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TABLE OF REQUIRED BEAM SIZES, DESIGN DATA AND STEEL QUANTITIES

| SPAN (ft) | ROLLED BEAM | | | | OPTIONAL PLATE GIRDER | | | | | | | Diaphragm Spaces "N" (ea) | Stud Spacing "X" (in) | Elastomeric Bearing Type | Estimated Quantities | |
|--------------|----------------|-----------------------|-----------------------|----------|-----------------------|---------------|------------|-----------------------|-----------------------|----------|---------------|---------------------------------|-----------------------------|--------------------------------|----------------------|--------|
| | Beam Member | Dimension "Y" (in) | Deflection "A" (feet) | | Plate Sizes (inches) | | | Dimension "Y" (in) | Deflection "A" (feet) | | Rollover Beam | | | | Steel Girder (1) | |
| | | | Slab DL | Total DL | Top Flange | Bottom Flange | Web | | Slab DL | Total DL | | | | | | |
| 30 | W18 x 130 | 29.25 | 0.014 | 0.019 | 1 x 12 | 1 1/4 x 12 | 1/2 x 17 | 29.25 | 0.015 | 0.019 | 2 | 8 | SB - 1 | 18,080 | 17,080 | |
| | W21 x 122 | 31.68 | 0.012 | 0.015 | 3/4 x 12 | 1 1/4 x 12 | 1/2 x 19.5 | 31.50 | 0.014 | 0.018 | 2 | 8 | SB - 1 | 18,060 | 17,310 | |
| | W24 x 104 | 34.06 | 0.011 | 0.014 | 3/4 x 12 | 7/8 x 12 | 1/2 x 22.5 | 34.12 | 0.011 | 0.014 | 2 | 9 | SB - 1 | 15,920 | 16,120 | |
| | W27 x 146 | 37.38 | 0.007 | 0.009 | 3/4 x 14 | 1 x 14 | 1/2 x 25.5 | 37.25 | 0.007 | 0.009 | 2 | 10.5 | SB - 2 | 20,960 | 18,890 | |
| | W30 x 173 | 40.44 | 0.005 | 0.006 | 1 x 15 | 1 1/4 x 15 | 1/2 x 28.5 | 40.75 | 0.005 | 0.006 | 2 | 10.5 | SB - 3 | 24,260 | 23,390 | |
| | W33 x 118 | 42.86 | 0.006 | 0.008 | 3/4 x 12 | 3/4 x 12 | 1/2 x 31.5 | 43.00 | 0.006 | 0.008 | 2 | 12 | SB - 1 | 18,220 | 18,030 | |
| | W36 x 135 | 45.55 | 0.005 | 0.006 | 3/4 x 12 | 7/8 x 12 | 1/2 x 34 | 45.62 | 0.005 | 0.006 | 2 | 12 | SB - 1 | 20,270 | 19,190 | |
| | W40 x 149 | 48.20 | 0.004 | 0.005 | 3/4 x 12 | 1 x 12 | 1/2 x 36.5 | 48.25 | 0.004 | 0.005 | 2 | 12 | SB - 1 | 22,050 | 20,420 | |
| 35 | W18 x 130 | 29.25 | 0.027 | 0.034 | 1 x 12 | 1 1/4 x 12 | 1/2 x 17 | 29.25 | 0.028 | 0.035 | 2 | 8 | SB - 1 | 20,740 | 19,550 | |
| | W21 x 122 | 31.68 | 0.022 | 0.028 | 3/4 x 12 | 1 1/4 x 12 | 1/2 x 19.5 | 31.50 | 0.026 | 0.033 | 2 | 8 | SB - 1 | 20,560 | 19,660 | |
| | W24 x 104 | 34.06 | 0.021 | 0.027 | 3/4 x 12 | 7/8 x 12 | 1/2 x 22.5 | 34.12 | 0.021 | 0.026 | 2 | 9 | SB - 1 | 18,050 | 18,250 | |
| | W27 x 146 | 37.38 | 0.012 | 0.016 | 3/4 x 14 | 1 x 14 | 1/2 x 25.5 | 37.25 | 0.013 | 0.017 | 2 | 10.5 | SB - 2 | 23,930 | 21,470 | |
| | W30 x 173 | 40.44 | 0.008 | 0.012 | 1 x 15 | 1 1/4 x 15 | 1/2 x 28.5 | 40.75 | 0.008 | 0.011 | 2 | 10.5 | SB - 3 | 27,770 | 26,700 | |
| | W33 x 118 | 42.86 | 0.011 | 0.015 | 3/4 x 12 | 3/4 x 12 | 1/2 x 31.5 | 43.00 | 0.011 | 0.015 | 2 | 12 | SB - 1 | 20,630 | 20,370 | |
| | W36 x 135 | 45.55 | 0.009 | 0.012 | 3/4 x 12 | 7/8 x 12 | 1/2 x 34 | 45.62 | 0.009 | 0.012 | 2 | 12 | SB - 1 | 23,010 | 21,720 | |
| | W40 x 149 | 48.20 | 0.007 | 0.010 | 3/4 x 12 | 1 x 12 | 1/2 x 36.5 | 48.25 | 0.008 | 0.010 | 2 | 12 | SB - 1 | 25,070 | 23,140 | |
| 40 | W18 x 130 | 29.25 | 0.045 | 0.059 | 1 x 12 | 1 1/4 x 12 | 1/2 x 17 | 29.25 | 0.047 | 0.060 | 3 | 8 | SB - 1 | 23,880 | 22,520 | |
| | W21 x 122 | 31.68 | 0.038 | 0.049 | 3/4 x 12 | 1 1/4 x 12 | 1/2 x 19.5 | 31.50 | 0.045 | 0.056 | 2 | 8 | SB - 1 | 23,060 | 22,010 | |
| | W24 x 104 | 34.06 | 0.036 | 0.045 | 3/4 x 12 | 7/8 x 12 | 1/2 x 22.5 | 34.12 | 0.036 | 0.045 | 2 | 9 | SB - 1 | 20,170 | 20,390 | |
| | W27 x 146 | 37.38 | 0.020 | 0.027 | 3/4 x 14 | 1 x 14 | 1/2 x 25.5 | 37.25 | 0.023 | 0.029 | 2 | 10.5 | SB - 2 | 26,900 | 24,040 | |
| | W30 x 173 | 40.44 | 0.014 | 0.020 | 1 x 15 | 1 1/4 x 15 | 1/2 x 28.5 | 40.75 | 0.014 | 0.019 | 2 | 10.5 | SB - 3 | 31,280 | 30,010 | |
| | W33 x 118 | 42.86 | 0.019 | 0.025 | 3/4 x 12 | 3/4 x 12 | 1/2 x 31.5 | 43.00 | 0.020 | 0.025 | 2 | 12 | SB - 1 | 23,020 | 22,700 | |
| | W36 x 135 | 45.55 | 0.015 | 0.020 | 3/4 x 12 | 7/8 x 12 | 1/2 x 34 | 45.62 | 0.015 | 0.020 | 2 | 12 | SB - 1 | 25,750 | 24,230 | |
| | W40 x 149 | 48.20 | 0.012 | 0.016 | 3/4 x 12 | 1 x 12 | 1/2 x 36.5 | 48.25 | 0.013 | 0.017 | 2 | 12 | SB - 1 | 28,090 | 25,840 | |
| 45 | W18 x 130 | 29.25 | 0.072 | 0.094 | 1 x 12 | 1 1/4 x 12 | 1/2 x 17 | 29.25 | 0.076 | 0.096 | 3 | 8 | SB - 1 | 26,540 | 24,990 | |
| | W21 x 122 | 31.68 | 0.060 | 0.078 | 3/4 x 12 | 1 1/4 x 12 | 1/2 x 19.5 | 31.50 | 0.072 | 0.090 | 2 | 8 | SB - 1 | 25,550 | 24,370 | |
| | W24 x 104 | 34.06 | 0.058 | 0.073 | 3/4 x 12 | 7/8 x 12 | 1/2 x 22.5 | 34.12 | 0.058 | 0.072 | 2 | 9 | SB - 1 | 22,310 | 22,540 | |
| | W27 x 146 | 37.38 | 0.033 | 0.044 | 3/4 x 14 | 1 x 14 | 1/2 x 25.5 | 37.25 | 0.036 | 0.047 | 2 | 10.5 | SB - 2 | 29,850 | 26,610 | |
| | W30 x 173 | 40.44 | 0.023 | 0.032 | 1 x 15 | 1 1/4 x 15 | 1/2 x 28.5 | 40.75 | 0.023 | 0.031 | 2 | 10.5 | SB - 3 | 34,770 | 33,310 | |
| | W33 x 118 | 42.86 | 0.031 | 0.040 | 3/4 x 12 | 3/4 x 12 | 1/2 x 31.5 | 43.00 | 0.031 | 0.040 | 2 | 12 | SB - 1 | 25,420 | 25,030 | |
| | W36 x 135 | 45.55 | 0.024 | 0.032 | 3/4 x 12 | 7/8 x 12 | 1/2 x 34 | 45.62 | 0.024 | 0.032 | 2 | 12 | SB - 1 | 28,480 | 26,750 | |
| | W40 x 149 | 48.20 | 0.019 | 0.026 | 3/4 x 12 | 1 x 12 | 1/2 x 36.5 | 48.25 | 0.021 | 0.027 | 2 | 12 | SB - 1 | 31,100 | 28,540 | |
| 50 | W18 x 130 | 29.25 | 0.110 | 0.143 | 1 x 12 | 1 1/4 x 12 | 1/2 x 17 | 29.25 | 0.115 | 0.147 | 3 | 8 | SB - 1 | 29,200 | 27,460 | |
| | W21 x 122 | 31.68 | 0.092 | 0.118 | 3/4 x 12 | 1 1/4 x 12 | 1/2 x 19.5 | 31.50 | 0.110 | 0.137 | 2 | 8 | SB - 1 | 28,050 | 26,720 | |
| | W24 x 104 | 34.06 | 0.088 | 0.111 | 3/4 x 12 | 7/8 x 12 | 1/2 x 22.5 | 34.12 | 0.088 | 0.110 | 2 | 9 | SB - 1 | 24,440 | 24,680 | |
| | W27 x 146 | 37.38 | 0.050 | 0.067 | 3/4 x 14 | 1 x 14 | 1/2 x 25.5 | 37.25 | 0.055 | 0.071 | 2 | 10.5 | SB - 2 | 32,820 | 29,190 | |
| | W30 x 173 | 40.44 | 0.035 | 0.048 | 1 x 15 | 1 1/4 x 15 | 1/2 x 28.5 | 40.75 | 0.035 | 0.047 | 2 | 10.5 | SB - 3 | 38,280 | 36,620 | |
| | W33 x 118 | 42.86 | 0.047 | 0.061 | 3/4 x 12 | 3/4 x 12 | 1/2 x 31.5 | 43.00 | 0.048 | 0.061 | 2 | 12 | SB - 1 | 27,820 | 27,370 | |
| | W36 x 135 | 45.55 | 0.037 | 0.048 | 3/4 x 12 | 7/8 x 12 | 1/2 x 34 | 45.62 | 0.037 | 0.048 | 2 | 12 | SB - 1 | 31,230 | 29,280 | |
| | W40 x 149 | 48.20 | 0.030 | 0.040 | 3/4 x 12 | 1 x 12 | 1/2 x 36.5 | 48.25 | 0.031 | 0.041 | 2 | 12 | SB - 1 | 34,130 | 31,260 | |
| 55 | W21 x 147 | 32.06 | 0.111 | 0.148 | 1 x 12 | 1 3/8 x 12 | 1/2 x 19.8 | 32.12 | 0.121 | 0.156 | 3 | 8 | SB - 1 | 36,790 | 33,300 | |
| | W24 x 117 | 34.26 | 0.114 | 0.146 | 3/4 x 12 | 7/8 x 12 | 1/2 x 22.5 | 34.12 | 0.124 | 0.156 | 3 | 9 | SB - 1 | 30,190 | 27,610 | |
| | W27 x 146 | 37.38 | 0.073 | 0.097 | 3/4 x 14 | 1 x 14 | 1/2 x 25.5 | 37.25 | 0.081 | 0.105 | 3 | 10.5 | SB - 2 | 36,580 | 32,560 | |
| | W30 x 173 | 40.44 | 0.051 | 0.070 | 1 x 15 | 1 1/4 x 15 | 1/2 x 28.5 | 40.75 | 0.051 | 0.069 | 3 | 10.5 | SB - 3 | 42,590 | 40,730 | |
| | W33 x 118 | 42.86 | 0.069 | 0.089 | 3/4 x 12 | 3/4 x 12 | 1/2 x 31.5 | 43.00 | 0.070 | 0.089 | 3 | 12 | SB - 1 | 31,210 | 30,690 | |
| | W36 x 135 | 45.55 | 0.054 | 0.071 | 3/4 x 12 | 7/8 x 12 | 1/2 x 34 | 45.62 | 0.054 | 0.071 | 3 | 12 | SB - 1 | 34,970 | 32,800 | |
| | W40 x 149 | 48.20 | 0.043 | 0.058 | 3/4 x 12 | 1 x 12 | 1/2 x 36.5 | 48.25 | 0.046 | 0.060 | 3 | 12 | SB - 1 | 38,190 | 35,000 | |
| | 60 | W21 x 166 | 32.48 | 0.135 | 0.183 | 1 x 12 | 1 5/8 x 12 | 1/2 x 19.8 | 32.38 | 0.160 | 0.208 | 3 | 8 | SB - 1 | 44,320 | 38,400 |
| W24 x 146 | | 34.74 | 0.126 | 0.168 | 1 x 12 | 1 3/8 x 12 | 1/2 x 22.5 | 34.88 | 0.128 | 0.170 | 3 | 9 | SB - 1 | 39,500 | 37,030 | |
| W27 x 146 | | 37.38 | 0.103 | 0.138 | 3/4 x 14 | 1 x 14 | 1/2 x 25.5 | 37.25 | 0.114 | 0.148 | 3 | 10.5 | SB - 2 | 39,540 | 35,140 | |
| W30 x 173 | | 40.44 | 0.072 | 0.100 | 1 x 15 | 1 1/4 x 15 | 1/2 x 28.5 | 40.75 | 0.072 | 0.098 | 3 | 10.5 | SB - 3 | 46,090 | 44,050 | |
| W33 x 118 | | 42.86 | 0.098 | 0.126 | 3/4 x 12 | 3/4 x 12 | 1/2 x 31.5 | 43.00 | 0.099 | 0.126 | 3 | 12 | SB - 1 | 33,610 | 33,020 | |
| W36 x 135 | | 45.55 | 0.076 | 0.100 | 3/4 x 12 | 7/8 x 12 | 1/2 x 34 | 45.62 | 0.076 | 0.100 | 3 | 12 | SB - 1 | 37,710 | 35,320 | |
| W40 x 149 | | 48.20 | 0.061 | 0.082 | 3/4 x 12 | 1 x 12 | 1/2 x 36.5 | 48.25 | 0.065 | 0.085 | 3 | 12 | SB - 1 | 41,200 | 37,710 | |

(1) For Contractor's information only. Structural Steel pay weight shall be based on Rolled Beams.

GENERAL NOTES:

Designed according to AASHTO LRFD Specifications.
 See Steel Beam Span sheets for beam spacing, diaphragm locations, fabrication notes and references to values "A", "N", "X" & "Y".
 See standard SBEB for bearing details.
 Indicated beam/girder designs are applicable for spans with 0, 15 and 30 degree skewers.
 See Bridge Layout for beam type.
 Change in beam type within a bridge, for example W18 to W24, is not supported by this standard.

The standard beam designs shown on these sheets are applicable for use only with the Steel Beam Spans shown on Standards SSB-24, SSB-24-15 and SSB-24-30.

| | | | | |
|----------------------------------------------------------|---------------------------------|--------------------------|--------------------------|--------------------------|
| Texas Department of Transportation | Bridge Division Standard | | | |
| <h2>STEEL BEAM STANDARD DESIGNS 24' ROADWAY</h2> | | | | |
| <h3>SBSD-24</h3> | | | | |
| <small>FILE: sbstd05.dgn</small> | <small>DN: TxDOT</small> | <small>CK: TxDOT</small> | <small>DW: TxDOT</small> | <small>CR: TxDOT</small> |
| <small>©TxDOT August 2004</small> | <small>CONT</small> | <small>SECT</small> | <small>JOB</small> | <small>HIGHWAY</small> |
| <small>REVISIONS</small> | | <small>SHEET NO.</small> | | |
| <small>Rev. 02-06: W36 sections</small> | <small>DIST</small> | <small>COUNTY</small> | | <small>SHEET NO.</small> |

TABLE OF REQUIRED BEAM SIZES, DESIGN DATA AND STEEL QUANTITIES

| SPAN (ft) | ROLLED BEAM | | | | OPTIONAL PLATE GIRDER | | | | | | Diaphragm Spaces "N" (ea) | Stud Spacing "X" (in) | Elastomeric Bearing Type | Estimated Quantities | |
|--------------|----------------|-----------------------|-----------------------|----------|-----------------------|--------------|------------|-----------------------|-----------------------|----------|---------------------------------|-----------------------------|--------------------------------|------------------------|---------------|
| | Beam Member | Dimension "Y" (in) | Deflection "A" (feet) | | Plate Sizes (inches) | | | Dimension "Y" (in) | Deflection "A" (feet) | | | | | Structural Steel (lbs) | |
| | | | Slab DL | Total DL | Top Flange | Bot't Flange | Web | | Slab DL | Total DL | | | | Rolled Beam | PL Girder (1) |
| 65 | W24 x 176 | 35.24 | 0.141 | 0.195 | 1 1/4 x 12 | 1 5/8 x 12 | 1/2 x 22.5 | 35.38 | 0.152 | 0.203 | 3 | 9 | SB - 2 | 50,300 | 45,130 |
| | W27 x 146 | 37.38 | 0.142 | 0.190 | 3/4 x 14 | 1 x 14 | 1/2 x 25.5 | 37.25 | 0.157 | 0.204 | 3 | 10.5 | SB - 2 | 42,500 | 37,710 |
| | W30 x 173 | 40.44 | 0.099 | 0.137 | 1 x 15 | 1 1/4 x 15 | 1/2 x 28.5 | 40.75 | 0.099 | 0.135 | 3 | 10.5 | SB - 3 | 49,590 | 47,340 |
| | W33 x 118 | 42.86 | 0.135 | 0.174 | 3/4 x 12 | 3/4 x 12 | 1/2 x 31.5 | 43.00 | 0.136 | 0.174 | 3 | 12 | SB - 2 | 36,080 | 35,420 |
| | W36 x 135 | 45.55 | 0.105 | 0.138 | 3/4 x 12 | 7/8 x 12 | 1/2 x 34 | 45.62 | 0.105 | 0.138 | 3 | 12 | SB - 2 | 40,510 | 37,910 |
| W40 x 149 | 48.20 | 0.085 | 0.113 | 3/4 x 12 | 1 x 12 | 1/2 x 36.5 | 48.25 | 0.089 | 0.117 | 3 | 12 | SB - 2 | 44,290 | 40,480 | |
| 70 | W24 x 207 | 35.71 | 0.159 | 0.227 | 1 1/2 x 12 | 1 7/8 x 12 | 1/2 x 22.5 | 35.88 | 0.173 | 0.238 | 3 | 9 | SB - 2 | 62,500 | 53,970 |
| | W27 x 178 | 37.81 | 0.155 | 0.216 | 3/4 x 14 | 1 3/8 x 14 | 1/2 x 25.5 | 37.62 | 0.193 | 0.254 | 3 | 10.5 | SB - 2 | 54,380 | 45,270 |
| | W30 x 173 | 40.44 | 0.134 | 0.184 | 1 x 15 | 1 1/4 x 15 | 1/2 x 28.5 | 40.75 | 0.133 | 0.181 | 3 | 10.5 | SB - 3 | 53,100 | 50,660 |
| | W33 x 130 | 43.09 | 0.161 | 0.210 | 3/4 x 12 | 1 x 12 | 1/2 x 31.5 | 43.25 | 0.164 | 0.214 | 3 | 12 | SB - 2 | 41,810 | 40,600 |
| | W36 x 135 | 45.55 | 0.141 | 0.185 | 3/4 x 12 | 7/8 x 12 | 1/2 x 34 | 45.62 | 0.141 | 0.185 | 3 | 12 | SB - 2 | 43,250 | 40,430 |
| W40 x 149 | 48.20 | 0.114 | 0.152 | 3/4 x 12 | 1 x 12 | 1/2 x 36.5 | 48.25 | 0.120 | 0.157 | 3 | 12 | SB - 2 | 47,300 | 43,190 | |
| 75 | W27 x 194 | 38.11 | 0.184 | 0.260 | 1 x 14 | 1 1/2 x 14 | 1/2 x 25.8 | 38.25 | 0.208 | 0.282 | 3 | 10.5 | SB - 2 | 62,770 | 53,680 |
| | W30 x 173 | 40.44 | 0.176 | 0.243 | 1 x 15 | 1 1/4 x 15 | 1/2 x 28.5 | 40.75 | 0.176 | 0.238 | 3 | 10.5 | SB - 3 | 56,600 | 53,970 |
| | W33 x 141 | 43.30 | 0.192 | 0.255 | 3/4 x 12 | 1 1/4 x 12 | 1/2 x 31.5 | 43.50 | 0.196 | 0.259 | 3 | 12 | SB - 2 | 47,730 | 46,190 |
| | W36 x 150 | 45.85 | 0.185 | 0.247 | 3/4 x 12 | 7/8 x 12 | 1/2 x 34 | 45.62 | 0.176 | 0.229 | 3 | 12 | SB - 2 | 50,460 | 42,940 |
| | W40 x 149 | 48.20 | 0.150 | 0.200 | 3/4 x 12 | 1 x 12 | 1/2 x 36.5 | 48.25 | 0.159 | 0.207 | 3 | 12 | SB - 2 | 50,320 | 45,890 |
| 80 | W27 x 235 | 38.66 | 0.194 | 0.287 | 1 1/4 x 14 | 1 3/4 x 14 | 1/2 x 25.8 | 38.75 | 0.227 | 0.316 | 4 | 10.5 | SB - 2 | 80,550 | 65,360 |
| | W30 x 211 | 40.94 | 0.182 | 0.263 | 1 x 15 | 1 1/2 x 15 | 1/2 x 28.5 | 41.00 | 0.210 | 0.289 | 4 | 12 | SB - 3 | 72,950 | 62,060 |
| | W33 x 169 | 43.82 | 0.200 | 0.275 | 1 x 12 | 1 1/4 x 12 | 1/2 x 31.5 | 43.75 | 0.225 | 0.299 | 4 | 12 | SB - 3 | 60,580 | 53,230 |
| | W36 x 150 | 45.85 | 0.210 | 0.281 | 3/4 x 12 | 1 1/8 x 12 | 1/2 x 34 | 45.87 | 0.227 | 0.296 | 4 | 12 | SB - 2 | 54,510 | 49,730 |
| | W40 x 149 | 48.20 | 0.194 | 0.259 | 3/4 x 12 | 1 x 12 | 1/2 x 36.5 | 48.25 | 0.205 | 0.268 | 4 | 12 | SB - 2 | 54,390 | 49,640 |
| 85 | W30 x 235 | 41.30 | 0.205 | 0.304 | 1 x 15 | 1 3/4 x 15 | 1/2 x 28.5 | 41.25 | 0.251 | 0.349 | 4 | 12 | SB - 3 | 85,330 | 69,940 |
| | W33 x 201 | 43.68 | 0.209 | 0.299 | 3/4 x 16 | 1 1/4 x 16 | 1/2 x 31.5 | 43.50 | 0.258 | 0.348 | 4 | 12 | SB - 3 | 74,840 | 62,090 |
| | W36 x 170 | 46.17 | 0.231 | 0.317 | 7/8 x 12 | 1 1/4 x 12 | 1/2 x 34 | 46.12 | 0.260 | 0.344 | 4 | 12 | SB - 2 | 64,320 | 55,900 |
| | W40 x 183 | 48.98 | 0.208 | 0.290 | 1 x 12 | 1 1/2 x 12 | 1/2 x 36.5 | 49.00 | 0.195 | 0.257 | 4 | 12 | SB - 2 | 68,920 | 62,700 |
| 90 | W30 x 261 | 41.61 | 0.222 | 0.344 | 1 1/4 x 15 | 1 7/8 x 15 | 1/2 x 28.5 | 41.62 | 0.272 | 0.389 | 4 | 12 | SB - 3 | 99,400 | 80,600 |
| | W33 x 221 | 43.93 | 0.237 | 0.347 | 1 1/4 x 16 | 1 3/8 x 16 | 1/2 x 31.5 | 44.12 | 0.243 | 0.346 | 4 | 12 | SB - 3 | 86,070 | 77,570 |
| | W36 x 231 | 46.49 | 0.228 | 0.336 | 1 1/8 x 16 | 1 1/2 x 16 | 1/2 x 33.5 | 46.12 | 0.218 | 0.309 | 4 | 12 | SB - 3 | 89,700 | 78,850 |
| | W40 x 199 | 48.67 | 0.206 | 0.292 | 7/8 x 16 | 1 1/4 x 16 | 1/2 x 36.5 | 48.62 | 0.231 | 0.317 | 4 | 12 | SB - 3 | 78,430 | 71,150 |
| 95 | W33 x 263 | 44.53 | 0.239 | 0.366 | 1 1/4 x 16 | 1 3/4 x 16 | 1/2 x 31.5 | 44.50 | 0.270 | 0.391 | 4 | 12 | SB - 3 | 106,440 | 89,260 |
| | W36 x 231 | 46.49 | 0.255 | 0.375 | 1 1/8 x 16 | 1 1/2 x 16 | 1/2 x 33.5 | 46.12 | 0.270 | 0.384 | 4 | 12 | SB - 3 | 94,360 | 82,890 |
| | W40 x 215 | 48.98 | 0.254 | 0.368 | 1 x 16 | 1 3/8 x 16 | 1/2 x 36.5 | 48.88 | 0.250 | 0.351 | 4 | 12 | SB - 3 | 88,500 | 79,900 |
| 100 | W33 x 291 | 44.84 | 0.263 | 0.414 | 1 1/2 x 16 | 2 x 16 | 1/2 x 31.5 | 45.00 | 0.284 | 0.424 | 4 | 12 | SB - 3 | 122,890 | 104,480 |
| | W36 x 262 | 46.85 | 0.272 | 0.413 | 1 1/4 x 16 | 1 3/4 x 16 | 1/2 x 33.5 | 46.50 | 0.294 | 0.427 | 4 | 12 | SB - 3 | 111,370 | 95,050 |
| | W40 x 215 | 48.98 | 0.282 | 0.408 | 1 x 16 | 1 3/8 x 16 | 1/2 x 36.5 | 48.88 | 0.307 | 0.431 | 4 | 12 | SB - 3 | 92,840 | 83,760 |
| 105 | W36 x 302 | 47.33 | 0.282 | 0.447 | 1 1/2 x 16 | 2 1/8 x 16 | 1/2 x 33.5 | 47.12 | 0.309 | 0.463 | 5 | 12 | SB - 3 | 134,400 | 114,740 |
| | W40 x 249 | 49.38 | 0.294 | 0.442 | 1 1/8 x 16 | 1 5/8 x 16 | 1/2 x 36.5 | 49.25 | 0.328 | 0.471 | 5 | 12 | SB - 3 | 112,450 | 97,200 |
| 110 | W40 x 277 | 49.69 | 0.316 | 0.489 | 1 1/4 x 16 | 1 7/8 x 16 | 1/2 x 36.5 | 49.62 | 0.352 | 0.517 | 5 | 12 | SB - 3 | 129,760 | 110,430 |
| 115 | W40 x 324 | 50.20 | 0.323 | 0.524 | 1 5/8 x 16 | 2 1/8 x 16 | 1/2 x 36.5 | 50.25 | 0.349 | 0.533 | 5 | 12 | SB - 4 | 156,890 | 130,700 |
| 120 | W40 x 362 | 50.60 | 0.341 | 0.573 | 1 3/4 x 16 | 2 3/8 x 16 | 1/2 x 36.5 | 50.62 | 0.378 | 0.589 | 5 | 12 | SB - 4 | 181,590 | 145,820 |

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DATE:
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**STEEL BEAM
STANDARD DESIGNS
24' ROADWAY**

SBSD-24

| | | | | |
|--------------------------|-----------|-----------|-----------|-----------|
| FILE: sbstd05.dgn | DN: TxDOT | CK: TxDOT | DW: TxDOT | CR: TxDOT |
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| REVISIONS | | | | |
| Rev. 02-06: W36 sections | DIST | COUNTY | SHEET NO. | |