

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
301	(2HB-2, 2HB-1D)	WINNEBAGO	107	10
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Chain BYPASS20 contains:
12 CUR 200 CUR 210 CUR 220 CUR 230 20

Beginning chain BYPASS20 description

Point 12 X 2,560,295.9940 Y 2,045,155.7590
Sta 561+57.6646

Course from 12 to PC 200 131° 40' 27.8273" Dist 4,791.0678

Curve Data

Curve 200
P.I. Station 624+39.9871 X 2,564,988.4829
Y 2,040,978.6639
Delta = 42° 35' 57.7134" (LT)
Degree = 1° 29' 52.6381"
Tangent = 1,491.2547
Length = 2,843.8347
Radius = 3,824.9332
External = 280.4236
Long Chord = 2,778.7839
Mid. Ord. = 261.2688
P.C. Station 609+48.7324 X 2,563,874.6120
Y 2,041,970.1941
P.T. Station 637+92.5671 X 2,566,479.5433
Y 2,041,002.7373
C.C. X 2,566,417.7973
Y 2,044,827.1720
Back = 131° 40' 27.8273"
Ahead = 89° 04' 30.1138"
Chord Bear = 110° 22' 28.9705"

Course from PT 200 to PC 210 89° 04' 30.1138" Dist 591.6257

Curve Data

Curve 210
P.I. Station 681+39.6603 X 2,570,826.0701
Y 2,041,072.9126
Delta = 66° 34' 11.3078" (RT)
Degree = 1° 00' 05.7527"
Tangent = 3,755.4875
Length = 6,646.3601
Radius = 5,720.4368
External = 1,122.5840
Long Chord = 6,278.7810
Mid. Ord. = 938.4263
P.C. Station 643+84.1928 X 2,567,071.0920
Y 2,041,012.2879
P.T. Station 710+30.5529 X 2,572,374.7934
Y 2,037,651.6566
C.C. X 2,567,163.4372
Y 2,035,292.5965
Back = 89° 04' 30.1138"
Ahead = 155° 38' 41.4216"
Chord Bear = 122° 21' 35.7677"

Course from PT 210 to PC 220 155° 38' 41.4216" Dist 9,646.1918

Curve Data

Curve 220
P.I. Station 816+26.9622 X 2,576,744.6636
Y 2,027,998.2570
Delta = 18° 48' 22.5631" (LT)
Degree = 0° 59' 54.8093"
Tangent = 950.2175
Length = 1,883.3423
Radius = 5,737.8512
External = 78.1483
Long Chord = 1,874.8994
Mid. Ord. = 77.0982
P.C. Station 806+76.7447 X 2,576,352.8019
Y 2,028,863.9115
P.T. Station 825+60.0870 X 2,577,394.6659
Y 2,027,305.1405
C.C. X 2,581,580.0227
Y 2,031,230.1532
Back = 155° 38' 41.4216"
Ahead = 136° 50' 18.8585"
Chord Bear = 146° 14' 30.1400"

Course from PT 220 to PC 230 136° 50' 18.8585" Dist 2,552.0889

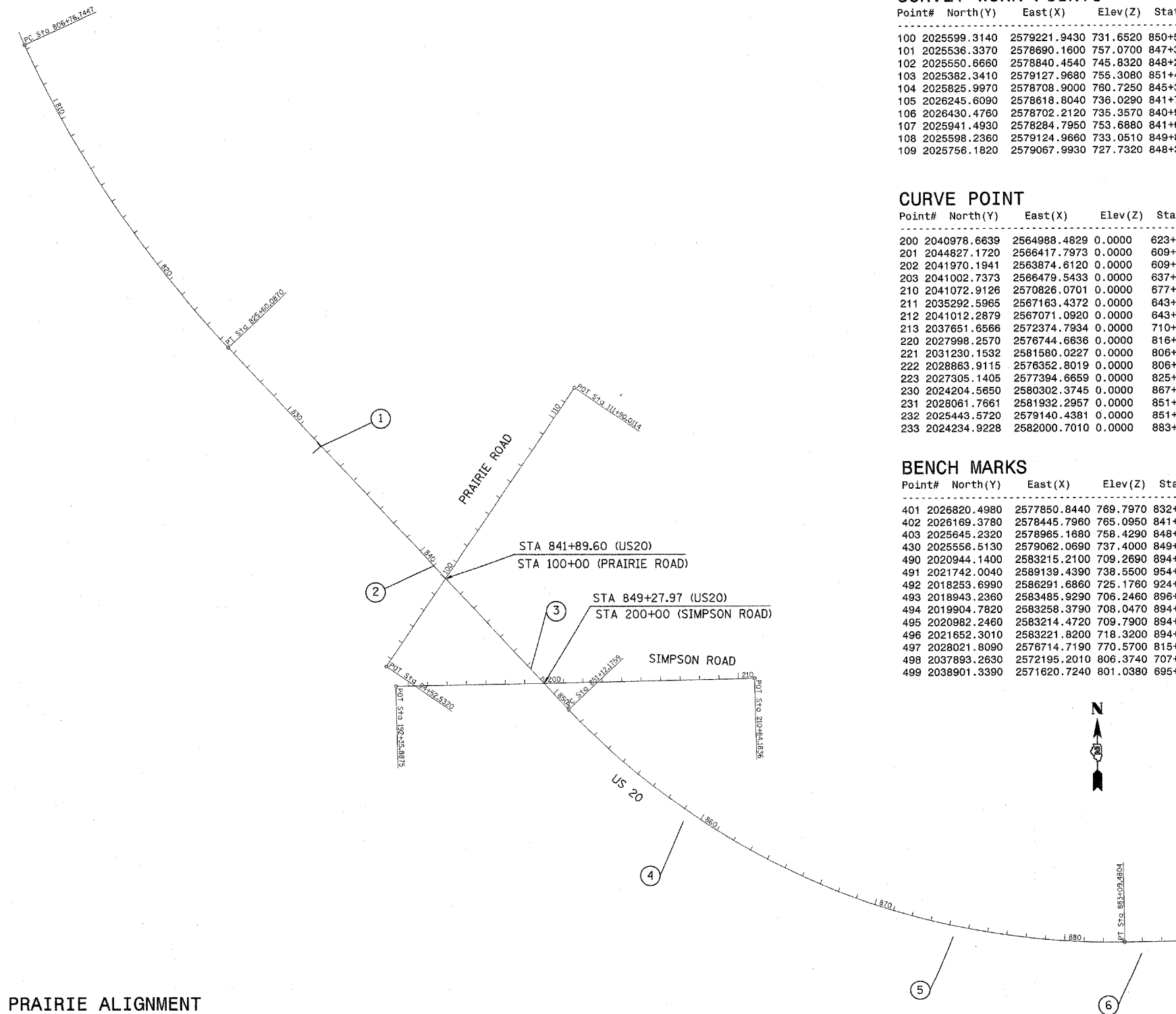
Curve Data

Curve 230
P.I. Station 868+10.7737 X 2,580,302.3745
Y 2,024,204.5650
Delta = 47° 51' 45.4783" (LT)
Degree = 1° 29' 49.0857"
Tangent = 1,698.5978
Length = 3,197.3045
Radius = 3,827.4546
External = 359.9841
Long Chord = 3,105.1468
Mid. Ord. = 329.0372
P.C. Station 851+12.1759 X 2,579,140.4381
Y 2,025,443.5720
P.T. Station 883+09.4804 X 2,582,000.7010
Y 2,024,234.9228
C.C. X 2,581,932.2957
Y 2,028,061.7661
Back = 136° 50' 18.8585"
Ahead = 88° 58' 33.3802"
Chord Bear = 112° 54' 26.1194"

Course from PT 230 to 20 88° 58' 33.3802" Dist 16,325.6225

Point 20 X 2,598,323.7160 Y 2,024,526.6990
Sta 1046+35.1029

Ending chain BYPASS20 description



PRAIRIE ALIGNMENT

Point#	North(Y)	East(X)	Elev(Z)	Station	Offset	Description
24	2025663.748	2578201.589	761.936	94+52.5320	0.0000	POT, NAIL
22	2027100.713	2579178.301	763.568	111+90.0114	0.0000	POT, NAIL

SIMPSON ALIGNMENT

Point#	North(Y)	East(X)	Elev(Z)	Station	Offset	Description
25	2025561.534	2578250.492	764.282	192+35.8875	0.0000	POT, NAIL
26	2025601.218	2580098.362	734.855	210+84.1836	0.0000	POT, NAIL

SURVEY WORK POINTS

Point#	North(Y)	East(X)	Elev(Z)	Station	Offset	Description
100	2025599.3140	2579221.9430	731.6520	850+54.3270	-165.9883	TOPO SURVEY POINT, NAIL
101	2025536.3370	2578690.1600	757.0700	847+36.4948	264.9896	TOPO SURVEY POINT, NAIL
102	2025560.6660	2578840.4540	745.8320	848+28.8524	145.5589	TOPO SURVEY POINT, NAIL
103	2025382.3410	2579127.9680	755.3080	851+47.8333	51.1498	TOPO SURVEY POINT, NAIL
104	2025825.9970	2578708.9000	760.7250	845+38.0276	53.1764	TOPO SURVEY POINT, NAIL
105	2026245.6090	2578618.8040	736.0290	841+70.3195	-168.1432	TOPO SURVEY POINT, NAIL
106	2026430.4760	2578702.2120	735.3570	840+92.5279	-385.4428	TOPO SURVEY POINT, NAIL
107	2025941.4930	2578284.7950	753.6880	841+63.6697	283.5252	TOPO SURVEY POINT, NAIL
108	2025598.2360	2579124.9660	733.0510	849+88.7756	-94.5130	TOPO SURVEY POINT, NAIL
109	2025756.1820	2579067.9930	727.7320	848+34.5925	-160.9992	TOPO SURVEY POINT, NAIL

CURVE POINT

Point#	North(Y)	East(X)	Elev(Z)	Station	Offset	Description
200	2040978.6639	2564988.4829	0.0000	623+70.6497	280.4236	PI
201	2044827.1720	2566417.7973	0.0000	609+48.7324	-3824.9332	RADIUS PT
202	2041970.1941	2563874.6120	0.0000	609+48.7324	0.0000	PC
203	2041002.7373	2566479.5433	0.0000	637+92.5671	-0.0000	PT
210	2041072.9126	2570826.0701	0.0000	677+07.3728	-1122.5840	PI
211	2035292.5965	2567163.4372	0.0000	643+84.1928	5720.4368	RADIUS PT
212	2041012.2879	2567071.0920	0.0000	643+84.1928	0.0000	PC
213	2037651.6566	2572374.7934	0.0000	710+30.5529	0.0000	PT
220	2027998.2570	2576744.6636	0.0000	816+18.4158	78.1483	PI
221	2031230.1532	2581580.0227	0.0000	806+76.7447	-5737.8512	RADIUS PT
222	2028863.9115	2576352.8019	0.0000	806+76.7447	0.0000	PC
223	2027305.1405	2577394.6659	0.0000	825+60.0870	0.0000	PT
230	2024204.5650	2580302.3745	0.0000	867+10.8281	359.9841	PI
231	2028061.7661	2581932.2957	0.0000	851+12.1759	-3827.4546	RADIUS PT
232	2025443.5720	2579140.4381	0.0000	851+12.1759	0.0000	PC
233	2024234.9228	2582000.7010	0.0000	883+09.4804	-0.0000	PT

BENCH MARKS

Point#	North(Y)	East(X)	Elev(Z)	Station	Offset	Description
401	2026820.4980	2577850.8440	769.7970	832+25.6509	-1.2270	DROP BOX, CHISELED SQUARE
402	2026169.3780	2578445.7960	765.0950	841+07.5775	10.2002	TOP OF WINGWALL, CHISELED SQUARE
403	2025645.2320	2578965.1680	768.4290	848+45.1846	-10.0996	TOP OF WINGWALL, CHISELED SQUARE
430	2025556.5130	2579062.0690	737.4000	849+76.1845	-20.0932	PIER, CHISELED SQUARE
490	2020944.1400	2583215.2100	709.2690	894+64.9816	3311.9633	TOP OF WINGWALL, CHISELED SQUARE
491	2021742.0040	2589139.4390	738.5500	954+02.5240	2620.1062	WALL, CHISELED SQUARE
492	2018253.6990	2586291.6860	725.1760	924+92.8819	6058.9582	SIGN FOUNDATION, CHISELED SQUARE
493	2018943.2360	2583485.9290	706.2460	896+99.8966	5317.3860	WALL, DISK
494	2019904.7820	2583258.3790	708.0470	894+89.5680	4351.9268	WALL, DISK
495	2020982.2460	2583214.4720	709.7900	894+64.9247	3273.8501	TOP OF WINGWALL, CHISELED SQUARE
496	2021652.3010	2583221.8200	718.3200	894+84.2470	2604.0335	FIRE HYDRANT, CHISELED X
497	2028021.8090	2578714.7190	770.5700	815+82.7545	90.0688	SIGN FOUNDATION, CHISELED SQUARE
498	2037893.2630	2572195.2010	806.3740	707+33.3262	56.3294	WALL, CHISELED SQUARE
499	2038901.3390	2571620.7240	801.0380	695+68.9458	-14.5809	WALL, CHISELED SQUARE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
US 20 OVER
PRAIRIE AND SIMPSON ROADS
ALIGNMENT, TIES, AND BENCHMARKS

SCALE: VERT.
HORIZ.
DATE 06/22/07

DRAWN BY AJP
CHECKED BY SPF

FILE NAME = P:\2273-08 - IDOT US 20 Bypass\2065905-Roadway\2065905RHC
PLOT SCALE = #SCALE#
USER NAME = #USER#