

| DIMENSIONS | | | | | | | | REINFORCING STEEL | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------|---------------|-------------------|----------------------|---------------------------------|---------------------------------|----|--------|-------------------|--------|----|--------|------|----------------|---------|------|----------------|--------|------|----------------|------------|--------|------|----------------|------------|------------|---------|------|----------------|---------|------|----------------|---------|
| SPAN (FT.) | HGHT (FT.) | T1 TOP SLAB | T2 BOTTOM SLAB | T3 EXTERIOR WALL (IN.) | T4 INTERIOR WALL (IN.) | A | B | C | D | E | F | BH1 | | | BH2 | | | BH3 | | | BH4 | | | BV1 | | | BV2 | | | | | |
| | | | | | | | | | | | | 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" | 13 | 13'-0" | 13 | 13'-0" | 1 | 1'-0" | 4 | 12" | 14'-10" | 4 | 12" | 15'-0" | -- | -- | ---- | ---- | 4 | 12" | 2'-1 1/4" | 2'-8" | 4'-6" | 4 | 12" | 4'-0" | 4 | 12" | 4'-0" |
| 3 | 4 | 8" | 8" | 8" | 8" | 13 | 13'-0" | 13 | 13'-0" | 2 | 2'-0" | 4 | 12" | 14'-10" | 4 | 12" | 15'-0" | -- | -- | ---- | ---- | 4 | 12" | 2'-1 1/4" | 3'-2" | 5'-0" | 4 | 12" | 5'-0" | 4 | 12" | 5'-0" |
| 4 | 3 | 8" | 8" | 8" | 8" | 17 | 17'-0" | 17 | 17'-0" | 1 | 1'-0" | 4 | 12" | 18'-5" | 4 | 12" | 19'-0" | -- | -- | ---- | ---- | 4 | 12" | 2'-3 5/8" | 2'-8" | 4'-8" | 4 | 12" | 4'-0" | 4 | 12" | 4'-0" |
| 4 | 4 | 8" | 8" | 8" | 8" | 17 | 17'-0" | 17 | 17'-0" | 2 | 2'-0" | 4 | 12" | 18'-5" | 4 | 12" | 19'-0" | -- | -- | ---- | ---- | 4 | 12" | 2'-3 5/8" | 3'-2" | 5'-2" | 4 | 12" | 5'-0" | 4 | 12" | 5'-0" |
| 4 | 5 | 8" | 8" | 8" | 8" | 17 | 17'-0" | 17 | 17'-0" | 3 | 3'-0" | 4 | 12" | 18'-5" | 4 | 12" | 19'-0" | -- | -- | ---- | ---- | 4 | 12" | 2'-3 5/8" | 3'-8" | 5'-8" | 4 | 12" | 6'-0" | 4 | 12" | 6'-0" |
| 4 | 6 | 8" | 8" | 8" | 8" | 17 | 17'-0" | 17 | 17'-0" | 4 | 4'-0" | 4 | 12" | 18'-5" | 4 | 12" | 19'-0" | -- | -- | ---- | ---- | 4 | 12" | 2'-3 5/8" | 4'-2" | 6'-2" | 4 | 12" | 7'-0" | 4 | 12" | 7'-0" |
| 5 | 3 | 8" | 8" | 8" | 8" | 21 | 21'-0" | 21 | 21'-0" | 1 | 1'-0" | 4 | 12" | 22'-0" | 4 | 12" | 23'-0" | 4 | 12" | 2'-6" | 4'-9" | 4 | 12" | 2'-6" | 2'-8" | 4'-11" | 4 | 12" | 4'-0" | 4 | 12" | 4'-0" |
| 5 | 4 | 8" | 8" | 8" | 8" | 21 | 21'-0" | 21 | 21'-0" | 2 | 2'-0" | 4 | 12" | 22'-0" | 4 | 12" | 23'-0" | 4 | 12" | 2'-6" | 4'-9" | 4 | 12" | 2'-6" | 3'-2" | 5'-5" | 4 | 12" | 5'-0" | 4 | 12" | 5'-0" |
| 5 | 5 | 8" | 8" | 8" | 8" | 21 | 21'-0" | 21 | 21'-0" | 3 | 3'-0" | 4 | 12" | 22'-0" | 4 | 12" | 23'-0" | 3 | 12" | 2'-6" | 4'-10" | 4 | 12" | 2'-6" | 3'-8" | 5'-11" | 4 | 12" | 6'-0" | 4 | 12" | 6'-0" |
| 5 | 6 | 8" | 8" | 8" | 8" | 21 | 21'-0" | 21 | 21'-0" | 4 | 4'-0" | 4 | 12" | 22'-0" | 4 | 12" | 23'-0" | 3 | 12" | 2'-6" | 4'-10" | 4 | 12" | 2'-6" | 4'-2" | 6'-5" | 4 | 12" | 7'-0" | 4 | 12" | 7'-0" |
| 5 | 7 | 8" | 8" | 8" | 8" | 21 | 21'-0" | 21 | 21'-0" | 5 | 5'-0" | 4 | 12" | 22'-0" | 4 | 12" | 23'-0" | 4 | 12" | 2'-6" | 4'-9" | 4 | 12" | 2'-6" | 4'-8" | 6'-11" | 4 | 12" | 8'-0" | 4 | 12" | 8'-0" |
| 6 | 4 | 9 1/4" | 9 1/4" | 8" | 8" | 25 | 25'-0" | 25 | 25'-0" | 2 | 2'-0" | 4 | 12" | 25'-7" | 4 | 12" | 27'-0" | 4 | 12" | 2'-8 3/8" | 5'-2" | 4 | 12" | 2'-8 3/8" | 3'-3/4" | 5'-8" | 4 | 12" | 5'-2" | 4 | 12" | 5'-2" |
| 6 | 5 | 9 1/4" | 9 1/4" | 8" | 8" | 25 | 25'-0" | 25 | 25'-0" | 3 | 3'-0" | 4 | 11" | 25'-7" | 4 | 11" | 27'-0" | 4 | 11" | 2'-8 3/8" | 5'-2" | 4 | 11" | 2'-8 3/8" | 3'-9/4" | 6'-2" | 4 | 12" | 6'-2" | 4 | 12" | 6'-2" |
| 6 | 6 | 9 1/2" | 9 1/2" | 8" | 8" | 25 | 25'-0" | 25 | 25'-0" | 4 | 4'-0" | 4 | 11" | 25'-7" | 4 | 12" | 27'-0" | 4 | 12" | 2'-8 3/8" | 5'-2" | 4 | 12" | 2'-8 3/8" | 4'-3/2" | 6'-9" | 4 | 12" | 7'-3" | 4 | 12" | 7'-3" |
| 6 | 7 | 9 1/2" | 9 1/2" | 8" | 8" | 25 | 25'-0" | 25 | 25'-0" | 5 | 5'-0" | 4 | 11" | 25'-7" | 4 | 11" | 27'-0" | 4 | 11" | 2'-8 3/8" | 5'-2" | 4 | 11" | 2'-8 3/8" | 4'-9/2" | 7'-3" | 4 | 12" | 8'-3" | 4 | 12" | 8'-3" |
| 6 | 8 | 9 1/2" | 9 1/2" | 8" | 8" | 25 | 25'-0" | 25 | 25'-0" | 6 | 6'-0" | 4 | 11" | 25'-7" | 4 | 11" | 27'-0" | -- | ---- | ---- | ---- | 5 | 11" | 2'-8 3/8" | 5'-3/2" | 7'-8" | 4 | 12" | 9'-3" | 4 | 12" | 9'-3" |
| 7 | 4 | 10 1/2" | 10 1/2" | 8" | 8" | 29 | 29'-0" | 29 | 29'-0" | 2 | 2'-0" | 4 | 10" | 29'-2" | 4 | 10" | 31'-0" | 3 | 10" | 2'-10 3/4" | 5'-7" | 4 | 10" | 2'-10 3/4" | 3'-4/2" | 6'-0" | 4 | 12" | 5'-5" | 4 | 12" | 5'-5" |
| 7 | 6 | 10 3/4" | 10 3/4" | 8" | 8" | 29 | 29'-0" | 29 | 29'-0" | 4 | 4'-0" | 4 | 10" | 29'-2" | 4 | 10" | 31'-0" | 3 | 10" | 2'-10 3/4" | 5'-7" | 4 | 10" | 2'-10 3/4" | 4'-4 3/4" | 7'-0" | 4 | 12" | 7'-5" | 4 | 12" | 7'-5" |
| 7 | 8 | 11" | 11" | 8" | 8" | 29 | 29'-0" | 29 | 29'-0" | 6 | 6'-0" | 4 | 10" | 29'-2" | 4 | 10" | 31'-0" | 3 | 10" | 2'-10 3/4" | 5'-7" | 4 | 10" | 2'-10 3/4" | 5'-5" | 8'-1" | 4 | 12" | 9'-6" | 4 | 12" | 9'-6" |
| 7 | 10 | 11 1/4" | 11 1/4" | 8" | 8" | 29 | 29'-0" | 29 | 29'-0" | 8 | 8'-0" | 4 | 10" | 29'-2" | 4 | 10" | 31'-0" | 3 | 10" | 2'-10 3/4" | 5'-7" | 5 | 10" | 2'-10 3/4" | 6'-5/4" | 9'-0" | 5 | 10 1/2" | 11'-6" | 4 | 12" | 11'-6" |
| 8 | 4 | 12" | 12" | 8" | 8" | 33 | 33'-0" | 33 | 33'-0" | 2 | 2'-0" | 4 | 9" | 32'-10" | 4 | 9" | 35'-0" | 3 | 9" | 3'-1 1/4" | 6'-0" | 4 | 9" | 3'-1 1/4" | 3'-6" | 6'-4" | 4 | 12" | 5'-8" | 4 | 12" | 5'-8" |
| 8 | 6 | 12 1/4" | 12 1/4" | 8" | 8" | 33 | 33'-0" | 33 | 33'-0" | 4 | 4'-0" | 4 | 9" | 32'-10" | 4 | 9" | 35'-0" | -- | ---- | ---- | ---- | 4 | 9" | 3'-1 1/4" | 4'-6 1/4" | 7'-4" | 4 | 12" | 7'-9" | 4 | 12" | 7'-9" |
| 8 | 8 | 12 1/4" | 12 1/4" | 8" | 8" | 33 | 33'-0" | 33 | 33'-0" | 6 | 6'-0" | 5 | 9" | 32'-10" | 5 | 9" | 35'-0" | 3 | 9" | 3'-1 1/4" | 6'-0" | 4 | 9" | 3'-1 1/4" | 5'-6 1/4" | 8'-4" | 4 | 12" | 9'-9" | 4 | 12" | 9'-9" |
| 8 | 10 | 12 1/2" | 12 1/2" | 8" | 8" | 33 | 33'-0" | 33 | 33'-0" | 8 | 8'-0" | 5 | 9" | 32'-10" | 5 | 9" | 35'-0" | 3 | 9" | 3'-1 1/4" | 6'-0" | 5 | 9" | 3'-1 1/4" | 6'-6 1/2" | 9'-4" | 4 | 7" | 11'-9" | 4 | 12" | 11'-9" |
| 9 | 4 | 13" | 13" | 8" | 8" | 37 | 37'-0" | 37 | 37'-0" | 2 | 2'-0" | 5 | 8" | 36'-5" | 5 | 8" | 39'-0" | 3 | 8" | 3'-3 5/8" | 6'-5" | 4 | 8" | 3'-3 5/8" | 3'-7" | 6'-7" | 4 | 10 1/2" | 5'-10" | 4 | 12" | 5'-10" |
| 9 | 6 | 13 1/4" | 13 1/4" | 8" | 8" | 37 | 37'-0" | 37 | 37'-0" | 4 | 4'-0" | 5 | 8" | 36'-5" | 5 | 8" | 39'-0" | -- | ---- | ---- | ---- | 4 | 8" | 3'-3 5/8" | 4'-7 1/4" | 7'-8" | 4 | 12" | 7'-10" | 4 | 12" | 7'-10" |
| 9 | 8 | 13 1/4" | 13 1/4" | 8" | 8" | 37 | 37'-0" | 37 | 37'-0" | 6 | 6'-0" | 5 | 8" | 36'-5" | 5 | 8" | 39'-0" | 3 | 8" | 3'-3 5/8" | 6'-5" | 4 | 8" | 3'-3 5/8" | 5'-7 1/4" | 8'-8" | 4 | 12" | 9'-10" | 4 | 12" | 9'-10" |
| 9 | 10 | 13 1/2" | 13 1/2" | 8" | 8" | 37 | 37'-0" | 37 | 37'-0" | 8 | 8'-0" | 5 | 8" | 36'-5" | 5 | 8" | 39'-0" | 4 | 8" | 3'-3 5/8" | 6'-4" | 4 | 8" | 3'-3 5/8" | 6'-7 1/2" | 9'-8" | 4 | 8" | 11'-11" | 4 | 12" | 11'-11" |
| 9 | 12 | 13 1/2" | 13 1/2" | 8" | 8" | 37 | 37'-0" | 37 | 37'-0" | 10 | 10'-0" | 5 | 9" | 36'-5" | 5 | 9" | 39'-0" | -- | ---- | ---- | ---- | 7 | 9" | 3'-3 5/8" | 7'-7 1/2" | 10'-6" | 5 | 7 1/2" | 13'-11" | 4 | 12" | 13'-11" |
| 10 | 4 | 14 1/4" | 14 1/4" | 8" | 8" | 41 | 41'-0" | 41 | 41'-0" | 2 | 2'-0" | 5 | 9" | 40'-0" | 5 | 9" | 43'-0" | -- | ---- | ---- | ---- | 5 | 9" | 3'-6" | 3'-8 1/4" | 6'-10" | 4 | 10" | 6'-0" | 4 | 12" | 6'-0" |
| 10 | 6 | 14 1/2" | 14 1/2" | 8" | 8" | 41 | 41'-0" | 41 | 41'-0" | 4 | 4'-0" | 5 | 9" | 40'-0" | 5 | 9" | 43'-0" | -- | ---- | ---- | ---- | 5 | 9" | 3'-6" | 4'-8 1/2" | 7'-11" | 4 | 12" | 8'-1" | 4 | 12" | 8'-1" |
| 10 | 8 | 14 1/2" | 14 1/2" | 8" | 8" | 41 | 41'-0" | 41 | 41'-0" | 6 | 6'-0" | 5 | 9" | 40'-0" | 5 | 9" | 43'-0" | -- | ---- | ---- | ---- | 5 | 9" | 3'-6" | 5'-8 1/2" | 8'-11" | 4 | 12" | 10'-1" | 4 | 12" | 10'-1" |
| 10 | 10 | 14 3/4" | 14 3/4" | 8" | 8" | 41 | 41'-0" | 41 | 41'-0" | 8 | 8'-0" | 5 | 9" | 40'-0" | 5 | 9" | 43'-0" | 3 | 9" | 3'-6" | 6'-10" | 5 | 9" | 3'-6" | 6'-8 3/4" | 9'-11" | 4 | 8" | 12'-1" | 4 | 12" | 12'-1" |
| 10 | 12 | 14 3/4" | 14 3/4" | 8" | 8" | 41 | 41'-0" | 41 | 41'-0" | 10 | 10'-0" | 6 | 9" | 40'-0" | 5 | 9" | 43'-0" | 3 | 9" | 3'-6" | 6'-10" | 6 | 9" | 3'-6" | 7'-8 3/4" | 10'-10" | 5 | 7 1/2" | 14'-1" | 4 | 12" | 14'-1" |
| 12 | 6 | 17" | 17" | 8" | 8" | 49 | 49'-0" | 49 | 49'-0" | 4 | 4'-0" | 6 | 8" | 47'-2" | 5 | 8" | 51'-0" | -- | ---- | ---- | ---- | 4 | 8" | 3'-10 3/4" | 4'-11" | 8'-7" | 4 | 12" | 8'-6" | 4 | 12" | 8'-6" |
| 12 | 8 | 17 1/4" | 17 1/4" | 8" | 8" | 49 | 49'-0" | 49 | 49'-0" | 6 | 6'-0" | 6 | 8" | 47'-2" | 5 | 8" | 51'-0" | 3 | 8" | 3'-10 3/4" | 7'-7" | 4 | 8" | 3'-10 3/4" | 5'-11 1/4" | 9'-7" | 4 | 12" | 10'-6" | 4 | 12" | 10'-6" |
| 12 | 10 | 17 1/2" | 17 1/2" | 8" | 8" | 49 | 49'-0" | 49 | 49'-0" | 8 | 8'-0" | 6 | 8" | 47'-2" | 5 | 8" | 51'-0" | -- | ---- | ---- | ---- | 4 | 8" | 3'-10 3/4" | 6'-11 1/2" | 10'-7" | 4 | 7 1/2" | 12'-7" | 4 | 12" | 12'-7" |
| 12 | 12 | 17 1/2" | 17 1/2" | 8" | 8" | 49 | 49'-0" | 49 | 49'-0" | 10 | 10'-0" | 6 | 8" | 47'-2" | 5 | 8" | 51'-0" | 4 | 8" | 3'-10 3/4" | 7'-6" | 5 | 8" | 3'-10 3/4" | 7'-11 1/2" | 11'-6" | 5 | 7 1/2" | 14'-7" | 4 | 12" | 14'-7" |

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

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| <h2>QUADRUPLE BOX CULVERTS</h2> <h3>15 TO 20 FT. FILLS</h3> <p>VIRGINIA DEPARTMENT OF TRANSPORTATION</p> | | | <p>STRUCTURE AND BRIDGE DIVISION</p> |
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