

REFERENCE TIES				
POINT	CHAIN	STATION	OFFSET	DESCRIPTION
501	BUS-20	417+11.27	40.05' LT	GUARDRAIL STEEL PLATE BEAM
502	BUS-20	429+94.64	38.03' LT	TOP OF WINGWALL
503	BUS-20	429+96.15	32.12' LT	BRIDGE CURB
504	BUS-20	430+79.61	37.65' RT	TOP OF WINGWALL
505	BUS-20	436+51.32	27.49' RT	DROP INLET PERIMETER
506	BUS-20	436+51.14	33.59' RT	DROP INLET PERIMETER
507	BUS-20	433+15.79	37.60' RT	HEADWALL
508	BUS-20	446+27.42	38.81' LT	GUARDRAIL STEEL PLATE BEAM
509	BUS-20	446+37.60	29.70' RT	DROP INLET PERIMETER
510	BUS-20	445+53.31	29.37' RT	DROP INLET PERIMETER
511	BUS-20	447+04.86	38.76' RT	GUARDRAIL
513	BUS-20	418+25.66	38.04' RT	GUARDRAIL STEEL PLATE BEAM

HORIZONTAL CONTROL POINTS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
2	2045370.2552	2455066.0941	788.28	BUS-20	429+05.48	30.66' LT	GPS CONTROL POINT, GPS CONTROL POINT
3	2045308.5079	2455780.9777	783.09	BUS-20	436+23.08	30.37' RT	GPS CONTROL POINT, GPS CONTROL POINT

BENCH MARKS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
405	2044953.8973	2456779.8263	761.02	BUS-20	447+09.52	39.23' RT	GPS CONTROL POINT, GPS CONTROL POINT
406	2044686.7971	2457237.7839	761.77	BUS-20	452+36.81	38.02' LT	GPS CONTROL POINT

CURVE POINT NUMBERS					
CHAIN	CURVE	PI	CC	PC	PT
BUS-20	1320	1320	1321	1322	1323
BUS-20	1330	1330	1331	1332	1333
BUS-20	1340	1340	1341	1342	1343
BUS-20	1350	1350	1351	1352	1353
BUS-20	200	200	201	202	203
BUS-20	210	210	211	212	213
BUS-20	220	220	221	222	223
BUS-20	230	230	231	232	233

BUS-20 Chain BUS-20 contains:
1370 1380 CUR 200 CUR 210 CUR 220 CUR 230 280

Beginning chain BUS-20 description
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Point 1370 N 2,047,094.6766 E 2,448,085.8936 Sta 353+08.21

Course from 1370 to 1380 S 52° 24' 29.72" E Dist 1,424.2242

Point 1380 N 2,046,225.8557 E 2,449,214.4169 Sta 367+32.43

Course from 1380 to PC 200 S 52° 25' 42.13" E Dist 1,476.3398

Curve Data

Curve 200
P.I. Station 383+13.46 N 2,045,261.8164 E 2,450,467.5306
Delta = 38° 16' 58.56" (LT)
Degree = 18° 59' 43.39"
Tangent = 104.6933
Length = 201.5381
Radius = 301.6300
External = 17.6525
Long Chord = 197.8100
Mid. Ord. = 16.6766
P.C. Station 382+08.77 N 2,045,325.6534 E 2,450,384.5515
P.T. Station 384+10.31 N 2,045,263.1161 E 2,450,572.2158
C.C. N 2,045,564.7228 E 2,450,568.4713
Back = S 52° 25' 42.13" E
Ahead = N 89° 17' 19.31" E
Chord Bear = S 71° 34' 11.41" E

Course from PT 200 to PC 210 N 89° 17' 19.31" E Dist 1,564.9916

Curve Data

Curve 210
P.I. Station 402+25.30 N 2,045,285.6479 E 2,452,387.0687
Delta = 0° 26' 31.62" (LT)
Degree = 0° 05' 18.32"
Tangent = 250.0012
Length = 500.0000
Radius = 64,797.0206
External = 0.4823
Long Chord = 499.9988
Mid. Ord. = 0.4823
P.C. Station 399+75.30 N 2,045,282.5443 E 2,452,137.0868
P.T. Station 404+75.30 N 2,045,290.6803 E 2,452,637.0193
C.C. N 2,110,074.5717 E 2,451,332.6787
Back = N 89° 17' 19.31" E
Ahead = N 88° 50' 47.68" E
Chord Bear = N 89° 04' 03.49" E

Course from PT 210 to PC 220 N 88° 50' 47.68" E Dist 2,883.0691

Curve Data

Curve 220
P.I. Station 442+54.70 N 2,045,366.7584 E 2,456,415.6582
Delta = 42° 47' 20.64" (RT)
Degree = 2° 30' 15.77"
Tangent = 896.3356
Length = 1,708.5681
Radius = 2,287.8213
External = 169.3201
Long Chord = 1,669.1393
Mid. Ord. = 157.6523
P.C. Station 433+58.37 N 2,045,348.7155 E 2,455,519.5043
P.T. Station 450+66.94 N 2,044,771.2408 E 2,457,085.5659
C.C. N 2,043,061.3577 E 2,455,565.5573
Back = N 88° 50' 47.68" E
Ahead = S 48° 21' 51.68" E
Chord Bear = S 69° 45' 32.00" E

Course from PT 220 to PC 230 S 48° 21' 51.68" E Dist 296.7687

Curve Data

Curve 230
P.I. Station 463+61.25 N 2,043,911.3110 E 2,458,052.9152
Delta = 38° 08' 15.80" (LT)
Degree = 1° 59' 07.57"
Tangent = 997.5435
Length = 1,920.8749
Radius = 2,885.8050
External = 167.5478
Long Chord = 1,885.6097
Mid. Ord. = 158.3539
P.C. Station 453+63.71 N 2,044,574.0702 E 2,457,307.3663
P.T. Station 472+84.58 N 2,043,850.4485 E 2,459,048.6003
C.C. N 2,046,730.8773 E 2,459,224.6701
Back = S 48° 21' 51.68" E
Ahead = S 86° 30' 07.47" E
Chord Bear = S 67° 25' 59.57" E

Course from PT 230 to 280 S 86° 30' 07.47" E Dist 1,155.4094

Point 280 N 2,043,779.9543 E 2,460,201.8571 Sta 484+39.99

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Ending chain BUS-20 description

FILE NAME = s:\p1\6380--6395\6346\025\micro\acadd sheets\0264E76-sh-t-hvc1.dgn



1170 SOUTH HOUBOLT ROAD JOLIET, ILLINOIS 60431 (815) 744-4200	USER NAME = brianf	DESIGNED EMD	REVISED -
		DRAWN B/JF	REVISED -
	PLOT SCALE = 40.0000' / IN.	CHECKED MAG	REVISED -
	PLOT DATE = 8/6/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZONTAL AND VERTICAL CONTROL

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5	(19VB-1D)	STEPHENSON	73	17
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT			CONTRACT NO. 64E76	