**DISCLAIMER:**

The use of this standard is governed by the "Texas Engineering Practice Act." No warranty of any kind is made by TX DOT for any purpose whatsoever. TX DOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

**TABLE OF FOUNDATION LOADS**

<table>
<thead>
<tr>
<th>Span Length</th>
<th>Girder Type T642</th>
<th>Force Type D667</th>
<th>Force Type D67</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>05</td>
<td>88</td>
<td>79</td>
</tr>
<tr>
<td>70</td>
<td>93</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>100</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>105</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>110</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>115</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>126</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>140</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>144</td>
<td>68</td>
<td></td>
</tr>
</tbody>
</table>

**AIG-62-24-15**

**MATERIAL NOTES:**

Provide Class C concrete (fc = 3,600 psi). Provide Class C (HPC) concrete if shown elsewhere in the plans. Provide Grade 60 reinforcing steel. Galvanize dowel bars D.

**GENERAL NOTES:**

Designed according to AASHTO LRFD Bridge Design Specifications. See Bridge Layout for header slope and foundation type, size, and length. See Common Foundation Details (FD) standard sheet for all foundation details and notes. See Riprap (SRR) standard sheet for riprap attachment details, if applicable. See applicable rail details for rail anchorage in the plans. Details are drawn showing right forward skew. See Bridge Layout for skew header details.

Details may be used with standard SIG-62-24-15 only. Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bars.

| TABLE A
<table>
<thead>
<tr>
<th>Header Size</th>
<th>Girder Type</th>
<th>Width/ft</th>
<th>Height/ft</th>
<th>&quot;W1&quot;</th>
<th>&quot;Z1&quot;</th>
<th>&quot;W2&quot;</th>
<th>&quot;Z2&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>T642</td>
<td>14.000</td>
<td>0.854</td>
<td>2.15</td>
<td>1.25</td>
<td>0.85</td>
<td>1.25</td>
</tr>
<tr>
<td>3.1</td>
<td>T642</td>
<td>21.000</td>
<td>0.967</td>
<td>2.15</td>
<td>1.25</td>
<td>0.96</td>
<td>1.25</td>
</tr>
</tbody>
</table>

**BEARING SEAT DETAIL**

(Bearing surface must be clean and free of all loose material before placing bearing pad.)

**SECTION A-A**

(With approach slab)

**BACKWALL DETAIL**

(Without approach slab)

**DETAIL A**

See Table A for variable dimensions based on header slope. For piling larger than 16", adjust Bars S spacing as required to avoid piling. Increase as required to maintain "W1" from finished grade. See Span details for "Y" value. See Bridge layout to determine if approach slab is present. With piles foundations, move Bars A shown to clean piles. See Table A for variable dimensions based on header slope. 5 Spaces at 1'-0" Max. See Detail A on FD standard. Field bend as needed to clear piles.

**ELEVATION**

**SHOWING DRILLED SHAFTS**

**SHOWING PILES**

**PLAN**

See Bridge Layout for slopes. Uniform slope between bridges.

**SHOWING DRILLED SHAFTS**

**SHOWING PILES**

2 Spa at 10'-0" Max = 1'-8"

1'-6"

**Pile Spa**

**Detail A**

See Bridge Layout for actual skew direction. Details are drawn showing right forward skew. See Bridge Layout for skew header details. These abutment details may be used with standard SIG-62-24-15 only. Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bars.

## SECTION A-A

(With approach slab)

## BACKWALL DETAIL

(Without approach slab)

## DETAIL A

See Table A for variable dimensions based on header slope. For piling larger than 16", adjust Bars S spacing as required to avoid piling. Increase as required to maintain "W1" from finished grade. See Span details for "Y" value. See Bridge layout to determine if approach slab is present. With piles foundations, move Bars A shown to clean piles. See Table A for variable dimensions based on header slope. 5 Spaces at 1'-0" Max. See Detail A on FD standard. Field bend as needed to clear piles.

**ELEVATION**

**SHOWING DRILLED SHAFTS**

**SHOWING PILES**

2 Spa at 10'-0" Max = 1'-8"

1'-6"

**Pile Spa**

**Detail A**

See Bridge Layout for actual skew direction. Details are drawn showing right forward skew. See Bridge Layout for skew header details. These abutment details may be used with standard SIG-62-24-15 only. Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bars.

## SECTION A-A

(With approach slab)

## BACKWALL DETAIL

(Without approach slab)

## DETAIL A

See Table A for variable dimensions based on header slope. For piling larger than 16", adjust Bars S spacing as required to avoid piling. Increase as required to maintain "W1" from finished grade. See Span details for "Y" value. See Bridge layout to determine if approach slab is present. With piles foundations, move Bars A shown to clean piles. See Table A for variable dimensions based on header slope. 5 Spaces at 1'-0" Max. See Detail A on FD standard. Field bend as needed to clear piles.

**ELEVATION**

**SHOWING DRILLED SHAFTS**

**SHOWING PILES**

2 Spa at 10'-0" Max = 1'-8"

1'-6"

**Pile Spa**

**Detail A**

See Bridge Layout for actual skew direction. Details are drawn showing right forward skew. See Bridge Layout for skew header details. These abutment details may be used with standard SIG-62-24-15 only. Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bars.

## SECTION A-A

(With approach slab)

## BACKWALL DETAIL

(Without approach slab)

## DETAIL A

See Table A for variable dimensions based on header slope. For piling larger than 16", adjust Bars S spacing as required to avoid piling. Increase as required to maintain "W1" from finished grade. See Span details for "Y" value. See Bridge layout to determine if approach slab is present. With piles foundations, move Bars A shown to clean piles. See Table A for variable dimensions based on header slope. 5 Spaces at 1'-0" Max. See Detail A on FD standard. Field bend as needed to clear piles.

**ELEVATION**

**SHOWING DRILLED SHAFTS**

**SHOWING PILES**

2 Spa at 10'-0" Max = 1'-8"

1'-6"

**Pile Spa**

**Detail A**

See Bridge Layout for actual skew direction. Details are drawn showing right forward skew. See Bridge Layout for skew header details. These abutment details may be used with standard SIG-62-24-15 only. Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bars.

## SECTION A-A

(With approach slab)

## BACKWALL DETAIL

(Without approach slab)

## DETAIL A

See Table A for variable dimensions based on header slope. For piling larger than 16", adjust Bars S spacing as required to avoid piling. Increase as required to maintain "W1" from finished grade. See Span details for "Y" value. See Bridge layout to determine if approach slab is present. With piles foundations, move Bars A shown to clean piles. See Table A for variable dimensions based on header slope. 5 Spaces at 1'-0" Max. See Detail A on FD standard. Field bend as needed to clear piles.

**ELEVATION**

**SHOWING DRILLED SHAFTS**

**SHOWING PILES**

2 Spa at 10'-0" Max = 1'-8"

1'-6"

**Pile Spa**

**Detail A**

See Bridge Layout for actual skew direction. Details are drawn showing right forward skew. See Bridge Layout for skew header details. These abutment details may be used with standard SIG-62-24-15 only. Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing bar dimensions shown are out-to-out of bars.

## SECTION A-A

(With approach slab)

## BACKWALL DETAIL

(Without approach slab)
**WINGWALL ELEVATION**

BARS V & wV

BARS S

BARS wS

BARS U

BARS L2

BARS L1

**SECTIONS**

**SECTION B-B**

**BACKWALL**

**CAP**

**CORNER DETAILS**

See Table 2 for length "Wc"

Bars w & wS

Standing Flash on top of wall

Perpendicular to roadway grail

H

H (top unless otherwise noted)

wH

1'-3" (Typ unless otherwise noted)

wH2

1'-8" (Max)

wS

2" (Typ unless otherwise noted)

wV

5" (Max)

1'-0" Max.

Field bend as needed to clear piles.

Adjust as required to avoid piling.

Double dowels at end of multi-span unit.

Adjust reinforcing steel total accordingly.

5 Spaces at 1'-0" Max.

Omit Dowels D at end of multi-span unit.

Adjust reinforcing steel total accordingly.

Quantities shown are for one approach only. Allow approach class with an approach span and 1.0" Class "C" concrete and 160 lbs reinforcing steel for 4 additional bars.

Reinforcing Steel

Class "C" Concrete

**TABLE OF ESTIMATED QUANTITIES WITH 2:1 HEADER SLOPE**

<table>
<thead>
<tr>
<th>Type Tx62 Girders</th>
<th>Bar No.</th>
<th>Size</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>#11</td>
<td>25'-11&quot;</td>
<td>1,377</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>#9</td>
<td>1'-8&quot;</td>
<td>11</td>
</tr>
<tr>
<td>H</td>
<td>12</td>
<td>#6</td>
<td>26'-7&quot;</td>
<td>479</td>
</tr>
<tr>
<td>L1</td>
<td>9</td>
<td>#6</td>
<td>4'-0&quot;</td>
<td>54</td>
</tr>
<tr>
<td>L2</td>
<td>9</td>
<td>#6</td>
<td>4'-0&quot;</td>
<td>54</td>
</tr>
<tr>
<td>S</td>
<td>26</td>
<td>#5</td>
<td>12'-6&quot;</td>
<td>339</td>
</tr>
<tr>
<td>U</td>
<td>4</td>
<td>#6</td>
<td>8'-8&quot;</td>
<td>52</td>
</tr>
<tr>
<td>wH1</td>
<td>14</td>
<td>#6</td>
<td>15'-8&quot;</td>
<td>329</td>
</tr>
<tr>
<td>wH2</td>
<td>28</td>
<td>#6</td>
<td>20'-8&quot;</td>
<td>869</td>
</tr>
<tr>
<td>wS</td>
<td>44</td>
<td>#4</td>
<td>7'-10&quot;</td>
<td>157</td>
</tr>
<tr>
<td>wV</td>
<td>44</td>
<td>#5</td>
<td>17'-0&quot;</td>
<td>532</td>
</tr>
</tbody>
</table>

Reinforcing Steel: 16,540 Lb

Class "C" Concrete: 26.2 CY

**TABLE OF ESTIMATED QUANTITIES WITH 3:1 HEADER SLOPE**

<table>
<thead>
<tr>
<th>Type Tx62 Girders</th>
<th>Bar No.</th>
<th>Size</th>
<th>Length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>#11</td>
<td>25'-11&quot;</td>
<td>1,377</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>#9</td>
<td>1'-8&quot;</td>
<td>11</td>
</tr>
<tr>
<td>H</td>
<td>12</td>
<td>#6</td>
<td>26'-7&quot;</td>
<td>479</td>
</tr>
<tr>
<td>L1</td>
<td>9</td>
<td>#6</td>
<td>4'-0&quot;</td>
<td>54</td>
</tr>
<tr>
<td>L2</td>
<td>9</td>
<td>#6</td>
<td>4'-0&quot;</td>
<td>54</td>
</tr>
<tr>
<td>S</td>
<td>26</td>
<td>#5</td>
<td>12'-6&quot;</td>
<td>339</td>
</tr>
<tr>
<td>U</td>
<td>4</td>
<td>#6</td>
<td>8'-8&quot;</td>
<td>52</td>
</tr>
<tr>
<td>wH1</td>
<td>14</td>
<td>#6</td>
<td>22'-8&quot;</td>
<td>477</td>
</tr>
<tr>
<td>wH2</td>
<td>28</td>
<td>#6</td>
<td>20'-8&quot;</td>
<td>869</td>
</tr>
<tr>
<td>wS</td>
<td>44</td>
<td>#4</td>
<td>7'-10&quot;</td>
<td>157</td>
</tr>
<tr>
<td>wV</td>
<td>44</td>
<td>#5</td>
<td>17'-0&quot;</td>
<td>780</td>
</tr>
</tbody>
</table>

Reinforcing Steel: 16,540 Lb

Class "C" Concrete: 26.2 CY

**HL93 LOADING**

**ABUTMENTS**

**TYPE TX62**

**PRESTR CONC I-GIRDERS**

24' ROADWAY 15° SKEW

AIG-62-24-15

Texas Department of Transportation

Bridge Design Standard