



P.C. = Point of Curvature

P.I. = Point of Intersection

P.T. = Point of Tangency

Δ = Central Angle or External Deflection Angle

D = Degree of Curve

R = Radius of Curve

T = Tangent of Curve

L = Length of Curve (Circular Arc)

E = External of Curve

M = Mid Ordinate of Curve

LC = Long Chord

$$L = \Delta R / 57.2958$$

$$D = 5729.578 / R$$

$$T = R \tan (\Delta / 2)$$

$$E = R (\sec (\Delta / 2) - 1) = R \tan (\Delta / 2) \tan (\Delta / 4)$$

$$M = R (1 - \cos(\Delta / 2)) = (LC/2) \tan (\Delta / 4)$$

$$LC = 2 R \sin (\Delta / 2) = 2 T \cos (\Delta / 2)$$

Figure 4-01: Circular Horizontal Curve