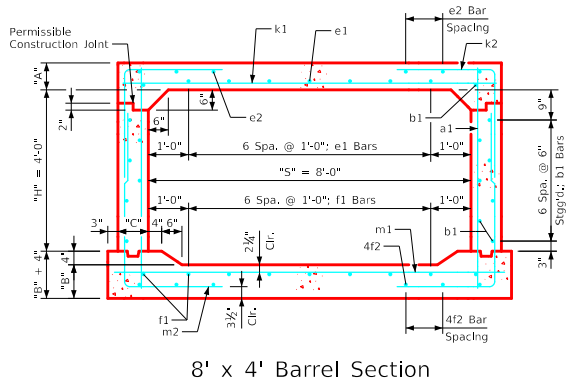
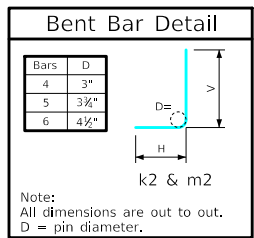


### Variable Dimensions and Quantities for 8' x 4' Barrel Sections

| Dimensions |   |   |      |      |     |   |      |     |        | Bar List |     |     |      |     |     |      |     |     |      |     |   |      |     |   |      |     |       | Quantities |     |        |        |                  |   |       |       |               |        |   |    |        |       |        |   |        |       |       |       |       |        |
|------------|---|---|------|------|-----|---|------|-----|--------|----------|-----|-----|------|-----|-----|------|-----|-----|------|-----|---|------|-----|---|------|-----|-------|------------|-----|--------|--------|------------------|---|-------|-------|---------------|--------|---|----|--------|-------|--------|---|--------|-------|-------|-------|-------|--------|
| Fill       | S | H | A    | B    | C   | D | a1   |     | b1     |          | e1  |     | e2   |     | f1  |      | f2  |     | k1   |     |   | k2   |     |   | k9   |     | m1    |            | m2  |        |        | Concrete (CY/FT) |   |       |       | Steel (LB/FT) |        |   |    |        |       |        |   |        |       |       |       |       |        |
| 0          | 8 | 4 | 12.5 | 11   | 9   | 9 | Size | Sp. | L      | Size     | Sp. | No. | Size | Sp. | No. | Size | Sp. | No. | Size | Sp. | L | Size | Sp. | L | Size | Sp. | L     | Size       | Sp. | L      | Size   | Sp.              | L | Slab  | Floor | Walls         | Total  |   |    |        |       |        |   |        |       |       |       |       |        |
| 1          | 8 | 4 | 10.5 | 10.5 | 9   | 9 | 5    | 12  | 5'-10" | 4        | 6   | 16  | 5    | 12  | 7   | 4    | 14  | 6   | 4    | 12  | 9 | 4    | 14  | 6 | 6    | 9   | 9'-2" | 4          | 6   | 5'-10" | 2'-11" | 2'-11"           | 4 | 9'-2" | 6     | 9             | 9'-8"  | 4 | 6  | 7'-4"  | 3'-0" | 4'-4"  | 4 | 9'-8"  | 0.399 | 0.376 | 0.202 | 0.977 | 121.58 |
| 2          | 8 | 4 | 8    | 10   | 9   | 6 | 4    | 6   | 5'-5"  | 4        | 6   | 16  | 5    | 12  | 7   | 4    | 13  | 6   | 4    | 12  | 9 | 4    | 12  | 6 | 6    | 9   | 9'-2" | 4          | 6   | 5'-6"  | 2'-9"  | 2'-9"            | 4 | 9'-2" | 5     | 6             | 9'-8"  | 4 | 6  | 6'-10" | 2'-7" | 4'-3"  | 4 | 9'-8"  | 0.267 | 0.345 | 0.202 | 0.814 | 119.89 |
| 3          | 8 | 4 | 8    | 10   | 9   | 9 | 4    | 9   | 5'-5"  | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 13  | 6   | 4    | 12  | 9 | 4    | 11  | 6 | 6    | 9   | 9'-2" | 4          | 6   | 5'-6"  | 2'-9"  | 2'-9"            | 4 | 9'-2" | 6     | 9             | 9'-8"  | 4 | 6  | 6'-8"  | 2'-5" | 4'-3"  | 4 | 9'-8"  | 0.267 | 0.345 | 0.202 | 0.814 | 111.92 |
| 4-7        | 8 | 4 | 8    | 10   | 9   | 9 | 4    | 12  | 5'-5"  | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 13  | 6   | 4    | 12  | 9 | 4    | 11  | 6 | 6    | 9   | 9'-2" | 4          | 6   | 5'-6"  | 2'-9"  | 2'-9"            | 4 | 9'-2" | 5     | 6             | 9'-8"  | 4 | 6  | 6'-8"  | 2'-5" | 4'-3"  | 4 | 9'-8"  | 0.267 | 0.345 | 0.202 | 0.814 | 109.79 |
| 8-10       | 8 | 4 | 8    | 10   | 9   | 9 | 4    | 9   | 5'-5"  | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 10  | 6   | 4    | 12  | 9 | 4    | 10  | 6 | 6    | 9   | 9'-2" | 4          | 6   | 5'-0"  | 2'-3"  | 2'-9"            | 4 | 9'-2" | 5     | 6             | 9'-8"  | 4 | 6  | 6'-7"  | 2'-4" | 4'-3"  | 4 | 9'-8"  | 0.267 | 0.345 | 0.202 | 0.814 | 110.47 |
| 11-15      | 8 | 4 | 8    | 10   | 9   | 9 | 4    | 12  | 5'-5"  | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 10  | 6   | 4    | 12  | 9 | 4    | 10  | 6 | 6    | 6   | 9'-2" | 5          | 6   | 5'-5"  | 2'-4"  | 3'-1"            | 5 | 9'-2" | 6     | 6             | 9'-8"  | 5 | 6  | 6'-7"  | 2'-4" | 4'-3"  | 5 | 9'-8"  | 0.267 | 0.345 | 0.202 | 0.814 | 145.61 |
| 16-20      | 8 | 4 | 8.5  | 11   | 9   | 9 | 4    | 12  | 5'-6"  | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 10  | 6   | 4    | 12  | 9 | 4    | 9   | 6 | 6    | 6   | 9'-2" | 5          | 6   | 5'-5"  | 2'-3"  | 3'-2"            | 5 | 9'-2" | 6     | 6             | 9'-8"  | 5 | 6  | 6'-6"  | 2'-2" | 4'-4"  | 5 | 9'-8"  | 0.282 | 0.376 | 0.202 | 0.860 | 145.39 |
| 21-25      | 8 | 4 | 10   | 12.5 | 9   | 9 | 4    | 12  | 5'-9"  | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 9   | 6   | 4    | 12  | 9 | 4    | 18  | 4 | 8    | 9   | 9'-2" | 5          | 6   | 5'-5"  | 2'-2"  | 3'-3"            | 5 | 9'-2" | 7     | 6             | 9'-8"  | 5 | 6  | 6'-7"  | 2'-1" | 4'-6"  | 5 | 9'-8"  | 0.326 | 0.422 | 0.202 | 0.950 | 161.61 |
| 26-30      | 8 | 4 | 11   | 13.5 | 9   | 9 | 4    | 12  | 5'-11" | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 9   | 6   | 4    | 12  | 9 | 4    | 18  | 4 | 7    | 6   | 9'-2" | 5          | 6   | 5'-6"  | 2'-2"  | 3'-4"            | 5 | 9'-2" | 7     | 6             | 9'-8"  | 5 | 6  | 6'-8"  | 2'-1" | 4'-7"  | 5 | 9'-8"  | 0.355 | 0.453 | 0.202 | 1.010 | 166.37 |
| 31-35      | 8 | 4 | 12.5 | 14.5 | 9   | 6 | 4    | 6   | 6'-2"  | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 11  | 6   | 4    | 12  | 9 | 4    | 11  | 6 | 7    | 6   | 9'-2" | 6          | 12  | 6'-3"  | 2'-5"  | 3'-10"           | 6 | 9'-2" | 7     | 6             | 9'-8"  | 6 | 12 | 7'-1"  | 2'-5" | 4'-8"  | 6 | 9'-8"  | 0.399 | 0.484 | 0.202 | 1.085 | 168.32 |
| 36-40      | 8 | 4 | 13.5 | 16   | 9   | 6 | 4    | 6   | 6'-4"  | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 11  | 6   | 4    | 12  | 9 | 4    | 11  | 6 | 9    | 9   | 9'-2" | 6          | 12  | 6'-5"  | 2'-5"  | 4'-0"            | 6 | 9'-2" | 9     | 9             | 9'-8"  | 6 | 12 | 7'-2"  | 2'-5" | 4'-9"  | 6 | 9'-8"  | 0.428 | 0.530 | 0.202 | 1.160 | 180.89 |
| 41-45      | 8 | 4 | 14.5 | 17   | 9   | 6 | 4    | 6   | 6'-6"  | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 11  | 6   | 4    | 12  | 9 | 4    | 11  | 6 | 9    | 9   | 9'-2" | 6          | 12  | 6'-6"  | 2'-5"  | 4'-1"            | 6 | 9'-2" | 8     | 6             | 9'-8"  | 6 | 12 | 7'-3"  | 2'-5" | 4'-10" | 6 | 9'-8"  | 0.458 | 0.561 | 0.202 | 1.221 | 188.34 |
| 46-50      | 8 | 4 | 15.5 | 17.5 | 9.5 | 6 | 4    | 6   | 6'-8"  | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 14  | 6   | 4    | 12  | 9 | 4    | 11  | 6 | 8    | 6   | 9'-3" | 6          | 12  | 7'-1"  | 3'-0"  | 4'-1"            | 6 | 9'-3" | 8     | 6             | 9'-9"  | 6 | 12 | 7'-5"  | 2'-6" | 4'-11" | 6 | 9'-9"  | 0.492 | 0.582 | 0.213 | 1.287 | 198.24 |
| 51-55      | 8 | 4 | 16   | 18.5 | 10  | 6 | 4    | 6   | 6'-9"  | 4        | 6   | 16  | 4    | 12  | 7   | 4    | 14  | 6   | 4    | 12  | 9 | 4    | 11  | 6 | 8    | 6   | 9'-4" | 6          | 12  | 7'-3"  | 3'-1"  | 4'-2"            | 6 | 9'-4" | 8     | 6             | 9'-10" | 6 | 12 | 7'-6"  | 2'-6" | 5'-0"  | 6 | 9'-10" | 0.512 | 0.619 | 0.224 | 1.355 | 200.21 |



- Notes:**
- Dimensions listed on this sheet to be used in conjunction with Sheet RCB G3-20.
  - The k2 and m2 bars horizontal legs may lap in low fill situations.
  - Fill dimensions "S" and "H" are in feet.
  - Dimensions "A", "B", "C", "D", and "Sp." listed in the bar list are in inches.
  - Dimensions "L", "H", "V" are in feet and inches.

|   |                             |   |
|---|-----------------------------|---|
| LATEST REVISION DATE                              | APPROVED BY BRIDGE ENGINEER | Standard Design<br><b>Single Reinforced Concrete Box Culverts</b><br>July, 2020 |
| Culvert Barrel Details<br>8' x 4' Barrel Sections |                             | RCB 8-4-20  |

ENGLISHLRFDDESIGNEDSINGLECULVERTS.DGN - RCB 8-4-20 - THIS SHEET ISSUED 07-2020.