

**Maximum Angle of Deflection for Horizontal Elliptical Concrete Pipes Entering and Exiting Inlet Boxes**

| Pipe Sizes (Including Wall Thickness) |                     |                     |             |                     |                     |             |                     |             |             |
|---------------------------------------|---------------------|---------------------|-------------|---------------------|---------------------|-------------|---------------------|-------------|-------------|
| Inlet Size                            | 14" x 23"           | 19" x 30"           | 22" x 34"   | 24" x 38"           | 27" x 42"           | 29" x 45"   | 32" x 49"           | 34" x 53"   | 38" x 60"   |
|                                       | (19 1/2" x 28 1/2") | (25 1/2" x 36 1/2") | (29" x 41") | (31 1/2" x 45 1/2") | (34 1/2" x 49 1/2") | (38" x 54") | (41 1/2" x 58 1/2") | (44" x 63") | (49" x 71") |
| RCP Equiv.                            | 18"                 | 24"                 | 27"         | 30"                 | 33"                 | 36"         | 39"                 | 42"         | 48"         |
| <b>34"</b> x 18"                      | 10.01°              |                     |             |                     |                     |             |                     |             |             |
| <b>34"</b> x 24"                      | 10.01°              |                     |             |                     |                     |             |                     |             |             |
| <b>48"</b> x 30"                      | 42.31°              | 26.96°              | 14.83°      |                     |                     |             |                     |             |             |
| <b>48"</b> x 48"                      | 42.31°              | 26.96°              | 14.83°      |                     |                     |             |                     |             |             |
| <b>66"</b> x 30"                      | 57.24°              | 48.60°              | 43.31°      | 37.55°              | 31.84°              | 24.37°      | 14.56°              |             |             |
| <b>66"</b> x 48"                      | 57.24°              | 48.60°              | 43.31°      | 37.55°              | 31.84°              | 24.37°      | 14.56°              |             |             |
| <b>66"</b> x 66"                      | 57.24°              | 48.60°              | 43.31°      | 37.55°              | 31.84°              | 24.37°      | 14.56°              |             |             |
| <b>72"</b> x 24"                      | 60.28°              | 52.63°              | 48.04°      | 43.16°              | 38.48°              | 32.67°      | 25.98°              | 5.46°       |             |
| <b>72"</b> x 48"                      | 60.28°              | 52.63°              | 48.04°      | 43.16°              | 38.48°              | 32.67°      | 25.98°              | 5.46°       |             |
| <b>72"</b> x 72"                      | 60.28°              | 52.63°              | 48.04°      | 43.16°              | 38.48°              | 32.67°      | 25.98°              | 5.46°       |             |
| <b>34" x 18"</b>                      |                     |                     |             |                     |                     |             |                     |             |             |
| <b>34" x 24"</b>                      |                     |                     |             |                     |                     |             |                     |             |             |
| <b>48" x 30"</b>                      |                     |                     |             |                     |                     |             |                     |             |             |
| <b>48" x 48"</b>                      | 42.31°              | 26.96°              | 14.83°      |                     |                     |             |                     |             |             |
| <b>66" x 30"</b>                      |                     |                     |             |                     |                     |             |                     |             |             |
| <b>66" x 48"</b>                      | 42.31°              | 26.96°              | 14.83°      |                     |                     |             |                     |             |             |
| <b>66" x 66"</b>                      | 57.24°              | 48.60°              | 43.31°      | 37.55°              | 31.84°              | 24.37°      | 14.56°              |             |             |
| <b>72" x 24"</b>                      |                     |                     |             |                     |                     |             |                     |             |             |
| <b>72" x 48"</b>                      | 42.31°              | 26.96°              | 14.83°      |                     |                     |             |                     |             |             |
| <b>72" x 72"</b>                      | 60.28°              | 52.63°              | 48.04°      | 43.16°              | 38.48°              | 32.67°      | 25.98°              | 5.46°       |             |

