

2016 ROAD & BRIDGE STANDARDS

BCD-30

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

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"	6'- 7"	4	12"	7'- 8"	--	---	----	----	4	12"	2'- 4"	2'- 9"	4'- 9"	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"	6'- 7"	4	12"	7'- 8"	--	---	----	----	4	12"	2'- 4"	3'- 3"	5'- 3"	4	12"	5'- 0"	4	12"	5'- 0"
4	3	8 1/2"	8 1/2"	8"	8"	8	8'- 0"	8	8'- 0"	1	1'- 0"	4	12"	8'- 7"	4	12"	9'- 8"	--	---	----	----	4	12"	2'- 4"	2'- 9"	4'- 9"	4	12"	4'- 0"	4	12"	4'- 0"
4	4	8 1/2"	8 1/2"	8"	8"	8	8'- 0"	8	8'- 0"	2	2'- 0"	4	12"	8'- 7"	4	12"	9'- 8"	--	---	----	----	4	12"	2'- 4"	3'- 3"	5'- 3"	4	12"	5'- 0"	4	12"	5'- 0"
4	5	8 3/4"	8 3/4"	8"	8"	8	8'- 0"	8	8'- 0"	3	3'- 0"	4	12"	8'- 7"	4	12"	9'- 8"	--	---	----	----	4	12"	2'- 4"	3'- 9"	5'- 10"	4	12"	6'- 1"	4	12"	6'- 1"
4	6	8 3/4"	8 3/4"	8"	8"	8	8'- 0"	8	8'- 0"	4	4'- 0"	4	12"	8'- 7"	4	12"	9'- 8"	--	---	----	----	4	12"	2'- 4"	4'- 3"	6'- 4"	5	12"	7'- 1"	4	12"	7'- 1"
5	3	10 1/4"	10 1/4"	8"	8"	10	10'- 0"	10	10'- 0"	1	1'- 0"	4	12"	10'- 7"	4	12"	11'- 8"	--	---	----	----	4	12"	2'- 4"	2'- 11"	4'- 11"	4	12"	4'- 4"	4	12"	4'- 4"
5	4	10 1/4"	10 1/4"	8"	8"	10	10'- 0"	10	10'- 0"	2	2'- 0"	4	12"	10'- 7"	4	12"	11'- 8"	--	---	----	----	4	12"	2'- 4"	3'- 5"	5'- 5"	4	12"	5'- 4"	4	12"	5'- 4"
5	5	10 1/4"	10 1/4"	8"	8"	10	10'- 0"	10	10'- 0"	3	3'- 0"	4	12"	10'- 7"	4	12"	11'- 8"	--	---	----	----	4	12"	2'- 4"	3'- 11"	5'- 11"	4	12"	6'- 4"	4	12"	6'- 4"
5	6	10 1/4"	10 1/4"	8"	8"	10	10'- 0"	10	10'- 0"	4	4'- 0"	4	12"	10'- 7"	4	12"	11'- 8"	3	12"	2'- 11"	5'- 7"	4	12"	2'- 4"	4'- 5"	6'- 5"	5	12"	7'- 4"	4	12"	7'- 4"
5	7	10 1/4"	10 1/4"	8"	8"	10	10'- 0"	10	10'- 0"	5	5'- 0"	4	12"	10'- 7"	4	12"	11'- 8"	4	12"	3'- 2"	5'- 11"	4	12"	2'- 4"	4'- 11"	6'- 11"	5	12"	8'- 4"	4	12"	8'- 4"
6	4	12 1/4"	12 1/4"	8"	8"	12	12'- 0"	12	12'- 0"	2	2'- 0"	4	11"	12'- 7"	4	11"	13'- 8"	--	---	----	----	4	11"	2'- 4"	3'- 7"	5'- 7"	4	12"	5'- 8"	4	12"	5'- 8"
6	5	12 1/4"	12 1/4"	8"	8"	12	12'- 0"	12	12'- 0"	3	3'- 0"	4	11"	12'- 7"	4	11"	13'- 8"	--	---	----	----	4	11"	2'- 4"	4'- 1"	6'- 1"	4	12"	6'- 8"	4	12"	6'- 8"
6	6	12"	12"	8"	8"	12	12'- 0"	12	12'- 0"	4	4'- 0"	4	11"	12'- 7"	4	11"	13'- 8"	3	11"	3'- 1"	5'- 11"	4	11"	2'- 4"	4'- 6"	6'- 7"	4	12"	7'- 8"	4	12"	7'- 8"
6	7	12"	12"	8"	8"	12	12'- 0"	12	12'- 0"	5	5'- 0"	4	10"	12'- 7"	4	10"	13'- 8"	3	10"	3'- 3"	6'- 4"	4	10"	2'- 4"	5'- 0"	7'- 1"	5	12"	8'- 8"	4	12"	8'- 8"
6	8	12"	12"	8"	8"	12	12'- 0"	12	12'- 0"	6	6'- 0"	4	10"	12'- 4"	4	10"	13'- 8"	--	---	----	----	5	10"	2'- 6"	5'- 9"	7'- 10"	5	8"	9'- 8"	4	12"	9'- 8"
7	4	13 3/4"	13 3/4"	8"	8"	14	14'- 0"	14	14'- 0"	2	2'- 0"	5	9"	14'- 7"	4	9"	15'- 8"	--	---	----	----	4	9"	2'- 9"	3'- 8"	6'- 2"	4	12"	5'- 11"	4	12"	5'- 11"
7	6	13 3/4"	13 3/4"	8"	8"	14	14'- 0"	14	14'- 0"	4	4'- 0"	5	9"	14'- 7"	4	9"	15'- 8"	--	---	----	----	4	9"	2'- 9"	4'- 8"	7'- 2"	4	12"	7'- 11"	4	12"	7'- 11"
7	8	13 3/4"	13 3/4"	8"	8"	14	14'- 0"	14	14'- 0"	6	6'- 0"	5	9"	14'- 7"	4	9"	15'- 8"	3	9"	3'- 7"	7'- 0"	4	9"	2'- 9"	5'- 8"	8'- 2"	5	8 1/2"	9'- 11"	4	12"	9'- 11"
7	10	13 3/4"	13 3/4"	9 1/2"	8"	14	14'- 0"	14	14'- 0"	8	8'- 0"	5	9"	14'- 7"	4	9"	15'- 11"	3	9"	4'- 0"	7'- 10"	5	9"	2'- 11"	6'- 10"	9'- 4"	5	5"	11'- 11"	4	12"	11'- 11"
8	4	15 1/2"	15 1/2"	8"	8"	16	16'- 0"	16	16'- 0"	2	2'- 0"	5	8"	16'- 7"	4	8"	17'- 8"	--	---	----	----	4	8"	2'- 9"	3'- 10"	6'- 3"	4	12"	6'- 3"	4	12"	6'- 3"
8	6	15 1/2"	15 1/2"	8"	8"	16	16'- 0"	16	16'- 0"	4	4'- 0"	5	8"	16'- 7"	4	8"	17'- 8"	--	---	----	----	4	8"	2'- 9"	4'- 10"	7'- 3"	4	12"	8'- 3"	4	12"	8'- 3"
8	8	15 1/2"	15 1/2"	8"	8"	16	16'- 0"	16	16'- 0"	6	6'- 0"	5	8"	16'- 7"	4	8"	17'- 8"	3	8"	3'- 9"	7'- 4"	4	8"	2'- 9"	5'- 10"	8'- 3"	5	8 1/2"	10'- 3"	4	12"	10'- 3"
8	10	15 1/2"	15 1/2"	9"	8"	16	16'- 0"	16	16'- 0"	8	8'- 0"	5	8"	16'- 6"	4	8"	17'- 9"	3	8"	4'- 2"	8'- 1"	5	8"	2'- 11"	7'- 0"	9'- 6"	5	5"	12'- 3"	4	12"	12'- 3"
9	4	17 1/4"	17 1/4"	8"	8"	18	18'- 0"	18	18'- 0"	2	2'- 0"	6	9"	18'- 7"	5	9"	19'- 8"	--	---	----	----	4	9"	3'- 2"	4'- 0"	6'- 10"	4	12"	6'- 6"	4	11"	6'- 6"
9	6	17 1/4"	17 1/4"	8"	8"	18	18'- 0"	18	18'- 0"	4	4'- 0"	6	9"	18'- 7"	5	9"	19'- 8"	--	---	----	----	4	9"	3'- 2"	5'- 0"	7'- 10"	4	12"	8'- 6"	4	11"	8'- 6"
9	8	17 1/2"	17 1/2"	8"	8"	18	18'- 0"	18	18'- 0"	6	6'- 0"	6	9"	18'- 7"	5	9"	19'- 8"	3	9"	3'- 11"	7'- 8"	4	9"	3'- 2"	6'- 0"	8'- 10"	5	8"	10'- 6"	4	11"	10'- 6"
9	10	17 1/2"	17 1/2"	9"	8"	18	18'- 0"	18	18'- 0"	8	8'- 0"	6	9"	18'- 9"	5	9"	19'- 9"	4	9"	4'- 4"	8'- 4"	4	9"	3'- 2"	7'- 0"	9'- 10"	6	7 1/2"	12'- 6"	4	11"	12'- 6"
9	12	17 1/2"	17 1/2"	11"	8"	18	18'- 0"	18	18'- 0"	10	10'- 0"	6	9"	18'- 7"	5	9"	20'- 2"	3	9"	4'- 9"	9'- 3"	6	9"	3'- 5"	8'- 4"	11'- 4"	5	5 1/2"	14'- 6"	4	11"	14'- 6"
10	4	19"	19"	8"	8"	20	20'- 0"	20	20'- 0"	2	2'- 0"	6	8"	20'- 7"	4	8"	21'- 8"	--	---	----	----	4	8"	2'- 9"	4'- 1"	6'- 7"	4	12"	6'- 9"	4	10"	6'- 9"
10	6	18 3/4"	18 3/4"	8"	8"	20	20'- 0"	20	20'- 0"	4	4'- 0"	6	9"	20'- 7"	5	9"	21'- 8"	--	---	----	----	4	9"	3'- 2"	5'- 1"	8'- 0"	4	12"	8'- 9"	4	10"	8'- 9"
10	8	18 3/4"	18 3/4"	8"	8"	20	20'- 0"	20	20'- 0"	6	6'- 0"	6	9"	20'- 7"	5	9"	21'- 8"	3	9"	4'- 0"	7'- 10"	4	9"	3'- 2"	6'- 1"	9'- 0"	5	8 1/2"	10'- 9"	4	10"	10'- 9"
10	10	19"	19"	9"	8"	20	20'- 0"	20	20'- 0"	8	8'- 0"	6	9"	20'- 6"	5	9"	21'- 9"	3	9"	4'- 6"	8'- 8"	5	9"	3'- 4"	7'- 3"	10'- 3"	6	7 1/2"	12'- 9"	4	10"	12'- 9"
10	12	19 1/4"	19 1/4"	11"	8"	20	20'- 0"	20	20'- 0"	10	10'- 0"	6	9"	20'- 7"	5	9"	22'- 2"	3	9"	4'- 11"	9'- 6"	6	9"	3'- 5"	8'- 6"	11'- 6"	7	10 1/2"	14'- 10"	4	10"	14'- 10"
12	6	22 1/4"	22 1/4"	8"	8"	24	24'- 0"	24	24'- 0"	4	4'- 0"	7	9"	24'- 7"	6	9"	25'- 8"	--	---	----	----	4	9"	3'- 10"	5'- 5"	8'- 11"	4	12"	9'- 4"	4	10"	9'- 4"
12	8	22 1/4"	22 1/4"	8"	8"	24	24'- 0"	24	24'- 0"	6	6'- 0"	7	9"	24'- 7"	6	9"	25'- 8"	3	9"	4'- 4"	8'- 5"	4	9"	3'- 10"	6'- 5"	9'- 11"	5	8"	11'- 4"	4	10"	11'- 4"
12	10	22 1/4"	22 1/4"	8 1/2"	8"	24	24'- 0"	24	24'- 0"	8	8'- 0"	7	9"	24'- 5"	6	9"	25'- 9"	3	9"	4'- 9"	9'- 3"	5	9"	4'- 0"	7'- 7"	11'- 2"	6	7 1/2"	13'- 4"	4	10"	13'- 4"
12	12	22 1/2"	22 1/2"	11"	8"	24	24'- 0"	24	24'- 0"	10	10'- 0"	7	9"	24'- 7"	6	9"	26'- 2"	3	9"	5'- 2"	10'- 1"	6	9"	4'- 1"	8'- 9"	12'- 5"	6	7 1/2"	15'- 5"	4	10"	15'- 5"

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

VDOT
ROAD AND BRIDGE STANDARDS

SHEET 1 OF 2 REVISION DATE
1003.13 07/11

DOUBLE BOX CULVERTS
20 TO 30 FT. FILLS
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE