CONST. NO. _____

| PROJECT NO. | YEAR | SHEET NO. |
|---|---|---|
| | | |

REVISIONS

| NO. | DATE | BY | BRIEF DESCRIPTION |
|---|---|---|---|
| | | | |

## 3 @ 12 x 8 REINFORCED CONCRETE SLAB BRIDGE

| | Fill Height ft. | Dimensions ST in. | WT in. | IT in. | BW ft. | Bars TST Size | No. | Spacing in. | Length ft. | Bars TSB Size | No. | Spacing in. | Length ft. | Bars EWE Size | No. | Spacing in. | Length ft. | Bar EWI Size | No. | Spacing in. | Length ft. | Bar IW Size | No. | Spacing in. | Length ft. | Bars LNT No. | Bars LND No. | Bars WS No. | Bars WF No. | Bars EWF Length ft. | Concrete CY/LF | Reinf. Steel LB/LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Continuous | No Fill | 9.5 | 8 | 8 | 38.67 | 7 | 2 | 6 | 38.17 | 9 | 1 | 12 | 38.17 | 4 | 2 | 12 | 6.50 | 4 | 2 | 12 | 6.50 | 4 | 4 | 12 | 6.50 | 98 | 36 | 4 | 4 | 1.67 | 2.25 | 545 |
| | 3 | 10 | 8 | 8 | 38.67 | 9 | 1 | 12 | 38.17 | 6 | 2 | 6 | 38.17 | 4 | 2 | 12 | 6.50 | 4 | 2 | 12 | 6.50 | 4 | 4 | 12 | 6.50 | 98 | 36 | 4 | 4 | 1.67 | 2.31 | 504 |
| | 5 | 9 | 8 | 8 | 38.67 | 7 | 2 | 6 | 38.17 | 8 | 1 | 12 | 38.17 | 4 | 2 | 12 | 6.50 | 4 | 2 | 12 | 6.50 | 4 | 4 | 12 | 6.50 | 136 | 0 | 4 | 4 | 1.67 | 2.19 | 505 |
| | 10 | 11 | 8 | 8 | 38.67 | 9 | 1 | 12 | 38.17 | 8 | 1 | 12 | 38.17 | 4 | 2 | 12 | 6.50 | 5 | 2 | 12 | 6.50 | 4 | 4 | 12 | 6.50 | 136 | 0 | 4 | 4 | 1.67 | 2.43 | 484 |
| Moment Break | 20 | 13 | 8 | 8 | 38.67 | 4 | 3 | 12 | 12.67 | 9 | 2 | 6 | 38.17 | 4 | 2 | 12 | 6.50 | 5 | 2 | 12 | 6.50 | 4 | 4 | 12 | 6.50 | 136 | 0 | 4 | 4 | 1.67 | 2.67 | 537 |
| | 30 | 19 | 9 | 8 | 38.83 | 4 | 3 | 12 | 12.67 | 11 | 1 | 12 | 38.33 | 4 | 2 | 12 | 6.50 | 5 | 2 | 12 | 6.50 | 5 | 4 | 12 | 6.50 | 136 | 0 | 4 | 4 | 1.75 | 3.45 | 491 |
| | 40 | 24 | 10 | 8 | 39.00 | 4 | 3 | 12 | 12.67 | 11 | 1 | 12 | 38.50 | 4 | 2 | 12 | 6.50 | 5 | 2 | 12 | 6.50 | 5 | 4 | 12 | 6.50 | 138 | 0 | 4 | 4 | 1.83 | 4.11 | 493 |
| | 50 | 28 | 11 | 8 | 39.17 | 4 | 3 | 12 | 12.67 | 11 | 1 | 12 | 38.67 | 4 | 2 | 12 | 6.50 | 4 | 2 | 12 | 6.50 | 4 | 8 | 6 | 6.50 | 138 | 0 | 4 | 4 | 1.92 | 4.65 | 497 |
| | 60 | 31 | 12 | 8 | 39.33 | 4 | 3 | 12 | 12.67 | 9 | 2 | 6 | 38.83 | 4 | 2 | 12 | 6.50 | 4 | 2 | 12 | 6.50 | 7 | 4 | 12 | 6.50 | 138 | 0 | 4 | 4 | 2 | 5.08 | 574 |

## 3 @ 12 x 9 REINFORCED CONCRETE SLAB BRIDGE

| | Fill Height ft. | Dimensions ST in. | WT in. | IT in. | BW ft. | Bars TST Size | No. | Spacing in. | Length ft. | Bars TSB Size | No. | Spacing in. | Length ft. | Bars EWE Size | No. | Spacing in. | Length ft. | Bar EWI Size | No. | Spacing in. | Length ft. | Bar IW Size | No. | Spacing in. | Length ft. | Bars LNT No. | Bars LND No. | Bars WS No. | Bars WF No. | Bars EWF Length ft. | Concrete CY/LF | Reinf. Steel LB/LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Continuous | No Fill | 9.5 | 8 | 8 | 38.66 | 7 | 2 | 6 | 38.16 | 9 | 1 | 12 | 38.16 | 4 | 2 | 12 | 7.50 | 4 | 2 | 12 | 7.50 | 4 | 4 | 12 | 7.50 | 106 | 36 | 4 | 4 | 1.66 | 2.35 | 555 |
| | 3 | 10 | 8 | 8 | 38.66 | 9 | 1 | 12 | 38.16 | 6 | 2 | 6 | 38.16 | 4 | 2 | 12 | 7.50 | 4 | 2 | 12 | 7.50 | 4 | 4 | 12 | 7.50 | 106 | 36 | 4 | 4 | 1.66 | 2.41 | 514 |
| | 5 | 9 | 8 | 8 | 38.66 | 7 | 2 | 6 | 38.16 | 8 | 1 | 12 | 38.16 | 4 | 2 | 12 | 7.50 | 5 | 2 | 12 | 7.50 | 4 | 4 | 12 | 7.50 | 144 | 0 | 4 | 4 | 1.66 | 2.29 | 521 |
| | 10 | 11 | 8 | 8 | 38.66 | 9 | 1 | 12 | 38.16 | 8 | 1 | 12 | 38.16 | 4 | 2 | 12 | 7.50 | 5 | 2 | 12 | 7.50 | 4 | 4 | 12 | 7.50 | 144 | 0 | 4 | 4 | 1.66 | 2.53 | 495 |
| Moment Break | 20 | 13 | 8 | 8 | 38.66 | 4 | 3 | 12 | 12.66 | 9 | 2 | 6 | 38.16 | 4 | 2 | 12 | 7.50 | 7 | 2 | 12 | 7.50 | 4 | 4 | 12 | 7.50 | 144 | 0 | 4 | 4 | 1.66 | 2.77 | 563 |
| | 30 | 19 | 10 | 8 | 39.00 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 38.50 | 4 | 2 | 12 | 7.50 | 4 | 4 | 6 | 7.50 | 5 | 4 | 12 | 7.50 | 146 | 0 | 4 | 4 | 1.83 | 3.62 | 511 |
| | 40 | 24 | 11 | 8 | 39.16 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 38.66 | 4 | 2 | 12 | 7.50 | 6 | 2 | 12 | 7.50 | 5 | 4 | 12 | 7.50 | 146 | 0 | 4 | 4 | 1.91 | 4.29 | 514 |
| | 50 | 28 | 13 | 8 | 39.50 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 39.00 | 4 | 2 | 12 | 7.50 | 5 | 2 | 12 | 7.50 | 4 | 8 | 6 | 7.50 | 146 | 0 | 4 | 4 | 2.08 | 4.91 | 518 |
| | 60 | 31 | 14 | 8 | 39.66 | 4 | 3 | 12 | 12.66 | 9 | 2 | 6 | 39.16 | 4 | 2 | 12 | 7.50 | 5 | 2 | 12 | 7.50 | 7 | 4 | 12 | 7.50 | 146 | 0 | 4 | 4 | 2.16 | 5.35 | 599 |

## 3 @ 12 x 10 REINFORCED CONCRETE SLAB BRIDGE

| | Fill Height ft. | Dimensions ST in. | WT in. | IT in. | BW ft. | Bars TST Size | No. | Spacing in. | Length ft. | Bars TSB Size | No. | Spacing in. | Length ft. | Bars EWE Size | No. | Spacing in. | Length ft. | Bar EWI Size | No. | Spacing in. | Length ft. | Bar IW Size | No. | Spacing in. | Length ft. | Bars LNT No. | Bars LND No. | Bars WS No. | Bars WF No. | Bars EWF Length ft. | Concrete CY/LF | Reinf. Steel LB/LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Continuous | No Fill | 9.5 | 8 | 8 | 38.66 | 7 | 2 | 6 | 38.16 | 9 | 1 | 12 | 38.16 | 4 | 2 | 12 | 8.50 | 4 | 2 | 12 | 8.50 | 4 | 4 | 12 | 8.50 | 114 | 36 | 4 | 4 | 1.66 | 2.45 | 567 |
| | 3 | 10 | 8 | 8 | 38.66 | 9 | 1 | 12 | 38.16 | 6 | 2 | 6 | 38.16 | 4 | 2 | 12 | 8.50 | 4 | 2 | 12 | 8.50 | 4 | 4 | 12 | 8.50 | 114 | 36 | 4 | 4 | 1.66 | 2.51 | 525 |
| | 5 | 9 | 8 | 8 | 38.66 | 7 | 2 | 6 | 38.16 | 8 | 1 | 12 | 38.16 | 4 | 2 | 12 | 8.50 | 5 | 2 | 12 | 8.50 | 4 | 4 | 12 | 8.50 | 152 | 0 | 4 | 4 | 1.66 | 2.39 | 533 |
| | 10 | 11 | 8 | 8 | 38.66 | 9 | 1 | 12 | 38.16 | 8 | 1 | 12 | 38.16 | 4 | 2 | 12 | 8.50 | 6 | 2 | 12 | 8.50 | 4 | 4 | 12 | 8.50 | 152 | 0 | 4 | 4 | 1.66 | 2.63 | 515 |
| Moment Break | 20 | 13 | 9 | 8 | 38.83 | 4 | 3 | 12 | 12.66 | 9 | 2 | 6 | 38.33 | 4 | 2 | 12 | 8.50 | 7 | 2 | 12 | 8.50 | 4 | 4 | 12 | 8.50 | 152 | 0 | 4 | 4 | 1.75 | 2.94 | 578 |
| | 30 | 19 | 11 | 8 | 39.16 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 38.66 | 4 | 2 | 12 | 8.50 | 7 | 2 | 12 | 8.50 | 5 | 4 | 12 | 8.50 | 154 | 0 | 4 | 4 | 1.91 | 3.80 | 537 |
| | 40 | 24 | 13 | 8 | 39.50 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 39.00 | 4 | 2 | 12 | 8.50 | 7 | 2 | 12 | 8.50 | 5 | 4 | 12 | 8.50 | 154 | 0 | 4 | 4 | 2.08 | 4.55 | 539 |
| | 50 | 28 | 14 | 8 | 39.66 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 39.16 | 4 | 2 | 12 | 8.50 | 7 | 2 | 12 | 8.50 | 4 | 8 | 6 | 8.50 | 154 | 0 | 4 | 4 | 2.16 | 5.11 | 550 |
| | 60 | 31 | 15 | 8 | 39.83 | 4 | 3 | 12 | 12.66 | 9 | 2 | 6 | 39.33 | 4 | 2 | 12 | 8.50 | 6 | 2 | 12 | 8.50 | 7 | 4 | 12 | 8.50 | 154 | 0 | 4 | 4 | 2.25 | 5.56 | 624 |

## 3 @ 12 x 11 REINFORCED CONCRETE SLAB BRIDGE

| | Fill Height ft. | Dimensions ST in. | WT in. | IT in. | BW ft. | Bars TST Size | No. | Spacing in. | Length ft. | Bars TSB Size | No. | Spacing in. | Length ft. | Bars EWE Size | No. | Spacing in. | Length ft. | Bar EWI Size | No. | Spacing in. | Length ft. | Bar IW Size | No. | Spacing in. | Length ft. | Bars LNT No. | Bars LND No. | Bars WS No. | Bars WF No. | Bars EWF Length ft. | Concrete CY/LF | Reinf. Steel LB/LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Continuous | No Fill | 9.5 | 8 | 8 | 38.66 | 7 | 2 | 6 | 38.16 | 9 | 1 | 12 | 38.16 | 4 | 2 | 12 | 9.50 | 4 | 2 | 12 | 9.50 | 4 | 4 | 12 | 9.50 | 122 | 36 | 4 | 4 | 1.66 | 2.55 | 577 |
| | 3 | 10 | 8 | 8 | 38.66 | 9 | 1 | 12 | 38.16 | 6 | 2 | 6 | 38.16 | 4 | 2 | 12 | 9.50 | 5 | 2 | 12 | 9.50 | 4 | 4 | 12 | 9.50 | 122 | 36 | 4 | 4 | 1.66 | 2.61 | 543 |
| | 5 | 9 | 8 | 8 | 38.66 | 7 | 2 | 6 | 38.16 | 8 | 1 | 12 | 38.16 | 4 | 2 | 12 | 9.50 | 4 | 4 | 6 | 9.50 | 4 | 4 | 12 | 9.50 | 160 | 0 | 4 | 4 | 1.66 | 2.49 | 550 |
| | 10 | 11 | 8 | 8 | 38.66 | 9 | 1 | 12 | 38.16 | 8 | 1 | 12 | 38.16 | 4 | 2 | 12 | 9.50 | 8 | 2 | 12 | 9.50 | 4 | 4 | 12 | 9.50 | 160 | 0 | 4 | 4 | 1.66 | 2.73 | 549 |
| Moment Break | 20 | 13 | 10 | 8 | 39.00 | 4 | 3 | 12 | 12.66 | 9 | 2 | 6 | 38.50 | 4 | 2 | 12 | 9.50 | 8 | 2 | 12 | 9.50 | 4 | 4 | 12 | 9.50 | 162 | 0 | 4 | 4 | 1.83 | 3.12 | 606 |
| | 30 | 19 | 12 | 8 | 39.33 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 38.83 | 4 | 2 | 12 | 9.50 | 8 | 2 | 12 | 9.50 | 5 | 4 | 12 | 9.50 | 162 | 0 | 4 | 4 | 2 | 3.99 | 565 |
| | 40 | 24 | 14 | 8 | 39.66 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 39.16 | 4 | 2 | 12 | 9.50 | 5 | 4 | 6 | 9.50 | 4 | 8 | 6 | 9.50 | 162 | 0 | 4 | 4 | 2.16 | 4.76 | 567 |
| | 50 | 28 | 15 | 8 | 39.83 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 39.33 | 4 | 2 | 12 | 9.50 | 5 | 4 | 6 | 9.50 | 4 | 8 | 6 | 9.50 | 162 | 0 | 4 | 4 | 2.25 | 5.33 | 568 |
| | 60 | 31 | 17 | 8 | 40.16 | 4 | 3 | 12 | 12.66 | 9 | 2 | 6 | 39.66 | 4 | 2 | 12 | 9.50 | 7 | 2 | 12 | 9.50 | 7 | 4 | 12 | 9.50 | 164 | 0 | 4 | 4 | 2.41 | 5.87 | 657 |

## 3 @ 12 x 12 REINFORCED CONCRETE SLAB BRIDGE

| | Fill Height ft. | Dimensions ST in. | WT in. | IT in. | BW ft. | Bars TST Size | No. | Spacing in. | Length ft. | Bars TSB Size | No. | Spacing in. | Length ft. | Bars EWE Size | No. | Spacing in. | Length ft. | Bar EWI Size | No. | Spacing in. | Length ft. | Bar IW Size | No. | Spacing in. | Length ft. | Bars LNT No. | Bars LND No. | Bars WS No. | Bars WF No. | Bars EWF Length ft. | Concrete CY/LF | Reinf. Steel LB/LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Continuous | No Fill | 9.5 | 8 | 8 | 38.66 | 7 | 2 | 6 | 38.16 | 9 | 1 | 12 | 38.16 | 4 | 2 | 12 | 10.50 | 5 | 2 | 12 | 10.50 | 4 | 4 | 12 | 10.50 | 130 | 36 | 4 | 4 | 1.66 | 2.65 | 595 |
| | 3 | 10 | 8 | 8 | 38.66 | 9 | 1 | 12 | 38.16 | 6 | 2 | 6 | 38.16 | 4 | 2 | 12 | 10.50 | 4 | 4 | 6 | 10.50 | 4 | 4 | 12 | 10.50 | 130 | 36 | 4 | 4 | 1.66 | 2.71 | 560 |
| | 5 | 9 | 8 | 8 | 38.66 | 7 | 2 | 6 | 38.16 | 8 | 1 | 12 | 38.16 | 4 | 2 | 12 | 10.50 | 7 | 2 | 12 | 10.50 | 4 | 4 | 12 | 10.50 | 168 | 0 | 4 | 4 | 1.66 | 2.59 | 576 |
| | 10 | 11 | 9 | 8 | 38.83 | 9 | 1 | 12 | 38.33 | 8 | 1 | 12 | 38.33 | 4 | 2 | 12 | 10.50 | 8 | 2 | 12 | 10.50 | 4 | 4 | 12 | 10.50 | 168 | 0 | 4 | 4 | 1.75 | 2.91 | 564 |
| Moment Break | 20 | 13 | 11 | 8 | 39.16 | 4 | 3 | 12 | 12.66 | 9 | 2 | 6 | 38.66 | 4 | 2 | 12 | 10.50 | 8 | 2 | 12 | 10.50 | 4 | 4 | 12 | 10.50 | 170 | 0 | 4 | 4 | 1.91 | 3.31 | 622 |
| | 30 | 19 | 13 | 8 | 39.50 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 39.00 | 4 | 2 | 12 | 10.50 | 8 | 2 | 12 | 10.50 | 5 | 4 | 12 | 10.50 | 170 | 0 | 4 | 4 | 2.08 | 4.20 | 583 |
| | 40 | 24 | 15 | 8 | 39.83 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 39.33 | 4 | 2 | 12 | 10.50 | 8 | 2 | 12 | 10.50 | 4 | 8 | 6 | 10.50 | 170 | 0 | 4 | 4 | 2.25 | 4.98 | 597 |
| | 50 | 28 | 17 | 8 | 40.16 | 4 | 3 | 12 | 12.66 | 11 | 1 | 12 | 39.66 | 4 | 2 | 12 | 10.50 | 8 | 2 | 12 | 10.50 | 4 | 8 | 6 | 10.50 | 172 | 0 | 4 | 4 | 2.41 | 5.65 | 600 |
| | 60 | 31 | 19 | 8 | 40.50 | 4 | 3 | 12 | 12.66 | 9 | 2 | 6 | 40.00 | 4 | 2 | 12 | 10.50 | 5 | 4 | 6 | 10.50 | 7 | 4 | 12 | 10.50 | 172 | 0 | 4 | 4 | 2.58 | 6.20 | 679 |

Note: Maximum fill height is measured from the bottom of the top slab. To obtain the total fill height from the flow line, add the height of the box.

Note: When top slab is the riding surface (No Fill), the concrete cover to the top mat of reinforcing shall be 2-1/2 inches.

The following bar information applies to all fill cases in the table above:

Bars LNT Size = 4 Spacing = 12 in.
Bars LND Size = 5 Spacing = 12 in.
Bars WS Size = 8 Length = 5.00 ft. Spacing = 12 in.
Bars WF Size = 8 Length = 6.00 ft. Spacing = 12 in.
Bars IWF Size = 4 No. = 2 Spacing = 12 in. Length = 1.66 ft.
Bars EWF Size = 4 No. = 2 Spacing = 12 in.

NOTE: FOR DESCRIPTIONS OF BOX DIMENSIONS AND REINFORCING BAR DESIGNATIONS SEE STANDARD DRAWING NO. STD-15-4.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

# STANDARD REINFORCED CONCRETE SLAB BRIDGE
INTERIOR SECTION
SPANS: 3 BARREL AT 12'-0"
CLEAR HEIGHTS 4'-0" THRU 10'-0"
0'-0" THRU 60'-0" FILL
2000

CORRECT Edward P. Wasserman
ENGINEER OF STRUCTURES

STD-15-141

DESIGNED BY R. LEFEVRE/I. YOUSSEF DATE 1-00
DRAWN BY KEVIN MARTINKO DATE 3-00
SUPERVISED BY FIELDS & HOLLORAN DATE 3-00
CHECKED BY R. LEFEVRE/I. YOUSSEF DATE 6-00

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