	8	20 1/4"	20 1/4"	8"	8"	18	18'- 0"	18	18'- 0"	6	6'- 0"	6	9"	17'- 1"	5	9"	19'- 8"	3	9"	3'- 3 5/8"	6'- 5"	4	9"	3'- 3 5/8"	6'- 2 1/4"	9'- 3"	4	6"	11'- 0"	4	10"	11'- 0"
9	10	20"	20"	8 1/2"	8"	18	18'- 0"	18	18'- 0"	8	8'- 0"	6	9"	17'- 1"	5	9"	19'- 9"	3	9"	3'- 4 1/8"	6'- 6"	5	9"	3'- 4 1/8"	7'- 2"	10'- 2"	4	4"	13'- 0"	4	10"	13'- 0"
9	12	20 1/2"	20 1/2"	10"	8"	18	18'- 0"	18	18'- 0"	10	10'- 0"	6	9"	17'- 1"	5	9"	20'- 0"	3	9"	3'- 5 5/8"	6'- 9"	6	9"	3'- 5 5/8"	8'- 2 1/2"	11'- 3"	6	7 1/2"	15'- 1"	4	10"	15'- 1"
10	4	22 3/4"	22 3/4"	8"	8"	20	20'- 0"	20	20'- 0"	2	2'- 0"	6	8"	18'- 8"	5	8"	21'- 8"	--	--	----	----	4	8"	3'- 6"	4'- 4 3/4"	7'- 8"	4	12"	7'- 6"	4	10"	7'- 6"
10	6	22 3/4"	22 3/4"	8"	8"	20	20'- 0"	20	20'- 0"	4	4'- 0"	6	8"	18'- 8"	5	8"	21'- 8"	--	--	----	----	4	8"	3'- 6"	5'- 4 3/4"	8'- 8"	4	11 1/2"	9'- 6"	4	10"	9'- 6"
10	8	22 1/2"	22 1/2"	8"	8"	20	20'- 0"	20	20'- 0"	6	6'- 0"	6	8"	18'- 8"	5	8"	21'- 8"	3	8"	3'- 6"	6'- 10"	4	8"	3'- 6"	6'- 4 1/2"	9'- 7"	5	9"	11'- 5"	4	10"	11'- 5"
10	10	22 1/4"	22 1/4"	8 1/2"	8"	20	20'- 0"	20	20'- 0"	8	8'- 0"	6	8"	18'- 8"	5	8"	21'- 9"	3	8"	3'- 6 1/2"	6'- 11"	5	8"	3'- 6 1/2"	7'- 4 1/4"	10'- 7"	5	6"	13'- 4"	4	10"	13'- 4"
10	12	22 1/4"	22 1/4"	10"	8"	20	20'- 0"	20	20'- 0"	10	10'- 0"	7	9"	18'- 8"	6	9"	22'- 0"	3	9"	3'- 8"	7'- 2"	6	9"	3'- 8"	8'- 4 1/4"	11'- 7"	6	7 1/2"	15'- 4"	4	10"	15'- 4"
12	6	26 3/4"	26 3/4"	8"	8"	24	24'- 0"	24	24'- 0"	4	4'- 0"	7	9"	21'- 10"	6	9"	25'- 8"	--	--	----	----	4	9"	3'- 10 3/4"	5'- 8 3/4"	9'- 4"	4	10"	10'- 2"	4	8 1/2"	10'- 2"
12	8	26 1/2"	26 1/2"	8"	8"	24	24'- 0"	24	24'- 0"	6	6'- 0"	7	9"	21'- 10"	6	9"	25'- 8"	3	9"	3'- 10 3/4"	7'- 7"	4	9"	3'- 10 3/4"	6'- 8 1/2"	10'- 4"	4	5 1/2"	12'- 1"	4	8 1/2"	12'- 1"
12	10	26 1/2"	26 1/2"	8 1/2"	8"	24	24'- 0"	24	24'- 0"	8	8'- 0"	7	9"	21'- 10"	6	9"	25'- 9"	3	9"	3'- 11 1/4"	7'- 8"	5	9"	3'- 11 1/4"	7'- 8 1/2"	11'- 4"	6	8"	14'- 1"	4	8 1/2"	14'- 1"
12	12	26 3/4"	26 3/4"	10"	8"	24	24'- 0"	24	24'- 0"	10	10'- 0"	7	9"	21'- 10"	6	9"	26'- 0"	3	9"	4'- 3/4"	7'- 11"	6	9"	4'- 3/4"	8'- 8 3/4"	12'- 5"	5	5"	16'- 2"	4	8 1/2"	16'- 2"

Sheet 1 of 2 For Typical Section, notes and other details, refer to standard BCD-DT.

	DOUBLE BOX CULVERTS	
	35 TO 40 FT. FILLS	
1003.20	VIRGINIA DEPARTMENT OF TRANSPORTATION	STRUCTURE AND BRIDGE DIVISION