

**RAMP E\_THORN\_A**

Point 1090 N 1,935,068.6166 E 1,068,569.1098 Sta 0+00.00

Course from 1090 to 1091 N 6° 00' 55.51" E Dist 504.9753

Point 1091 N 1,935,570.8114 E 1,068,622.0292 Sta 5+04.98

Course from 1091 to PC E THORN A-1 N 3° 56' 30.16" E Dist 392.4647

Curve Data

Curve E THORN A-1  
 P.I. Station 12+15.50 N 1,936,279.6528 E 1,068,670.8716  
 Delta = 46°04' 17.05" (RT)  
 Degree = 7° 39' 35.51"  
 Tangent = 318.0574  
 Length = 601.4650  
 Radius = 748.0000  
 External = 64.8127  
 Long Chord = 585.3917  
 Mid. Ord. = 59.6446  
 P.C. Station 8+97.44 N 1,935,962.3478 E 1,068,649.0079  
 P.T. Station 14+98.91 N 1,936,484.0403 E 1,068,914.5645  
 C.C. N 1,935,910.9290 E 1,069,395.2385  
 Back = N 3° 56' 30.16" E  
 Ahead = N 50° 00' 47.21" E  
 Chord Bear = N 26° 58' 38.69" E

Course from PT E THORN A-1 to PC E THORN A-2 N 50° 00' 47.21" E Dist 238.9842

Curve Data

Curve E THORN A-2  
 P.I. Station 18+23.64 N 1,936,692.7179 E 1,069,163.3724  
 Delta = 21° 34' 37.71" (LT)  
 Degree = 12° 43' 56.62"  
 Tangent = 85.7491  
 Length = 169.4665  
 Radius = 450.0000  
 External = 8.0970  
 Long Chord = 168.4668  
 Mid. Ord. = 7.9539  
 P.C. Station 17+37.89 N 1,936,637.6145 E 1,069,097.6722  
 P.T. Station 19+07.36 N 1,936,768.1213 E 1,069,204.2041  
 C.C. N 1,936,982.4007 E 1,068,808.4967  
 Back = N 50° 00' 47.21" E  
 Ahead = N 28° 26' 09.50" E  
 Chord Bear = N 39° 13' 28.35" E

Curve Data

Curve E THORN A-3  
 P.I. Station 20+02.88 N 1,936,852.1164 E 1,069,249.6882  
 Delta = 3° 49' 29.36" (LT)  
 Degree = 2° 00' 10.29"  
 Tangent = 95.5195  
 Length = 190.9681  
 Radius = 2,860.6995  
 External = 1.5943  
 Long Chord = 190.9327  
 Mid. Ord. = 1.5934  
 P.C. Station 19+07.36 N 1,936,768.1213 E 1,069,204.2041  
 P.T. Station 20+98.32 N 1,936,938.9585 E 1,069,289.4681  
 C.C. N 1,938,130.3188 E 1,066,688.6485  
 Back = N 28° 26' 09.50" E  
 Ahead = N 24° 36' 40.14" E  
 Chord Bear = N 26° 31' 24.82" E

Course from PT E THORN A-3 to 1092 N 15° 01' 45.31" E Dist 180.4305

Point 1092 N 1,937,113.2171 E 1,069,336.2559 Sta 22+78.75

**RAMP E\_THORN\_B**

Point 1100 N 1,937,493.5714 E 1,068,604.0067 Sta 0+00.00

Course from 1100 to PC E THORN B-1 S 1° 27' 47.91" E Dist 311.1294

Curve Data

Curve E THORN B-1  
 P.I. Station 4+06.93 N 1,937,086.7763 E 1,068,614.3983  
 Delta = 10°43' 51.46" (LT)  
 Degree = 5° 37' 02.04"  
 Tangent = 95.7984  
 Length = 191.0364  
 Radius = 1,020.0000  
 External = 4.4888  
 Long Chord = 190.7573  
 Mid. Ord. = 4.4691  
 P.C. Station 3+11.13 N 1,937,182.5435 E 1,068,611.9519  
 P.T. Station 5+02.17 N 1,936,993.1394 E 1,068,634.6335  
 C.C. N 1,937,208.5910 E 1,069,631.6193  
 Back = S 1° 27' 47.91" E  
 Ahead = S 12° 11' 39.37" E  
 Chord Bear = S 6° 49' 43.64" E

Curve Data

Curve E THORN B-2  
 P.I. Station 6+32.39 N 1,936,865.8563 E 1,068,662.1398  
 Delta = 36° 03' 56.34" (LT)  
 Degree = 14° 19' 26.20"  
 Tangent = 130.2213  
 Length = 251.7857  
 Radius = 400.0000  
 External = 20.6633  
 Long Chord = 247.6494  
 Mid. Ord. = 19.6483  
 P.C. Station 5+02.17 N 1,936,993.1394 E 1,068,634.6335  
 P.T. Station 7+53.95 N 1,936,779.1612 E 1,068,759.3073  
 C.C. N 1,937,077.6302 E 1,069,025.6083  
 Back = S 12° 11' 39.37" E  
 Ahead = S 48° 15' 35.71" E  
 Chord Bear = S 30° 13' 37.54" E

Curve Data

Curve E THORN B-3  
 P.I. Station 34+18.00 N 1,935,005.5651 E 1,070,747.1465  
 Delta = 169° 21' 47.38" (LT)  
 Degree = 23° 06' 11.29"  
 Tangent = 2,664.0472  
 Length = 733.0743  
 Radius = 248.0000  
 External = 2,427.5656  
 Long Chord = 493.8647  
 Mid. Ord. = 225.0127  
 P.C. Station 7+53.95 N 1,936,779.1612 E 1,068,759.3073  
 P.T. Station 14+87.03 N 1,937,115.6071 E 1,069,120.8408  
 C.C. N 1,936,964.2120 E 1,068,924.4140  
 Back = S 48° 15' 35.71" E  
 Ahead = N 37° 37' 23.09" W  
 Chord Bear = N 47° 03' 30.60" E

Curve Data

Curve E THORN B-4  
 P.I. Station 15+21.41 N 1,937,143.5263 E 1,069,100.7645  
 Delta = 13° 37' 04.16" (LT)  
 Degree = 19° 53' 38.21"  
 Tangent = 34.3881  
 Length = 68.4521  
 Radius = 288.0061  
 External = 2.0457  
 Long Chord = 68.2911  
 Mid. Ord. = 2.0313  
 P.C. Station 14+87.03 N 1,937,115.6071 E 1,069,120.8408  
 P.T. Station 15+55.48 N 1,937,165.9338 E 1,069,074.6792  
 C.C. N 1,936,947.4647 E 1,068,887.0126  
 Back = N 35° 43' 09.70" W  
 Ahead = N 49° 20' 13.86" W  
 Chord Bear = N 42° 31' 41.78" W

**RAMP E\_THORN\_B**

Curve Data

Curve E THORN B-5  
 P.I. Station 16+45.33 N 1,937,224.4833 E 1,069,006.5197  
 Delta = 22°26' 54.54" (LT)  
 Degree = 12° 39' 14.12"  
 Tangent = 89.8541  
 Length = 177.4033  
 Radius = 452.7906  
 External = 8.8295  
 Long Chord = 176.2708  
 Mid. Ord. = 8.6606  
 P.C. Station 15+55.48 N 1,937,165.9338 E 1,069,074.6792  
 P.T. Station 17+32.88 N 1,937,252.5692 E 1,068,921.1679  
 C.C. N 1,936,822.4662 E 1,068,779.6380  
 Back = N 49° 20' 13.86" W  
 Ahead = N 71° 47' 08.39" W  
 Chord Bear = N 60° 33' 41.12" W

Course from PT E THORN B-5 to 1101 N 71° 47' 08.39" W Dist 362.8872

Point 1101 N 1,937,365.9978 E 1,068,576.4636 Sta 20+95.77

FILE NAME =	DESIGNED - AJP	REVISED -	<b>benesch</b>	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ALIGNMENT PLAN I-290 CURVE DATA</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
...\\exp\in-ABC.C1.290.R.Data.exalign-41.dgn	DRAWN - TMB	REVISED -			2201, 1-1, 2&3RS-7	DUPAGE	546	58				
USER NAME = jmajewski	CHECKED - JMM	REVISED -			*290,355	CONTRACT NO. 60G51						
PLCT DATE = 11/13/2009	DATE - 10/16/09	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT							
					SCALE: N.T.S.	SHEET NO. 33 OF 44 SHEETS	STA.	TO STA.				