

# HORIZONTAL & VERTICAL CONTROL

Chain IL82 contains:  
20 CUR 200 CUR 210 220 CUR 230 72

Beginning chain IL82 description

Point 20 N 1,750,306.0710 E 2,298,872.5550 Sta 1205+21.7200

Course from 20 to PC 200 N 0° 23' 09.9713" E Dist 1,797.7938

Curve Data  
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Curve 200  
P.I. Station = 1225+19.5138 N 1,752,303.8195 E 2,298,886.0176  
Delta = 1° 58' 52.2273" (LT)  
Degree = 0° 29' 43.2345"  
Tangent = 200.0000  
Length = 399.9601  
Radius = 11,566.8918  
External = 1.7289  
Long Chord = 399.9402  
Mid. Ord. = 1.7287  
P.C. Station = 1223+19.5138 N 1,752,103.8240 E 2,298,884.6698  
P.T. Station = 1227+19.4740 N 1,752,503.7420 E 2,298,880.4504  
C.C. = N 1,752,181.7701 E 2,287,318.0406  
Back = N 0° 23' 09.9714" E  
Ahead = N 1° 35' 42.2559" W  
Chord Bear = N 0° 36' 16.1423" W

Course from PT 200 to PC 201 N 1° 35' 42.2559" W Dist 628.9749

Curve Data  
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Curve 210  
P.I. Station = 1237+16.8489 N 1,753,500.7304 E 2,298,852.6879  
Delta = 3° 41' 00.0000" (RT)  
Degree = 0° 30' 00.2943"  
Tangent = 368.4000  
Length = 736.5462  
Radius = 11,457.2825  
External = 5.9213  
Long Chord = 736.4194  
Mid. Ord. = 5.9182  
P.C. Station = 1233+48.4489 N 1,753,132.4732 E 2,298,862.9425  
P.T. Station = 1240+84.9951 N 1,753,868.8858 E 2,298,866.1120  
C.C. = N 1,753,451.3940 E 2,310,315.7855  
Back = N 1° 35' 42.2559" W  
Ahead = N 2° 05' 17.7441" E  
Chord Bear = N 0° 14' 47.7441" E

Course from PT 201 to 220 N 2° 05' 17.7441" E Dist 4,677.7062

Point 220 N 1,758,543.4854 E 2,299,036.5628 Sta 1287+62.7013

Course from 220 to PC 230 N 2° 06' 56.2770" E Dist 2,606.7891

Curve Data  
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Curve 230  
P.I. Station = 1317+07.9420 N 1,761,486.7185 E 2,299,145.2904  
Delta = 3° 18' 45.3391" (LT)  
Degree = 0° 29' 22.2404"  
Tangent = 338.4516  
Length = 676.7147  
Radius = 11,704.6920  
External = 4.8923  
Long Chord = 676.6204  
Mid. Ord. = 4.8902  
P.C. Station = 1313+69.4904 N 1,761,148.4976 E 2,299,132.7960  
P.T. Station = 1320+46.2051 N 1,761,825.0963 E 2,299,138.2204  
C.C. = N 1,761,580.5922 E 2,287,436.0824  
Back = N 2° 06' 56.2770" E  
Ahead = N 1° 11' 49.0621" W  
Chord Bear = N 0° 27' 33.6075" E

Course from PT 230 to 72 N 1° 11' 49.0621" W Dist 5,906.9530

Point 72 N 1,767,730.7603 E 2,299,014.8276 Sta 1379+53.1581

Ending chain IL82 description

Chain TRAIL contains:  
60000 CUR 60100 CUR 60200 60001  
Beginning chain TRAIL description

Point 60000 N 1,754,036.4572 E 2,298,753.5606 Sta 10+00.0000

Course from 60000 to PC 60100 S 78° 22' 59.4216" E Dist 64.4204

Curve Data  
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Curve 60100  
P.I. Station = 11+16.9298 N 1,754,012.9115 E 2,298,868.0953  
Delta = 13° 32' 59.7467" (LT)  
Degree = 12° 57' 46.2458"  
Tangent = 52.5094  
Length = 104.5290  
Radius = 442.0000  
External = 3.1081  
Long Chord = 104.2856  
Mid. Ord. = 3.0864  
P.C. Station = 10+64.4204 N 1,754,023.4851 E 2,298,816.6614  
P.T. Station = 11+68.9494 N 1,754,014.6828 E 2,298,920.5748  
C.C. = N 1,754,456.4313 E 2,298,905.6650  
Back = S 78° 22' 59.4210" E  
Ahead = N 88° 04' 00.8324" E  
Chord Bear = S 85° 09' 29.2943" E

Curve Data  
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Curve 60200  
P.I. Station = 12+08.8300 N 1,754,016.0281 E 2,298,960.4328  
Delta = 7° 18' 07.4692" (RT)  
Degree = 9° 10' 02.3690"  
Tangent = 39.8806  
Length = 79.6533  
Radius = 625.0000  
External = 1.2711  
Long Chord = 79.5994  
Mid. Ord. = 1.2685  
P.C. Station = 11+68.9494 N 1,754,014.6828 E 2,298,920.5748  
P.T. Station = 12+48.6027 N 1,754,012.2965 E 2,299,000.1384  
C.C. = N 1,753,390.0385 E 2,298,941.6577  
Back = N 88° 04' 00.8324" E  
Ahead = S 84° 37' 51.6984" E  
Chord Bear = S 88° 16' 55.4330" E

Course from PT 60200 to 60001 S 84° 37' 51.6975" E Dist 97.8243

Point 60001 N 1,754,003.1431 E 2,299,097.5336 Sta 13+46.4270

Ending chain TRAIL description

### BENCH MARKS

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
401	1754027.6590	2298855.3313	615.0760	IL82	1242+43.2701	16.5591' LT	NW WINGWALL, CHISELED "X"

### CURVE POINT NUMBERS

CHAIN	CURVE	PI	CC	PC	PT
IL82	200	200	201	202	203
IL82	201	210	211	212	213
IL82	230	230	231	232	233
TRAIL	60100	60100	60101	60102	60103
TRAIL	60200	60200	60201	60202	60203

FILE NAME =	USER NAME = #USER#	DESIGNED - JDS	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IL 82 OVER HENNEPIN CANAL ALIGNMENT, TIES, AND BENCHMARKS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN - WLL	REVISED -			638	129BR-3	HENRY	73	10	
		CHECKED - RJA	REVISED -			CONTRACT NO. 64B08					
		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
				SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.		