TYPICAL SECTION

BARS C

BARS D

BARS Z

BARS Y

BARS K (#4)

(SIZE = 3'-0"

LENGTH = 4'-0"

TOP SLAB

BAR DIMENSIONS

<table>
<thead>
<tr>
<th>N</th>
<th>X</th>
<th>X'</th>
</tr>
</thead>
<tbody>
<tr>
<td>0'-0&quot;</td>
<td>1'-0&quot;</td>
<td>1'-0&quot;</td>
</tr>
<tr>
<td>2'-0&quot;</td>
<td>3'-0&quot;</td>
<td>3'-0&quot;</td>
</tr>
</tbody>
</table>

4'-0" to 6'-0" Max.

- For structures with pedestrian rail or curbs taller than 3'-0", refer to the Extended Curb Details (ECD) standard sheet.
- For structures with T631 or T631LS bridge rail, refer to the Rail Anchorage Curb (RAC) standard sheet. Refer to the Mounting Details for T631 & T631LS Rails (T631-CM) standard sheet for structures with bridge rail other than T631 or T631LS.

For vehicle safety, the following requirements must be met:
- For structures without bridge rail, construct curbs not more than 3'-0" above finished grade.
- For structures with bridge rail, construct curbs flush with finished grade. Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.

For curbs less than 3'-0" high, tilt Bars K or reduce bar height as necessary to maintain cover. For curbs less than 3'-0", Bars K may be omitted.

For vehicle safety, 3'-0" when the Rail Anchorage Curb (RAC) standard sheet is referred to elsewhere in the plans.

CONSTRUCTION NOTES:
Do not use permanent forms.

Chamfer the bottom edge of the top slab 3" at the entrance.

Example conversion: Replacing No. 6 Gr 60 at 6" Spacing with WWR

Required WWR = (0.44 sq. in. per 0.5 ft.) x (60 ksf / 70 ksf) = 0.755 sq. in. per ft.

Example conversion: Replacing No. 6 Gr 60 at 6" Spacing with WWR

Required lap length for the provided D30.6 wire is 2'-1" (the same minimum lap length required for uncoated #5 bars, as listed under MATERIAL NOTES).

Spacing of WWR is limited to 4" Min and 18" Max. When required, provide lap splices in the WWR of the same length required for the equivalent bar sizes, rounded up to the nearest wire between conventional bar sizes. The lap length required for WWR is never less than the lap length required for uncoated #4 bars.

Material Notes:
Provide Grade 60 reinforcing steel.

Provide galvanized reinforcing steel if required elsewhere in the plans.

Provide Class C concrete (f'c = 3,600 psi) for culvert barrel and curb, with the following exceptions:
- Provide Class C concrete (f'c = 3,000 psi) for top slabs of:
- Coral, with 1-to-2 course surface treatment, or
- Curb with the top slab as the final riding surface,
- Provide bar laps, where required, as follows:
- Uncoupled or balanced - 4'-0" Min
- 3'-0" Min

General Notes:
Detailed according to AASHTO LRFD Bridge Design Specifications for the range of fill heights shown.

See the Multiple Box Culverts Cast-In-Place Miscellaneous Detail (MC-MD) standard sheet for details pertaining to skewed angles, section lengths, and tie-in.
### BILLS OF REINFORCING STEEL (For Box Length = 40 feet)

<table>
<thead>
<tr>
<th>Section Dimensions</th>
<th>Number of Spans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Dimensions**

- **Bars A**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars B**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars C**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars D**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars E**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars F**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars G**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars H**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars I**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars J**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars K**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars L**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars M**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars N**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars O**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars P**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars Q**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars R**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars S**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars T**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars U**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars V**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars W**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

- **Bars X**
  - Length: 108
  - Size: 15
  - Sizex: 136.7

**Use this standard only when lengthening or for incorrect results or damages resulting from its use.**