

| DIMENSIONS | | | | | | REINFORCING STEEL | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|-------|----------|-------------|---------------------|---------------------|-------------------|---------|----|---------|----|---------|------|-------------|----------|------|-------------|---------|------|-------------|-------------|---------|------|-------------|-------------|-------------|---------|------|-------------|----------|------|-------------|----------|
| SPAN | HGHT | T1 | T2 | T3 | T4 | A | B | C | D | E | F | BH1 | | | BH2 | | | BH3 | | | BH4 | | | BV1 | | | BV2 | | | | | |
| (FT.) | (FT.) | TOP SLAB | BOTTOM SLAB | EXTERIOR WALL (IN.) | INTERIOR WALL (IN.) | | | | | | | 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 | 8/4" | 8/4" | 8" | 8" | 9 | 9'- 0" | 9 | 9'- 0" | 1 | 1'- 0" | 4 | 12" | 11'- 2" | 4 | 12" | 11'- 4" | 4 | 12" | 2'- 1/4" | 3'- 11" | 4 | 12" | 2'- 1/4" | 2'- 8/4" | 4'- 6" | 4 | 12" | 4'- 0" | 4 | 12" | 4'- 0" |
| 3 | 4 | 8/4" | 8/4" | 8" | 8" | 9 | 9'- 0" | 9 | 9'- 0" | 2 | 2'- 0" | 4 | 12" | 11'- 2" | 4 | 12" | 11'- 4" | 4 | 12" | 2'- 1/4" | 3'- 11" | 4 | 12" | 2'- 1/4" | 3'- 2/4" | 5'- 0" | 4 | 12" | 5'- 0" | 4 | 12" | 5'- 0" |
| 4 | 3 | 10/2" | 10/2" | 8" | 8" | 12 | 12'- 0" | 12 | 12'- 0" | 1 | 1'- 0" | 4 | 12" | 13'- 9" | 4 | 12" | 14'- 4" | -- | -- | ---- | ---- | 4 | 12" | 2'- 3/8" | 2'- 10/2" | 4'- 11" | 4 | 12" | 4'- 5" | 4 | 12" | 4'- 5" |
| 4 | 4 | 10/2" | 10/2" | 8" | 8" | 12 | 12'- 0" | 12 | 12'- 0" | 2 | 2'- 0" | 4 | 12" | 13'- 9" | 4 | 12" | 14'- 4" | -- | -- | ---- | ---- | 4 | 12" | 2'- 3/8" | 3'- 4/2" | 5'- 5" | 4 | 12" | 5'- 5" | 4 | 12" | 5'- 5" |
| 4 | 5 | 10 3/4" | 10 3/4" | 8" | 8" | 12 | 12'- 0" | 12 | 12'- 0" | 3 | 3'- 0" | 4 | 12" | 13'- 9" | 4 | 12" | 14'- 4" | -- | -- | ---- | ---- | 4 | 12" | 2'- 3/8" | 3'- 10 3/4" | 5'- 11" | 4 | 12" | 6'- 5" | 4 | 12" | 6'- 5" |
| 4 | 6 | 10 3/4" | 10 3/4" | 8" | 8" | 12 | 12'- 0" | 12 | 12'- 0" | 4 | 4'- 0" | 4 | 12" | 13'- 9" | 4 | 12" | 14'- 4" | 4 | 12" | 2'- 3/8" | 4'- 4" | 4 | 12" | 2'- 3/8" | 4'- 4 3/4" | 6'- 5" | 4 | 11" | 7'- 5" | 4 | 12" | 7'- 5" |
| 5 | 3 | 12/2" | 12/2" | 8" | 8" | 15 | 15'- 0" | 15 | 15'- 0" | 1 | 1'- 0" | 4 | 10" | 16'- 4" | 4 | 10" | 17'- 4" | -- | -- | ---- | ---- | 4 | 10" | 2'- 6" | 3'- 1/2" | 5'- 3" | 4 | 12" | 4'- 9" | 4 | 12" | 4'- 9" |
| 5 | 4 | 12/2" | 12/2" | 8" | 8" | 15 | 15'- 0" | 15 | 15'- 0" | 2 | 2'- 0" | 4 | 10" | 16'- 4" | 4 | 10" | 17'- 4" | -- | -- | ---- | ---- | 4 | 10" | 2'- 6" | 3'- 6/2" | 5'- 9" | 4 | 12" | 5'- 9" | 4 | 12" | 5'- 9" |
| 5 | 5 | 12/2" | 12/2" | 8" | 8" | 15 | 15'- 0" | 15 | 15'- 0" | 3 | 3'- 0" | 4 | 10" | 16'- 4" | 4 | 10" | 17'- 4" | -- | -- | ---- | ---- | 4 | 10" | 2'- 6" | 4'- 1/2" | 6'- 3" | 4 | 12" | 6'- 9" | 4 | 12" | 6'- 9" |
| 5 | 6 | 12/2" | 12/2" | 8" | 8" | 15 | 15'- 0" | 15 | 15'- 0" | 4 | 4'- 0" | 4 | 10" | 16'- 4" | 4 | 10" | 17'- 4" | -- | -- | ---- | ---- | 4 | 10" | 2'- 6" | 4'- 6/2" | 6'- 9" | 4 | 12" | 7'- 9" | 4 | 12" | 7'- 9" |
| 5 | 7 | 12/2" | 12/2" | 8" | 8" | 15 | 15'- 0" | 15 | 15'- 0" | 5 | 5'- 0" | 4 | 10" | 16'- 4" | 4 | 10" | 17'- 4" | -- | -- | ---- | ---- | 5 | 10" | 2'- 6" | 5'- 1/2" | 7'- 3" | 4 | 7/2" | 8'- 9" | 4 | 12" | 8'- 9" |
| 6 | 4 | 14 3/4" | 14 3/4" | 8" | 8" | 18 | 18'- 0" | 18 | 18'- 0" | 2 | 2'- 0" | 4 | 9" | 18'- 11" | 5 | 9" | 20'- 4" | -- | -- | ---- | ---- | 4 | 9" | 2'- 8 3/8" | 3'- 8 3/4" | 6'- 2" | 4 | 12" | 6'- 1" | 4 | 12" | 6'- 1" |
| 6 | 5 | 14 3/4" | 14 3/4" | 8" | 8" | 18 | 18'- 0" | 18 | 18'- 0" | 3 | 3'- 0" | 4 | 9" | 18'- 11" | 5 | 9" | 20'- 4" | -- | -- | ---- | ---- | 4 | 9" | 2'- 8 3/8" | 4'- 2 3/4" | 6'- 8" | 4 | 12" | 7'- 1" | 4 | 12" | 7'- 1" |
| 6 | 6 | 14 3/4" | 14 3/4" | 8" | 8" | 18 | 18'- 0" | 18 | 18'- 0" | 4 | 4'- 0" | 4 | 9" | 18'- 11" | 5 | 9" | 20'- 4" | -- | -- | ---- | ---- | 4 | 9" | 2'- 8 3/8" | 4'- 8 3/4" | 7'- 2" | 4 | 12" | 8'- 1" | 4 | 12" | 8'- 1" |
| 6 | 7 | 14 3/4" | 14 3/4" | 8" | 8" | 18 | 18'- 0" | 18 | 18'- 0" | 5 | 5'- 0" | 4 | 9" | 18'- 11" | 5 | 9" | 20'- 4" | 3 | 9" | 2'- 8 3/8" | 5'- 2" | 4 | 9" | 2'- 8 3/8" | 5'- 2 3/4" | 7'- 8" | 4 | 7/2" | 9'- 1" | 4 | 12" | 9'- 1" |
| 6 | 8 | 14 3/4" | 14 3/4" | 8" | 8" | 18 | 18'- 0" | 18 | 18'- 0" | 6 | 6'- 0" | 4 | 9" | 18'- 11" | 5 | 9" | 20'- 4" | -- | -- | ---- | ---- | 5 | 9" | 2'- 8 3/8" | 5'- 8 3/4" | 8'- 1" | 4 | 5/2" | 10'- 1" | 4 | 12" | 10'- 1" |
| 7 | 4 | 17/4" | 17/4" | 8" | 8" | 21 | 21'- 0" | 21 | 21'- 0" | 2 | 2'- 0" | 4 | 9" | 21'- 6" | 5 | 9" | 23'- 4" | -- | -- | ---- | ---- | 4 | 9" | 2'- 10 3/4" | 3'- 11/4" | 6'- 7" | 4 | 12" | 6'- 6" | 4 | 10/2" | 6'- 6" |
| 7 | 6 | 17/4" | 17/4" | 8" | 8" | 21 | 21'- 0" | 21 | 21'- 0" | 4 | 4'- 0" | 5 | 9" | 21'- 6" | 5 | 9" | 23'- 4" | -- | -- | ---- | ---- | 4 | 9" | 2'- 10 3/4" | 4'- 11/4" | 7'- 7" | 4 | 11/2" | 8'- 6" | 4 | 11" | 8'- 6" |
| 7 | 8 | 17/4" | 17/4" | 8" | 8" | 21 | 21'- 0" | 21 | 21'- 0" | 6 | 6'- 0" | 5 | 9" | 21'- 6" | 5 | 9" | 23'- 4" | 4 | 9" | 2'- 10 3/4" | 5'- 6" | 4 | 9" | 2'- 10 3/4" | 5'- 11/4" | 8'- 7" | 4 | 5/2" | 10'- 6" | 4 | 11" | 10'- 6" |
| 7 | 10 | 17/4" | 17/4" | 9" | 8" | 21 | 21'- 0" | 21 | 21'- 0" | 8 | 8'- 0" | 5 | 9" | 21'- 6" | 5 | 9" | 23'- 6" | 3 | 9" | 2'- 11 3/4" | 5'- 9" | 5 | 9" | 2'- 11 3/4" | 6'- 11/4" | 9'- 7" | 4 | 4" | 12'- 6" | 4 | 11" | 12'- 6" |
| 8 | 4 | 19/4" | 19/4" | 8" | 8" | 24 | 24'- 0" | 24 | 24'- 0" | 2 | 2'- 0" | 5 | 8" | 24'- 2" | 5 | 8" | 26'- 4" | -- | -- | ---- | ---- | 4 | 8" | 3'- 1/4" | 4'- 1/4" | 6'- 11" | 4 | 12" | 6'- 10" | 4 | 10" | 6'- 10" |
| 8 | 6 | 19/4" | 19/4" | 8" | 8" | 24 | 24'- 0" | 24 | 24'- 0" | 4 | 4'- 0" | 4 | 8" | 24'- 2" | 5 | 8" | 26'- 4" | -- | -- | ---- | ---- | 4 | 8" | 3'- 1/4" | 5'- 1/4" | 7'- 11" | 4 | 11" | 8'- 10" | 4 | 10" | 8'- 10" |
| 8 | 8 | 19" | 19" | 8" | 8" | 24 | 24'- 0" | 24 | 24'- 0" | 6 | 6'- 0" | 4 | 8" | 24'- 2" | 5 | 8" | 26'- 4" | 3 | 8" | 3'- 1/4" | 6'- 0" | 4 | 8" | 3'- 1/4" | 6'- 1" | 8'- 11" | 4 | 5/2" | 10'- 10" | 4 | 10" | 10'- 10" |
| 8 | 10 | 19/4" | 19/4" | 9" | 8" | 24 | 24'- 0" | 24 | 24'- 0" | 8 | 8'- 0" | 5 | 8" | 24'- 2" | 5 | 8" | 26'- 6" | 3 | 8" | 3'- 2/4" | 6'- 2" | 5 | 8" | 3'- 2/4" | 7'- 1/4" | 10'- 0" | 4 | 4" | 12'- 10" | 4 | 10" | 12'- 10" |
| 9 | 4 | 21/4" | 21/4" | 8" | 8" | 27 | 27'- 0" | 27 | 27'- 0" | 2 | 2'- 0" | 6 | 9" | 26'- 9" | 6 | 9" | 29'- 4" | -- | -- | ---- | ---- | 4 | 9" | 3'- 3 5/8" | 4'- 3/4" | 7'- 4" | 4 | 12" | 7'- 3" | 4 | 10" | 7'- 3" |
| 9 | 6 | 21/4" | 21/4" | 8" | 8" | 27 | 27'- 0" | 27 | 27'- 0" | 4 | 4'- 0" | 6 | 9" | 26'- 9" | 6 | 9" | 29'- 4" | -- | -- | ---- | ---- | 4 | 9" | 3'- 3 5/8" | 5'- 3/4" | 8'- 4" | 4 | 11" | 9'- 3" | 4 | 10" | 9'- 3" |
| 9 | 8 | 21/4" | 21/4" | 8" | 8" | 27 | 27'- 0" | 27 | 27'- 0" | 6 | 6'- 0" | 6 | 9" | 26'- 9" | 6 | 9" | 29'- 4" | -- | -- | ---- | ---- | 5 | 9" | 3'- 3 5/8" | 6'- 3/4" | 9'- 3" | 6 | 11/2" | 11'- 3" | 4 | 10" | 11'- 3" |
| 9 | 10 | 21/4" | 21/4" | 9" | 8" | 27 | 27'- 0" | 27 | 27'- 0" | 8 | 8'- 0" | 6 | 9" | 26'- 9" | 6 | 9" | 29'- 6" | -- | -- | ---- | ---- | 6 | 9" | 3'- 4 5/8" | 7'- 3/4" | 10'- 3" | 5 | 6" | 13'- 3" | 4 | 10" | 13'- 3" |
| 9 | 12 | 21 1/2" | 21 1/2" | 10/2" | 8" | 27 | 27'- 0" | 27 | 27'- 0" | 10 | 10'- 0" | 6 | 9" | 26'- 9" | 6 | 9" | 29'- 9" | -- | -- | ---- | ---- | 7 | 9" | 3'- 6 1/8" | 8'- 3/2" | 11'- 4" | 7 | 10" | 15'- 3" | 4 | 10" | 15'- 3" |
| 10 | 4 | 23/4" | 23/4" | 8" | 8" | 30 | 30'- 0" | 30 | 30'- 0" | 2 | 2'- 0" | 6 | 9" | 29'- 4" | 6 | 9" | 32'- 4" | -- | -- | ---- | ---- | 4 | 9" | 3'- 6" | 4'- 5/4" | 7'- 8" | 4 | 12" | 7'- 6" | 4 | 10" | 7'- 6" |
| 10 | 8 | 23/4" | 23/4" | 8" | 8" | 30 | 30'- 0" | 30 | 30'- 0" | 4 | 4'- 0" | 6 | 9" | 29'- 4" | 6 | 9" | 32'- 4" | -- | -- | ---- | ---- | 4 | 9" | 3'- 6" | 5'- 5/4" | 8'- 8" | 4 | 10/2" | 9'- 6" | 4 | 10" | 9'- 6" |
| 10 | 8 | 23/4" | 23/4" | 8" | 8" | 30 | 30'- 0" | 30 | 30'- 0" | 6 | 6'- 0" | 6 | 9" | 29'- 4" | 6 | 9" | 32'- 4" | 3 | 9" | 3'- 6" | 6'- 10" | 4 | 9" | 3'- 6" | 6'- 5/4" | 9'- 8" | 6 | 11/2" | 11'- 6" | 4 | 10" | 11'- 6" |
| 10 | 10 | 23/4" | 23/4" | 9" | 8" | 30 | 30'- 0" | 30 | 30'- 0" | 8 | 8'- 0" | 6 | 9" | 29'- 4" | 6 | 9" | 32'- 6" | 3 | 9" | 3'- 7" | 7'- 0" | 5 | 9" | 3'- 7" | 7'- 5/4" | 10'- 8" | 5 | 6" | 13'- 6" | 4 | 10" | 13'- 6" |
| 10 | 12 | 23 1/2" | 23 1/2" | 10/2" | 8" | 30 | 30'- 0" | 30 | 30'- 0" | 10 | 10'- 0" | 6 | 9" | 29'- 4" | 6 | 9" | 32'- 9" | 3 | 9" | 3'- 8/2" | 7'- 3" | 6 | 9" | 3'- 8/2" | 8'- 5/2" | 11'- 9" | 5 | 5" | 15'- 7" | 4 | 10" | 15'- 7" |
| 12 | 6 | 27 1/2" | 27 1/2" | 8" | 8" | 36 | 36'- 0" | 36 | 36'- 0" | 4 | 4'- 0" | 7 | 8" | 34'- 6" | 6 | 8" | 38'- 4" | -- | -- | ---- | ---- | 4 | 8" | 3'- 10 3/4" | 5'- 9/2" | 9'- 5" | 4 | 9" | 10'- 3" | 4 | 8/2" | 10'- 3" |
| 12 | 8 | 27 1/2" | 27 1/2" | 8" | 8" | 36 | 36'- 0" | 36 | 36'- 0" | 6 | 6'- 0" | 7 | 8" | 34'- 6" | 6 | 8" | 38'- 4" | 3 | 8" | 3'- 10 3/4" | 7'- 7" | 4 | 8" | 3'- 10 3/4" | 6'- 9/2" | 10'- 5" | 5 | 7/2" | 12'- 3" | 4 | 8/2" | 12'- 3" |
| 12 | 10 | 27 1/2" | 27 1/2" | 9/4" | 8" | 36 | 36'- 0" | 36 | 36'- 0" | 8 | 8'- 0" | 6 | 8" | 34'- 6" | 6 | 8" | 38'- 6" | 3 | 8" | 4'- 0" | 7'- 10" | 5 | 8" | 4'- 0" | 7'- 9/2" | 11'- 6" | 5 | 6" | 14'- 3" | 4 | 8/2" | 14'- 3" |
| 12 | 12 | 27 1/2" | 27 1/2" | 10/2" | 8" | 36 | 36'- 0" | 36 | 36'- 0" | 10 | 10'- 0" | 6 | 8" | 34'- 6" | 6 | 8" | 38'- 9" | 3 | 8" | 4'- 1/4" | 8'- 0" | 6 | 8" | 4'- 1/4" | 8'- 9/2" | 12'- 6" | 6 | 7" | 16'- 3" | 4 | 8" | 16'- 3" |

TRIPLE BOX CULVERTS

40 TO 45 FT. FILLS

VIRGINIA DEPARTMENT OF TRANSPORTATION

STRUCTURE
AND
BRIDGE
DIVISION