

ALIGNMENT - HORIZONTAL CURVE DATA

Chain I80 contains:
 1 CUR 1200 CUR 1210 CUR 1220 CUR 1230 CUR 1240 CUR 1250 CUR 1260 CUR 1270 CUR 1280
 CUR 1290 CUR 1300 38

Beginning chain I80 description

Point 1 N 1,723,562.8520 E 2,482,155.3860 Sta 2925+29.05

Course from 1 to PC 1200 N 81° 25' 23.6256" E Dist 8,276.1506

Curve Data

Curve 1200
 P.I. Station = 3035+35.33 N 1,725,204.2673 E 2,493,038.5799
 Delta = 26° 47' 48.2692" (RT)
 Degree = 0° 29' 59.6601"
 Tangent = 2,730.1272
 Length = 5,360.3606
 Radius = 11,461.3203
 External = 320.6769
 Long Chord = 5,311.6398
 Mid. Ord. = 311.9489
 P.C. Station = 3008+05.20 N 1,724,797.1113 E 2,490,338.9838
 P.T. Station = 3061+65.56 N 1,724,350.6493 E 2,495,631.8271
 C.C. = 1,713,463.9637 E 2,492,048.2617
 Back = N 81° 25' 23.6256" E
 Ahead = S 71° 46' 48.1051" E
 Chord Bear = S 85° 10' 42.2398" E

Course from PT 1200 to PC 1210 S 71° 46' 48.1052" E Dist 1,367.8882

Curve Data

Curve 1210
 P.I. Station = 3094+24.01 N 1,723,331.8434 E 2,498,726.9066
 Delta = 36° 28' 59.0837" (LT)
 Degree = 0° 59' 55.8749"
 Tangent = 1,890.5598
 Length = 3,652.4931
 Radius = 5,736.1507
 External = 303.5216
 Long Chord = 3,591.1007
 Mid. Ord. = 288.2682
 P.C. Station = 3075+33.45 N 1,723,922.9571 E 2,496,931.1336
 P.T. Station = 3111+85.94 N 1,723,924.3090 E 2,500,522.2341
 C.C. = 1,729,371.5152 E 2,498,724.6330
 Back = S 71° 46' 48.1051" E
 Ahead = N 71° 44' 12.8112" E
 Chord Bear = N 89° 58' 42.3530" E

Course from PT 1210 to PC 1220 N 71° 44' 12.8112" E Dist 1,304.8427

Curve Data

Curve 1220
 P.I. Station = 3142+96.95 N 1,724,899.2384 E 2,503,476.5279
 Delta = 17° 53' 45.9362" (RT)
 Degree = 0° 29' 58.1483"
 Tangent = 1,806.1602
 Length = 3,582.9045
 Radius = 11,470.9563
 External = 141.3240
 Long Chord = 3,568.3578
 Mid. Ord. = 139.6040
 P.C. Station = 3124+90.79 N 1,724,333.2220 E 2,501,761.3485
 P.T. Station = 3160+73.69 N 1,724,910.8079 E 2,505,282.6511
 C.C. = 1,713,440.0869 E 2,505,356.1291
 Back = N 71° 44' 12.8112" E
 Ahead = N 89° 37' 58.7474" E
 Chord Bear = N 80° 41' 05.7793" E

Course from PT 1220 to PC 1230 N 89° 37' 58.7474" E Dist 9,201.9752

Curve Data

Curve 1230
 P.I. Station = 3262+38.66 N 1,724,975.9203 E 2,515,447.4077
 Delta = 3° 18' 37.4708" (RT)
 Degree = 0° 10' 18.9466"
 Tangent = 962.9899
 Length = 1,925.4440
 Radius = 33,325.1364
 External = 13.9108
 Long Chord = 1,925.1762
 Mid. Ord. = 13.9050
 P.C. Station = 3252+75.67 N 1,724,969.7518 E 2,514,484.4375
 P.T. Station = 3272+01.11 N 1,724,926.4714 E 2,516,409.1272
 C.C. = 1,691,645.2991 E 2,514,697.9040
 Back = N 89° 37' 58.7474" E
 Ahead = S 87° 03' 23.7818" E
 Chord Bear = S 88° 42' 42.5172" E

Course from PT 1230 to PC 1240 S 87° 03' 23.7818" E Dist 874.6988

Curve Data

Curve 1240
 P.I. Station = 3302+13.75 N 1,724,771.7743 E 2,519,417.7938
 Delta = 7° 09' 05.8557" (LT)
 Degree = 0° 10' 02.9006"
 Tangent = 2,137.9422
 Length = 4,270.3315
 Radius = 34,212.0736
 External = 66.7358
 Long Chord = 4,267.5599
 Mid. Ord. = 66.6059
 P.C. Station = 3280+75.81 N 1,724,881.5562 E 2,517,282.6720
 P.T. Station = 3323+46.14 N 1,724,928.6597 E 2,521,549.9720
 C.C. = 1,759,048.4957 E 2,519,039.4389
 Back = S 87° 03' 23.7818" E
 Ahead = N 85° 47' 30.3626" E
 Chord Bear = N 89° 22' 03.2904" E

Course from PT 1240 to PC 1250 N 85° 47' 30.3626" E Dist 804.6665

Curve Data

Curve 1250
 P.I. Station = 3341+19.47 N 1,725,058.7896 E 2,523,318.5236
 Delta = 3° 14' 52.3904" (RT)
 Degree = 0° 10' 03.6921"
 Tangent = 968.6661
 Length = 1,936.8134
 Radius = 34,167.2170
 External = 13.7284
 Long Chord = 1,936.5541
 Mid. Ord. = 13.7229
 P.C. Station = 3331+50.81 N 1,724,987.7074 E 2,522,352.4691
 P.T. Station = 3350+87.62 N 1,725,075.0248 E 2,524,287.0537
 C.C. = 1,690,912.6072 E 2,524,859.7107
 Back = N 85° 47' 30.3626" E
 Ahead = N 89° 02' 22.7529" E
 Chord Bear = N 87° 24' 56.5577" E

Course from PT 1250 to PC 1260 N 89° 02' 22.7529" E Dist 4,434.6464

Curve Data

Curve 1260
 P.I. Station = 3424+50.42 N 1,725,198.4284 E 2,531,648.8161
 Delta = 28° 38' 18.9861" (RT)
 Degree = 0° 29' 58.0721"
 Tangent = 2,928.1503
 Length = 5,733.8626
 Radius = 11,471.4422
 External = 367.8167
 Long Chord = 5,674.3597
 Mid. Ord. = 356.3895
 P.C. Station = 3395+22.27 N 1,725,149.3513 E 2,528,721.0772
 P.T. Station = 3452+56.13 N 1,723,838.2848 E 2,534,241.8980
 C.C. = 1,713,679.5205 E 2,528,913.3434
 Back = N 89° 02' 22.7529" E
 Ahead = S 62° 19' 18.2610" E
 Chord Bear = S 76° 38' 27.7540" E

Course from PT 1260 to PC 1270 S 62° 19' 18.2610" E Dist 5,859.9896

Curve Data

Curve 1270
 P.I. Station = 3533+10.86 N 1,720,096.8143 E 2,541,374.9237
 Delta = 7° 17' 06.0849" (RT)
 Degree = 0° 09' 58.2823"
 Tangent = 2,194.7393
 Length = 4,383.5634
 Radius = 34,476.1659
 External = 69.7875
 Long Chord = 4,380.6112
 Mid. Ord. = 69.6465
 P.C. Station = 3511+16.12 N 1,721,116.2840 E 2,539,431.3286
 P.T. Station = 3554+99.68 N 1,718,839.1159 E 2,543,173.5552
 C.C. = 1,690,585.2281 E 2,523,416.9401
 Back = S 62° 19' 18.2610" E
 Ahead = S 55° 02' 12.1761" E
 Chord Bear = S 58° 40' 45.2185" E

Course from PT 1270 to PC 1280 S 55° 02' 12.1761" E Dist 3,584.8541

Curve Data

Curve 1280
 P.I. Station = 3613+86.67 N 1,715,465.5682 E 2,547,998.0576
 Delta = 22° 37' 08.3647" (LT)
 Degree = 0° 29' 51.8721"
 Tangent = 2,302.1355
 Length = 4,544.3180
 Radius = 11,511.1346
 External = 227.9475
 Long Chord = 4,514.8661
 Mid. Ord. = 223.5212
 P.C. Station = 3590+84.54 N 1,716,784.8102 E 2,546,111.4128
 P.T. Station = 3636+28.85 N 1,714,973.4046 E 2,550,246.9691
 C.C. = 1,726,218.4086 E 2,552,707.8846
 Back = S 55° 02' 12.1761" E
 Ahead = S 77° 39' 20.5408" E
 Chord Bear = S 66° 20' 46.3584" E

Course from PT 1280 to PC 1290 S 77° 39' 20.5408" E Dist 11,034.9722

Curve Data

Curve 1290
 P.I. Station = 3755+63.95 N 1,712,421.8529 E 2,561,906.1298
 Delta = 13° 09' 21.0543" (LT)
 Degree = 0° 44' 02.4364"
 Tangent = 900.1208
 Length = 1,792.3252
 Radius = 7,805.8570
 External = 51.7267
 Long Chord = 1,788.3905
 Mid. Ord. = 51.3861
 P.C. Station = 3746+63.83 N 1,712,614.2859 E 2,561,026.8193
 P.T. Station = 3764+56.15 N 1,712,434.6021 E 2,562,806.1603
 C.C. = 1,720,239.6761 E 2,562,695.5996
 Back = S 77° 39' 20.5408" E
 Ahead = N 89° 11' 18.4049" E
 Chord Bear = S 84° 14' 01.0679" E

Course from PT 1290 to PC 1300 N 89° 11' 18.4049" E Dist 5,856.9468

Curve Data

Curve 1300
 P.I. Station = 3829+18.99 N 1,712,526.1406 E 2,569,268.3499
 Delta = 1° 10' 05.5736" (LT)
 Degree = 0° 05' 47.0690"
 Tangent = 605.8910
 Length = 1,211.7400
 Radius = 59,430.4941
 External = 3.0884
 Long Chord = 1,211.7190
 Mid. Ord. = 3.0883
 P.C. Station = 3823+13.10 N 1,712,517.5588 E 2,568,662.5196
 P.T. Station = 3835+24.84 N 1,712,547.0720 E 2,569,873.8792
 C.C. = 1,771,942.0913 E 2,567,820.7569
 Back = N 89° 11' 18.4049" E
 Ahead = N 88° 01' 12.8313" E
 Chord Bear = N 88° 36' 15.6181" E

Course from PT 1300 to PC 38 N 88° 01' 12.8313" E Dist 10,985.4171

Point 38 N 1,712,926.5810 E 2,580,852.7390 Sta 3945+10.26

Ending chain I80 description

CURVE POINT NUMBERS				
CURVE	PI	CC	PC	PT
1200	1200	1201	1202	1203
1210	1210	1211	1212	1213
1220	1220	1221	1222	1223
1230	1230	1231	1232	1233
1240	1240	1241	1242	1243
1250	1250	1251	1252	1253

CURVE POINT NUMBERS (continued)				
CURVE	PI	CC	PC	PT
1260	1260	1261	1262	1263
1270	1270	1271	1272	1273
1280	1280	1281	1282	1283
1290	1290	1291	1292	1293
1300	1300	1301	1302	1303

TYLIN INTERNATIONAL

USER NAME = #USER#	DESIGNED - CAC	REVISED -
PLOT SCALE = #SCALE#	DRAWN - CAC	REVISED -
PLOT DATE = 8/14/2009	CHECKED - JDF	REVISED -
	DATE - 08/14/2009	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

F.A.I. ROUTE 80 (I-80)
 ALIGNMENT AND SURVEY TIES FOR CONTROL POINTS
 SHEET 3 OF 3

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.I. RTE. 80	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		BUREAU	344	29
CONTRACT NO. 66908				

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT
 * 06-ETBR & BR-1,7VB-M, 6BR & 6, 7 RS-1 & II