

Exercise 7-1

This is an individual exercise to practice storing horizontal alignments.

1. Open the MicroStation file **t:\de-proj\randolph\j2p0200\data\plan_j2p0200.dgn**.

2. Enter Coordinate Geometry.

3. Use **Coordinate Geometry**, **Graphical COGO**, or **Horizontal Alignment Generator** to create the alignments as shown on the following pages.

Do not worry about the graphics (stationing, curve data, etc.) being plotted. These items will be discussed in later chapters.

X = 1676434.4103
 Y = 1262365.4715
 POT STA 9+50.00

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CHAIN RTE63

TS STA 25+04.73 25

SPIRAL RTE63-1B
 PI 27+20.79
 Ls 324.00'
 Ys 7.63'
 Xs 323.84'
 LT 216.06'
 ST 108.05'

SC STA 28+28.73
 POT STA 0+00.00

X = 1676792.0050
 Y = 1260393.1372

CHAIN ROAD1

PC STA 7+53.43

CURVE ROAD1-1
 PI 15+74.80
 PC 7+53.43
 PT 23+62.95
 Δ 28° 10' 00.0" (LT)
 D 1° 45' 00.0"
 L 1,609.52'
 T 821.37'
 R 3,274.04'

CURVE RTE63-1
 TOTAL PI 36+24.28
 SC 28+28.73
 CS 43+17.48
 TOTAL Δ 45° 19' 07.4" (LT)
 D 2° 30' 00.0"
 Lc 1,488.75'
 Ls 324.00'
 Ts 1,119.55'
 R 2,291.83'
 θ s 4° 03' 00.0"
 Xs 323.84'
 Ys 7.63'

SPIRAL RTE63-1A
 PI 44+25.53
 Ls 324.00'
 Ys 7.63'
 Xs 323.84'
 LT 216.06'
 ST 108.05'

CS STA 43+17.48

ST STA 46+41.48

PT STA 23+62.95

X = 1679002.6087
 Y = 1257759.8897

45° 39' 27.2" E
 52° 30' 00.0" E

POT STA 35+10.08

X = 1678994.1614
 Y = 1257205.0288

POT STA 70+79.01

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4. Upon completion of storing the alignments in coordinate geometry, close **coordinate geometry**, **graphical cogo**, and **Horizontal Alignment Generator**.

5. Delete all of the graphics in the MicroStation drawing by going to **Edit>>Select All**, and then selecting the **Delete** button.