

**RAMP E\_CALIF\_E**

Curve Data

Curve E CALIF E-1  
 P.I. Station = 0+61.39 N 1,898,013.3219 E 1,158,142.9780  
 Delta = 8° 40' 07.49" (LT)  
 Degree = 7° 04' 24.79"  
 Tangent = 61.3929  
 Length = 122.5515  
 Radius = 810.0000  
 External = 2.3233  
 Long Chord = 122.4347  
 Mid. Ord. = 2.3166  
 P.C. Station = 0+00.00 N 1,898,022.3646 E 1,158,082.2547  
 P.T. Station = 1+22.55 N 1,898,013.5349 E 1,158,204.3705  
 C.C. = N 1,898,823.5300 E 1,158,201.5614  
 Back = S 81° 31' 47.85" E  
 Ahead = N 89° 48' 04.66" E  
 Chord Bear = S 85° 51' 51.60" E

Course from PT E CALIF E-1 to 1831 N 89° 48' 04.66" E Dist 450.0130

Point 1831 N 1,898,015.0955 E 1,158,654.3808 Sta 5+72.56

Course from 1831 to 1832 S 89° 45' 26.13" E Dist 132.4477

Point 1832 N 1,898,014.5344 E 1,158,786.8273 Sta 7+05.01

Course from 1832 to 1833 N 88° 37' 05.16" E Dist 266.1199

Point 1833 N 1,898,020.9522 E 1,159,052.8698 Sta 9+71.13

Course from 1833 to 1834 N 88° 51' 34.81" E Dist 67.2595

Point 1834 N 1,898,022.2908 E 1,159,120.1160 Sta 10+38.39

Course from 1834 to 1835 N 88° 51' 34.81" E Dist 154.7606

Point 1835 N 1,898,025.3707 E 1,159,274.8460 Sta 11+93.15

Course from 1835 to 1836 N 88° 16' 31.97" E Dist 10.8339

Point 1836 N 1,898,025.6967 E 1,159,285.6749 Sta 12+03.99

Course from 1836 to PC E CALIF E-2 N 87° 47' 15.06" E Dist 516.5721

Curve Data

Curve E CALIF E-2  
 P.I. Station = 17+92.44 N 1,898,048.4143 E 1,159,873.6904  
 Delta = 2° 00' 05.46" (LT)  
 Degree = 1° 23' 32.51"  
 Tangent = 71.8820  
 Length = 143.7495  
 Radius = 4,115.0000  
 External = 0.6278  
 Long Chord = 143.7421  
 Mid. Ord. = 0.6277  
 P.C. Station = 17+20.56 N 1,898,045.6393 E 1,159,801.8619  
 P.T. Station = 18+64.31 N 1,898,053.6963 E 1,159,945.3781  
 C.C. = N 1,902,157.5716 E 1,159,643.0002  
 Back = N 87° 47' 15.06" E  
 Ahead = N 85° 47' 09.60" E  
 Chord Bear = N 86° 47' 12.33" E

**RAMP E\_CALIF\_E**

Curve Data

Curve E CALIF E-3  
 P.I. Station = 19+11.45 N 1,898,057.1608 E 1,159,992.3978  
 Delta = 12° 13' 55.63" (LT)  
 Degree = 13° 01' 18.37"  
 Tangent = 47.1472  
 Length = 93.9359  
 Radius = 440.0000  
 External = 2.5188  
 Long Chord = 93.7577  
 Mid. Ord. = 2.5044  
 P.C. Station = 18+64.31 N 1,898,053.6963 E 1,159,945.3781  
 P.T. Station = 19+58.24 N 1,898,070.5088 E 1,160,037.6160  
 C.C. = N 1,898,492.5068 E 1,159,913.0461  
 Back = N 85° 47' 09.60" E  
 Ahead = N 73° 33' 13.97" E  
 Chord Bear = N 79° 40' 11.78" E

**RAMP E\_CALIF\_F**

Curve Data

Curve E CALIF F-1  
 P.I. Station = 0+72.28 N 1,897,726.7705 E 1,159,973.5411  
 Delta = 10° 00' 08.95" (LT)  
 Degree = 6° 56' 11.53"  
 Tangent = 72.2837  
 Length = 144.2000  
 Radius = 826.0000  
 External = 3.1568  
 Long Chord = 144.0170  
 Mid. Ord. = 3.1447  
 P.C. Station = 0+00.00 N 1,897,714.5173 E 1,160,044.7787  
 P.T. Station = 1+44.20 N 1,897,726.4642 E 1,159,901.2581  
 C.C. = N 1,896,900.4716 E 1,159,904.7583  
 Back = N 80° 14' 25.13" W  
 Ahead = S 89° 45' 25.93" W  
 Chord Bear = N 85° 14' 29.60" W

Course from PT E CALIF F-1 to 1851 S 89° 45' 25.93" W Dist 317.5127

Point 1851 N 1,897,725.1187 E 1,159,583.7482 Sta 4+61.71

Course from 1851 to 1852 S 89° 54' 17.23" W Dist 292.5840

Point 1852 N 1,897,724.6325 E 1,159,291.1646 Sta 7+54.30

Course from 1852 to 1853 S 89° 54' 17.23" W Dist 13.2330

Point 1853 N 1,897,724.6105 E 1,159,277.9317 Sta 7+67.53

Course from 1853 to 1854 S 88° 24' 31.55" W Dist 150.3626

Point 1854 N 1,897,720.4351 E 1,159,127.6271 Sta 9+17.89

Course from 1854 to 1855 S 88° 24' 31.55" W Dist 67.2589

Point 1855 N 1,897,718.5674 E 1,159,060.3941 Sta 9+85.15

Course from 1855 to 1856 S 88° 37' 21.17" W Dist 284.1742

Point 1856 N 1,897,711.7362 E 1,158,776.3019 Sta 12+69.33

Course from 1856 to PC E CALIF F-2 S 87° 25' 06.33" W Dist 502.1369

Curve Data

Curve E CALIF F-2  
 P.I. Station = 18+40.21 N 1,897,686.0225 E 1,158,205.9947  
 Delta = 8° 46' 31.33" (LT)  
 Degree = 6° 23' 40.63"  
 Tangent = 68.7497  
 Length = 137.2306  
 Radius = 896.0000  
 External = 2.6337  
 Long Chord = 137.0965  
 Mid. Ord. = 2.6260  
 P.C. Station = 17+71.46 N 1,897,689.1191 E 1,158,274.6746  
 P.T. Station = 19+08.69 N 1,897,672.4843 E 1,158,138.5911  
 C.C. = N 1,896,794.0285 E 1,158,315.0320  
 Back = S 87° 25' 06.33" W  
 Ahead = S 78° 38' 35.00" W  
 Chord Bear = S 83° 01' 50.67" W

FILE NAME =	DESIGNED - CAG	REVISED -	<b>benesch</b>	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ALIGNMENT PLAN CURVE DATA</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
...\\xp1n_abc_c3_298_r_data\exalign-28.dgn	DRAWN - DMS	REVISED -						290	(2828B.D. ETC., 3031.1RS-6	COOK	185	43
USER NAME = tblank	CHECKED - CAR	REVISED -			CONTRACT NO. 60653							
DATE = 11/12/2009	DATE - 10/16/09	REVISED -			SCALE: N.T.S.	SHEET NO. 28 OF 33 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		