

Answers to “Test Yourself” No. 24

Replace the Reverse Curve

Dr. Richard L. Elgin, PLS, PE
Archer-Elgin Surveying and Engineering, LLC
Rolla, Missouri

Distance, $PI1$ to $PI2 = T1 + T2$

$$T = R \tan \frac{\Delta}{2}$$

$$T1 = 529.71$$

$$T2 = 207.08$$

New $T1 + 100.00 + T2 = 736.79$

$$R \tan \frac{\Delta 1}{2} + R \tan \frac{\Delta 2}{2} + 100.00 = 736.79$$

$$1.7656960 R + 1.2942378 R = 636.79$$

$$\text{New } R's = 208.11 \text{ feet}$$