TYPICAL SECTION

PART PLANS

TOP SLAB

BOTTOM SLAB

SECTION THRU CURB

TABLE OF BAR DIMENSIONS

<table>
<thead>
<tr>
<th>H</th>
<th>#2</th>
<th>#3</th>
<th>#5</th>
</tr>
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<tbody>
<tr>
<td>4'-0&quot;</td>
<td>1</td>
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<td>2.5</td>
</tr>
<tr>
<td>5'-0&quot;</td>
<td>1.5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6'-0&quot;</td>
<td>2</td>
<td>2.5</td>
<td>4</td>
</tr>
<tr>
<td>7'-0&quot;</td>
<td>2.5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>8'-0&quot;</td>
<td>3</td>
<td>3.5</td>
<td>6</td>
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</tbody>
</table>

CONSTRUCTION NOTES:

Do not use permanent forms.

Remove the bottom edge of the top slab F at the entrance.

Provide 60 ksi deformed 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:

- Bars B, C, D, E, F1, F2, M, Y, and/or Z may be reversed, as necessary to maintain cover.
- Provide galvanized reinforcing steel if required elsewhere in the plans.

MATERIAL NOTES:

Provide Grade 60 reinforcing steel.

Provide all reinforcing steel in the WWR of the same length required for the equivalent bar size, rounded up for bars listed between conventional bar sizes.

Spacing of WWR is limited to 4" Min and 18" Max. When required, provide lap splices never less than the lap length required for uncoated #4 bars.

The Contractor may replace all #2 bars with #3 bars, when the #2 bars are used in the WWR of the same length required for the equivalent bar size, rounded up for bars listed between conventional bar sizes.

Provide #4 bars in the WWR of the same length required for the equivalent bar size, rounded up for bars listed between conventional bar sizes.

Provide #5 bars in the WWR of the same length required for the equivalent bar size, rounded up for bars listed between conventional bar sizes.

Spacing of WWR is limited to 4" Min and 18" Max. When required, provide lap splices never less than the lap length required for uncoated #4 bars.

Provide galvanized reinforcing steel if required elsewhere in the plans.

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications for the range of fill heights shown.

See the Multiple Box Culverts Cast-In-Place Miscellaneous Details (MC-90) standard for details pertaining to skewed ends, angle sections, and lengthening.

Cover dimensions are clear dimensions, unless noted otherwise. The Contractor may replace Bars B, C, D, E, F1, F2, M, Y, and/or Z with deformed reinforcing steel.

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Reinforcing bar dimensions shown are out-of-out of bar.

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Reinforcing bar dimensions shown are out-of-out of bar.
### BILLS OF REINFORCING STEEL (For Box Length = 40 feet)

<table>
<thead>
<tr>
<th>S</th>
<th>No.</th>
<th>Dia.</th>
<th>Conc</th>
<th>Bars E</th>
<th>Bars T1 - #4</th>
<th>Bars T2 - #4</th>
<th>Bars M - #4</th>
<th>Bars Y &amp; Z - #4</th>
<th>Bars H &amp; #4</th>
<th>Aisle</th>
<th>Per Foot of Barrel</th>
<th>Curb</th>
<th>Total</th>
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<td>1/4&quot;</td>
<td>6</td>
<td>1170</td>
<td>570</td>
<td>483</td>
<td>827.3</td>
<td>14187</td>
<td>26499</td>
<td>39777</td>
<td>40743</td>
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<td>3/8&quot;</td>
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<td>162</td>
<td>57'</td>
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<td>980</td>
<td>1380</td>
<td>798</td>
<td>1.20</td>
<td>7.35</td>
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<td>570</td>
<td>383</td>
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<td>1170</td>
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<td>270</td>
<td>570</td>
<td>270</td>
<td>1.17</td>
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<td>1.16</td>
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<td>270</td>
<td>270</td>
<td>570</td>
<td>270</td>
<td>1.16</td>
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### Dimensions

<table>
<thead>
<tr>
<th>Bars B</th>
<th>Bars C &amp; D</th>
<th>Bars E</th>
<th>Bars F1 - #4</th>
<th>Bars F2 - #4</th>
<th>Bars M - #4</th>
<th>Bars Y &amp; Z - #4</th>
<th>Bars H &amp; #4</th>
<th>Per Foot of Barrel</th>
<th>Curb</th>
<th>Total</th>
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<tr>
<td>1</td>
<td>1170</td>
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### Notes

- The use of this standard is governed by the "Texas Engineering Practice Act." No warranty of any kind.
- Dimensions are in feet and inches.
- Quantities are in linear feet.

[1] Loadings SHEET 2 OF 2

**Multiple Box Culverts**

CAST-IN-PLACE

9'-0" SPAN

9'-0" TO 10'-0"

**MC-9-10**