

COMPUTATIONS FOR
BRIDGE 107
HENDRICKS COUNTY

SECTIONS 5 & 6, T.16 N., R. 2 W.

FILE 0662WB

DISK 5

DISK 5
0662WB

①

#BR107 - Adjustment of traverse network in Sections 5 and 6, T.16 N., R.2 W., in
#connection with the restoration of the line between the sections to enable the
#creation of right of way descriptions for land acquisition for Hendricks County
#Bridge 107.

C	2	10000	10000	!	!
C	29	10127	11984		
TB	29				
T	2	88-34-03	1983.841		
T	3	94-06-27	4162.063		
T	25	71-41-25.8	2136.086		
T	27	-250-11-07	1648.0485		
T	29	175-48-55.5	1987.878		
TE	2				
M	2-29-4	74-22-34.5	1600.816		
M	3-2-4	42-15-45	583.582		
M	3-2-5	171-31-50	586.760		
M	5-3-6	138-16-38	598.694		
M	5-3-7	168-11-33	388.840		
M	25-3-20	103-54-05.5	278.618		
M	27-29-20	245-43-00	1906.172		
M	20-25-19	-108-29-00	1322.028		
A	20-27-19	-251-48-43			
M	27-29-21	112-39-35	1770.472		
TB	29				
T	2	331-29-06	492.316		
T	1	-235-54-43	566.315		
T	11	-181-47-17	862.762		
T	12	169-25-20	1112.141		
M	12-11-15	-219-08-29	12.359		
T	31	-275-23-36	4125.302		
T	32	106-57-15.3	5908.894		
T	35	145-29-37	3118.056		
M	35-32-34	87-13-34.5	1677.017		
M	35-32-33	278-28-18	168.696		
T	36	121-54-41.5	660.003		
M	36-35-37	90-02-04	11.76	1200	0.07
M	36-35-40	122-17-03.2	5963.073		
T	38	180-25-05	5303.110		
M	38-36-39	181-18-54	1974.666		
T	40	90-27-01	2575.649		
A	40-36-38	0-02-53			
T	41	193-56-09.5	2319.431		

M	41-40-20	193-53-32.5	2598.025	
M	41-40-42	89-52-22.5	674.656	
T	25	-284-17-54.5	4162.063	
TE	3			
TB	3			
T	4	-115-22-28	229.085	
T	9	193-28-51	8.17	
TE	8			
TB	3			
T	5	227-27-46.5	465.288	
T	13	117-48-22	769.712	
T	14	214-10-08.5	329.799	
T	23	183-37-05	179.208	
T	28	108-38-16	135.364	
TE	30			
TB	3			
T	5	-222-13-22	459.309	
T	44	-115-10-51	1391.549	
TE	30			
M	8-19-10	180-00-00	332.25	! !
B	10-15	0-00-00		!
A	5-44-13	89-41-09		
SS	14-13-17	95-30-14	67.93	
SS	23-14-18	84-22-40	88.66	
D	33-37		3235.790	! #From 0662WA
D	33-34		1842.722	#From 0662WA
A	33-34-37	54-51-01.71		#From 0662WA

STAR*NET Adjustment Program
 Copyright 1989 STARPLUS SOFTWARE, INC.
 Licensed for Use by Sharle Engineering
 Serial Number 10270
 Version 3.24 June 1990
 Run Date : Tue Apr 23 20:01:53 1991
 Summary of Options Used

Type of Adjustment : 2D
 Input Order for Coordinates : N,E
 Input Order for Angle Stations : At-From-To
 Print Input Data File : No
 Print Summary of All Input Observations : Yes
 Print Adjustment Summary Each Iteration : No
 Perform Error Propagation : Yes
 Perform Data Check Only : No
 Perform Preanalysis Only : No
 Perform Blunder Detection Only : No
 Maximum Number of Iterations : 6
 Convergence Test For Error Factor : 0.050000
 Default Standard Error for Coordinates : 1.000e-007
 Default Standard Error for Angles : 5.000
 Default Standard Error for Distances : 0.01600
 Default Standard Error for Azimuths : 4.000
 Tribrach Centering Error : 0.0060
 EDM Parts Per Million : 3.0000
 Default Distance Scale Factor : 1.00000000

Number of Azimuth Observations = 1
 At To Azimuth Std Err
 10 15 + 0-00-00.00 FIXED

Number of SideShots = 2
 At From To Angle Distance
 14 13 17 + 95-30-14.00 67.930
 23 14 18 + 84-22-40.00 88.660

Unadjusted Traverse Observations

Traverse # 1
 Backsight On 29, Begin At 2 Backsight Azimuth = +86-20-14.5
 From To Azimuth Distance
 2 3 +174-54-17.5 1983.841
 3 25 + 89-00-44.5 4162.063
 25 27 +340-42-10.3 2136.086
 27 29 +270-31-03.3 1648.049
 29 2 +266-19-58.8 1987.878

Coordinate Misclosure 1:26847 -0.439 N -0.087 E
 Angular Misclosure -0-00-15.7

Traverse # 2
 Backsight On 29, Begin At 2 Backsight Azimuth = +86-20-14.5
 From To Azimuth Distance
 2 1 + 67-49-20.5 492.316
 1 11 + 1-54-37.5 666.316
 11 12 + 0-07-20.5 862.762
 12 31 +349-32-40.5 1112.141
 31 32 +254-09-04.5 4125.302
 32 36 +181-06-19.8 6908.894
 36 36 +146-35-56.8 3118.056
 36 38 + 88-30-38.3 660.003
 38 40 + 88-55-43.3 5303.110
 40 41 +359-22-44.3 2575.649
 41 25 + 13-18-53.8 2319.431
 25 3 -90-59-00.7 4162.063

Coordinate Misclosure 1:51955 0.577 N 0.168 E
 No Angular Closure Possible

Traverse # 3
 Backsight On 3, Begin At 4 Backsight Azimuth = +217-10-00.8
 From To Azimuth Distance
 4 9 +101-47-32.5 229.086
 9 8 +116-16-23.8 8.170

No Coordinate Closure Possible
 No Angular Closure Possible

Traverse # 4
 Backsight On 3, Begin At 5 Backsight Azimuth = +346-26-07.5
 From To Azimuth Distance
 5 13 +213-53-54.0 465.288
 13 14 +151-42-16.0 769.712
 14 23 +185-52-24.5 329.799
 23 28 +189-29-29.5 179.208
 28 30 +118-07-45.5 136.364

No Coordinate Closure Possible
 No Angular Closure Possible

Traverse # 5
 Backsight On 3, Begin At 5 Backsight Azimuth = +346-26-07.5

From To Azimuth Distance
 5 44 +124-12-45.5 459.309
 44 30 +189-01-54.5 1391.549

Coordinate Misclosure 1:28696 0.037 N -0.063 E
 No Angular Closure Possible

Statistical Summary

Number of Observations = 96
 Number of Unknowns = 72
 Degrees of Freedom = 23

Data Type	Count	Weighted Residuals	Error Factor
Distances	46	5.61	0.71
Angles	48	22.59	1.39
Azimuths	1	0.00	0.00
Stations	37	0.00	0.00
Total	132	28.20	1.11

Adjustment passes the Chi Square test at 5% level

Residuals in Observations After Adjustment

Residuals in Angles

At	From	To	Adj Angle	Residual	StdErr	StdRes
2	29	3	+ 88-34-01.58	-0-00-01.42	5.11	0.3
3	2	25	+ 94-06-22.57	-0-00-04.33	5.07	0.9
25	3	27	+ 71-41-39.30	+0-00-13.60	5.05	2.7
27	25	29	-250-11-01.06	+0-00-05.94	5.14	1.2
29	27	2	+175-48-57.52	+0-00-02.02	5.19	0.4
2	29	4	+ 74-22-30.72	-0-00-03.78	5.12	0.7
3	2	4	+ 42-15-45.74	+0-00-00.74	5.52	0.1
3	2	5	+171-31-50.00	+0-00-00.00	5.79	0.0
5	3	6	+138-16-38.00	+0-00-00.00	6.46	0.0
5	3	7	+168-11-33.00	-0-00-00.00	7.37	0.0
25	3	20	+103-54-00.26	-0-00-05.24	7.28	0.7
27	29	20	+245-42-66.98	-0-00-03.02	5.16	0.6
20	25	19	-108-29-05.40	-0-00-05.40	7.45	0.7
20	27	19	-251-48-40.36	+0-00-02.64	5.20	0.5
27	29	21	+112-39-36.00	-0-00-00.00	5.17	0.0
2	29	1	+331-29-04.56	-0-00-01.44	5.69	0.3
1	2	11	-238-54-46.82	-0-00-02.82	6.68	0.4
11	1	12	-181-47-19.23	-0-00-02.23	6.23	0.4
12	11	15	-219-08-29.00	-0-00-00.00	118.78	0.0
12	11	31	+169-26-18.60	-0-00-01.60	5.64	0.3
31	12	32	-275-23-36.64	-0-00-00.64	5.18	0.1
32	31	35	+106-57-19.69	+0-00-04.29	5.02	0.9
35	32	34	+ 87-13-35.10	+0-00-00.60	5.08	0.1
35	32	33	+278-28-17.63	-0-00-00.37	9.97	0.0
36	32	36	+145-29-39.20	+0-00-02.20	5.04	0.4
36	36	37	+ 89-37-43.69	-0-24-20.31	1206.39	1.2
36	36	40	+122-17-01.85	-0-00-01.35	5.03	0.3
36	36	38	+121-54-42.69	+0-00-01.19	5.54	0.2
38	36	39	+181-18-54.00	+0-00-00.00	5.66	0.0
38	36	40	+180-26-06.82	+0-00-00.82	5.53	0.1
40	36	38	+ 0-02-46.66	-0-00-06.34	5.01	1.3
40	38	41	+ 90-26-52.77	-0-00-08.23	5.04	1.6
41	40	20	+193-53-29.91	-0-00-02.69	5.09	0.5
41	40	42	+ 89-52-22.50	-0-00-00.00	5.48	0.0
41	40	25	+193-56-04.49	-0-00-05.01	5.11	1.0
25	41	3	-284-18-01.70	-0-00-07.20	5.05	1.4
4	3	9	-115-22-28.00	-0-00-00.00	8.57	0.0
9	4	8	+193-28-51.00	+0-00-00.00	181.77	0.0
5	3	13	+227-27-47.54	+0-00-01.04	6.20	0.2
13	5	14	+117-48-22.70	+0-00-00.70	6.42	0.1
14	13	23	+214-10-09.62	+0-00-01.12	7.42	0.2
23	14	28	+183-37-06.37	+0-00-00.37	12.11	0.0
28	23	30	+108-38-14.09	-0-00-01.91	15.34	0.1
5	3	44	-222-13-23.06	-0-00-01.06	6.86	0.2
44	5	30	-115-10-54.07	-0-00-03.07	6.13	0.5
8	19	10	+180-00-00.00	+0-00-00.00	FIXED	0.0
5	44	13	+ 89-41-10.60	+0-00-01.60	6.70	0.2
33	34	37	+ 54-51-02.50	+0-00-00.79	5.06	0.2

Residuals in Observed Distances

At	To	Adj Dist	Residual	StdErr	StdRes
2	3	1983.8319	-0.0091	0.023	0.4
3	25	4162.0630	0.0000	0.029	0.0
25	27	2136.1132	0.0272	0.023	1.2
27	29	1648.0502	0.0017	0.022	0.1
29	2	1987.8786	0.0006	0.023	0.0
2	4	1600.8051	-0.0109	0.022	0.5
3	4	583.5718	-0.0102	0.019	0.5
3	5	586.7600	0.0000	0.019	0.0
5	6	598.5940	-0.0000	0.019	0.0
5	7	388.3400	0.0000	0.019	0.0
25	20	278.6087	-0.0093	0.018	0.5

Station Name: ...

Station ID: ...

Station Elevation: ...

Station Coordinates: ...

Station Description: ...

Station Status: ...

Station Type: ...

Station Date: ...

Station Time: ...

Station User: ...

Station Agency: ...

Station Project: ...

Station Notes: ...

Station Comments: ...

Station Remarks: ...

Station Observations: ...

Station Measurements: ...

Station Calculations: ...

Station Results: ...

Station Summary: ...

Station Footer: ...

27	20	1906.1039	-0.0081	0.023	0.4
20	19	1322.0280	-0.0000	0.021	0.0
27	21	1770.4720	-0.0000	0.022	0.0
2	1	492.3132	-0.0028	0.019	0.1
1	11	566.3111	-0.0099	0.019	0.2
11	12	862.7677	-0.0043	0.020	0.2
12	15	12.3590	0.0000	0.018	0.0
12	31	1112.1367	-0.0043	0.021	0.2
31	32	4126.3066	0.0046	0.029	0.2
32	36	8908.9068	0.0128	0.034	0.4
36	34	1677.0010	-0.0160	0.022	0.7
36	33	168.6823	-0.0137	0.018	0.8
36	36	3118.0491	-0.0069	0.026	0.3
36	37	11.7666	0.0066	0.070	0.1
36	40	5963.0823	0.0093	0.035	0.3
36	38	649.9991	-0.0039	0.019	0.2
38	39	1974.6960	0.0000	0.023	0.0
38	40	5903.0969	-0.0111	0.033	0.3
40	41	2575.5424	-0.0066	0.025	0.3
41	20	2698.0262	0.0012	0.025	0.0
41	42	674.6560	0.0000	0.019	0.0
41	25	2319.4236	-0.0074	0.024	0.3
25	3	4162.0630	0.0000	0.029	0.0
4	9	229.0860	-0.0000	0.018	0.0
9	8	8.1700	0.0000	0.018	0.0
5	13	465.2843	-0.0037	0.019	0.2
13	14	769.7039	-0.0081	0.020	0.4
14	23	329.7929	-0.0061	0.018	0.3
23	28	179.2024	-0.0066	0.018	0.3
28	30	135.3585	-0.0065	0.018	0.3
5	44	469.3154	0.0064	0.019	0.3
44	30	1391.5669	0.0079	0.021	0.4
8	10	332.2500	-0.0000	FIXED	0.0
33	37	3235.7900	0.0000	FIXED	0.0
33	34	1842.7386	0.0166	0.023	0.7

Residuals in Azimuths

At	To	Adj Azimuth	Residual	StdErr	StdRes
10	15	+ 0-00-00.00	+ 0-00-00.00	FIXED	0.0

Elapsed time = 00:00:25

FIXED COORDINATES

10282.35432	10418.57398
10000.00000	10000.00000
8024.08528	10177.05041
8489.27378	10529.41783
7453.75347	10314.93291
7113.08906	10807.22164
7162.49331	10481.70475
8439.06835	10701.07753
8442.85323	10752.69804
8435.09489	10425.88129
10828.86919	10435.16820
11691.12573	10456.63675
7067.44047	10055.80355
6889.86420	10420.73845
11700.72456	10438.85199
6410.20623	10483.38703
6061.43743	10475.89840
8498.30360	10716.82415
8089.38155	14400.80347
11741.41585	14327.98845
6081.78811	10357.14609
6200.10804	14338.49132
10113.37831	13681.75098
8988.02832	10397.87005
10127.89631	11989.78242
5821.59198	10477.00902
12784.70058	10234.12686
11056.18525	6036.24049
5776.31490	6988.70807
5797.31067	7881.71904
2743.82570	9109.05116
2143.02447	7873.69134
2178.08580	7902.43043
2163.48662	8532.44034
2179.36071	10507.10336
2294.95040	13594.07785
3643.41086	18906.40181
2901.23627	13130.88770
7195.86000	10494.98270

USE COORDINATES ON P. 10

WBR107 - Readjustment of the line between the sections to enable the connection with the restoration of the line between the sections to enable the creation of right of way description for Hendricks County Bridge 197. This includes angles and 43 to see if some improves the adjustment.

ADJUSTED COORDINATES		
	1	10262.36432 10416.57806
	2	10000.00000 10000.00000
	3	8024.08536 10177.06041
	4	8489.27378 10529.41783
C 2	5	10000 7453.75347 10314.93291
C 29	6	10127 7113.03905 10807.22164
C 22	7	9812 7102.49331 10481.70475
C 43	8	21974 8439.06835 10761.07753
	9	8442.55323 10753.68804
TB 29	10	8435.09469 10428.85129
T 2	11	88-34-03 10828.36919 10435.19820
T 3	12	94-06-27 11691.12573 10436.63675
T 25	13	71-41-25 7067.44047 10055.60355
T 27	14	250-11-0 6389.86420 10420.75345
T 28	15	175-48-5 11700.72425 10428.85129
TE 3	17	6416.20628 10483.36798
	18	6061.43743 10475.80540
M 2-25-4	19	74-22-34 8498.33660 15716.32415
M 3-1-4	20	43-15-45 8369.35165 14400.60347
M 3-3-5	21	171-31-5 11741.41586 14327.96646
M 3-3-6	23	138-18-3 6061.78811 10387.14609
M 5-3-7	25	168-11-3 8097.75934 14338.47132
M 25-3-20	27	103-54-0 10113.57831 13631.75096
M 27-29-20	28	245-48-0 5885.02632 10357.67095
M 29-12-19	29	108-29 10127.85531 11983.76262
A 20-17-19	30	251-48-4 5821.26198 10477.06963
M 27-29-21	31	112-39-3 12784.70088 10234.29686
	32	11656.18525 6266.34949
TB 29	33	5776.31490 5988.70697
T 2	34	331-29-0 5797.91067 7831.31904
T 1	35	235-54 5748.32670 6155.05118
T 11	36	181-47-1 3146.02447 7872.68134
T 12	37	149-25-1 3152.56980 7882.45948
M 12-11-28	38	219-08 3163.46992 8532.44984
T 31	39	275-23 3170.35071 10507.10385
T 32	40	106-57-4 3264.93945 13834.57785
T 35	41	145-29-3 5840.41696 13805.43191
M 25-27-24	42	87-13-34 5831.28627 13130.83770
M 35-35-28	44	276-28-1 7195.66660 10694.88270
T 36		121-54-41 680.703
M 35-35-37		90-02-04 11.78 1200 0.07
M 35-35-40		122-17-03 5863.073
T 33		180-25-05 5308.110
M 35-35-39		181-15-54 1974.666

USE COORDINATES ON P. 10

ADJUSTED COORDINATES

10257.38182	10116.37806	1
10000.00000	00000.00000	2
8024.08238	10177.06041	3
8480.27378	10228.41783	4
7453.72347	10314.93391	5
7113.08908	10807.23184	6
7102.49331	10481.70478	7
8439.08885	10761.07723	8
8442.82328	10783.68804	9
8138.03489	10428.82129	10
10828.38319	10427.18820	11
11681.72878	10486.68815	12
7067.44047	10025.60852	13
8359.88420	10420.78348	14
11700.73428	10428.82129	15
6116.28828	10428.82129	16
6087.43743	10478.80710	17
8488.23880	10716.32416	18
3369.82185	1400.00000	19
11741.41536	14827.88818	20
6081.78871	10387.14909	21
3007.78894	14388.47132	22
10113.07881	18881.10086	23
6888.02832	10387.14909	24
10127.85231	11882.78827	25
8221.28188	10477.06041	26
12784.70088	10234.23888	27
11688.18828	8268.23843	28
6776.31400	6884.70897	29
7887.81004	7887.81004	30
6748.82870	6748.82870	31
8146.02447	7872.82181	32
3162.88830	7882.48848	33
8163.48892	8268.23843	34
3170.88071	10877.10388	35
3264.93816	13884.57788	36
8240.41696	18800.23101	37
6881.28827	18120.82740	38
7165.68880	10884.88270	39

THE COORDINATES ON P. 10

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T	36	121-54-41.5	660.003		
M	36-35-37	90-02-04	11.76	1200	0.07
M	36-35-40	122-17-03.2	5963.073		
T	38	180-25-05	5303.110		
M	38-36-39	181-18-54	1974.666		

#From 0802WA
 #From 0802WA
 #From 0802WA

Adjustment of traverse network in Sections 5 and 6, T16 N, R2 W, in
connection with the restoration of the line between the sections to enable the
restoration of right of way descriptions for land acquisition for Hendricks County
roads. This includes angles to towers at points 22 and 43 to see if same
indicates the adjustment.

1000	1000
1184	1017
1812	9812
2028	1017
1883.841	88-24-02
4182.022	94-08-27
2188.082	71-41-25.8
1618.0432	380-11-07
1987.878	175-48-28.6
1600.816	74-22-24.5
583.882	42-15-43
528.780	171-31-50
528.684	188-18-28
388.846	188-11-33
278.818	11-54-05.2
1908.172	245-18-00
1322.028	108-29-10
1710.472	201-18-12
1170.472	112-29-85
492.318	181-28-08
568.318	138-24-48
823.782	11-11-181
1112.141	168-28-20
12.888	218-08-29
412.802	278-28-88
2002.861	108-27-15.3
318.058	148-20-27
1671.017	87-13-24.2
168.082	278-28-18
680.002	121-64-11.8
11.78	90-02-04
568.078	122-17-08.2
2303.110	180-22-02
1874.688	181-18-24

T	40	90-27-01	2575.649
A	40-36-38	0-02-53	
T	41	193-56-09.5	2319.431
M	41-40-20	193-53-32.5	2598.025
M	41-40-42	89-52-22.5	674.656
T	25	-284-17-54.5	4162.063
TE	3		
TB	3		
T	4	-115-22-28	229.085
T	9	193-28-51	8.17
TE	8		
TB	3		
T	5	227-27-46.5	465.288
T	13	117-48-22	769.712
T	14	214-10-08.5	329.799
T	23	183-37-05	179.208
T	28	108-38-16	135.364
TE	30		
TB	3		
T	5	-222-13-22	459.309
T	44	-115-10-51	1391.549
TE	30		
M	8-19-10	180-00-00	332.25
B	10-15	0-00-00	
A	5-44-13	89-41-09	
SS	14-13-17	95-30-14	67.93
SS	23-14-18	84-22-40	88.66
D	33-37		3235.790
D	33-34		1842.722
A	33-34-37	54-51-01.71	
A	25-3-22	158-16-42.2	
A	41-40-22	229-58-25	
A	32-31-22	24-30-25	
A	32-31-43	279-15-29	
A	36-35-43	24-57-38.5	
A	40-36-43	66-02-30	
A	25-3-43	57-16-02.5	

! #From 0662WA
! #From 0662WA
! #From 0662WA

1	11	566.3068	-0.0092	0.019	0.5
11	12	862.7520	-0.0100	0.020	0.5
12	15	12.3590	0.0000	0.018	0.0
12	31	1112.1906	-0.0104	0.021	0.5
31	32	4125.3095	0.0075	0.029	0.3
32	35	5908.9227	0.0287	0.034	0.8
35	34	1677.0014	-0.0156	0.022	0.7
35	33	168.5815	-0.0144	0.018	0.5
35	36	3118.0546	-0.0014	0.026	0.1
35	37	11.7554	-0.0036	0.070	0.1
35	40	5953.0818	0.0088	0.035	0.3
35	38	669.9990	-0.0040	0.019	0.2
38	39	1974.6960	-0.0000	0.023	0.0
38	40	5303.0985	-0.0115	0.033	0.4
40	41	2876.5367	-0.0138	0.025	0.5
41	20	2598.0241	-0.0009	0.025	0.0
41	42	674.6560	0.0000	0.019	0.0
41	25	2319.4209	-0.0101	0.024	0.4
25	3	4162.0632	0.0002	0.029	0.0
4	9	229.0850	-0.0000	0.018	0.0
9	8	8.1700	0.0000	0.018	0.0
5	13	465.2843	-0.0037	0.019	0.2
13	14	769.7039	-0.0081	0.020	0.4
14	23	329.7929	-0.0051	0.018	0.3
23	28	179.2024	-0.0056	0.018	0.3
28	30	135.3585	-0.0055	0.018	0.3
5	44	459.3154	0.0064	0.019	0.3
44	30	1391.5559	0.0079	0.021	0.4
8	10	332.2500	-0.0000	FIXED	0.0
33	37	3235.7900	0.0000	FIXED	0.0
33	34	1842.7382	0.0162	0.023	0.7

ADJUSTED COORDINATES

10092.36194	10416.53346
10000.00000	10000.00000
9884.09005	10177.08917
8480.27560	10528.42444
7453.75879	10314.94429
7113.04651	10807.23459
7102.49946	10481.71776
6439.07348	10761.08430
5442.58475	10758.65480
5425.05805	10428.35803
10825.38141	10435.19922
11691.11218	10438.94347
7007.44480	10655.81671
5289.87001	10420.75573
11760.71075	10428.95805
6416.21257	10453.33414
8061.44345	10475.32331

Residuals in Azimuths

At	To	Adj Azimuth	Residual	StdErr	StdRes
10	15	+ 0-00-00.00	+ 0-00-00.00	FIXED	0.0

Elapsed time = 00:00:30

This readjustment failed to pass the Chi Square test at 5% level because the angle 40-36-43 was poor. However, it is used because it is generally as good as the original adjustment and, if fact, should be closer to the truth. This experiment shows that the observation of angles to towers is not worth the effort unless the position of the towers is the object.

COORDINATE FILE: 000208 LENGTH: 72 POINTS TIME ON FILE: 7 34 16.88
BRIDGE 107

READJUSTED COORDINATES

POINT NO.	Easting	Northing	Station
1	10262.36194	10416.57646	
2	10000.00000	10000.00000	
3	8024.09005	10177.06917	
4	8489.27860	10529.42444	
5	7453.75879	10314.94429	
6	7113.04664	10807.23459	
7	7102.49940	10481.71775	
8	8439.07388	10761.08430	
9	8442.55873	10753.69480	
10	8435.09866	10428.85808	
11	10828.36141	10435.19922	
12	11691.11216	10436.64347	
13	7067.44460	10055.61671	
14	6389.87001	10420.76973	
15	11700.71073	10428.85808	
17	6416.21237	10483.38414	
18	6061.44349	10475.82320	
19	8498.36540	15716.33126	
20	8369.37411	14400.61120	
21	11741.43742	14327.95619	
22	9810.37789	18425.19835	
23	6061.79376	10387.16389	
25	8097.78092	14338.47996	
27	10113.59596	13631.74984	
28	5885.03184	10357.68956	
29	10127.86369	11983.76178	
30	5821.26805	10477.08853	
31	12784.68283	10234.31311	
32	11656.20641	6266.35146	
33	5776.32174	5988.67032	
34	5797.91170	7831.28207	
35	5748.33276	6155.01366	
36	3146.03372	7872.65859	
37	3152.57818	7882.42497	
38	3163.48250	8532.42687	
39	3170.37326	10507.08084	
40	3264.97307	13834.55408	
41	5840.44413	13805.42837	
42	5831.31872	13130.83409	
43	21971.74037	5069.88228	
44	7195.67368	10694.89528	

START
41 8-0-55 10 20 100
42 8-0-55 10 20 100
43 8-0-55 10 20 100
44 8-0-55 10 20 100

COORDINATE FILE:0662WB LENGTH = 120 POINTS; TIME ON FILE: 1 34 18.80
BRIDGE 107 ***** JOB #1991

***** COGO *****

FROM TYPE BEARING DISTANCE TO NORTHING EASTING

PTS 1 THRU 30 CLEARED
ENTER & ASSIGN
SEE PAGE 10 FOR COORDINATES OF ALL POINTS
ENTER & ASSIGN

			1	10,262.36194	10,416.57646
			2	10,000.00000	10,000.00000
			3	8,024.09005	10,177.06917
			4	8,489.27860	10,529.42444
			6	7,113.04664	10,807.23459
			7	7,102.49940	10,481.71775
			8	8,439.07388	10,761.08430
			10	8,435.09866	10,428.85808
			11	10,828.36141	10,435.19922
			15	11,700.71073	10,428.85808
			17	6,416.21237	10,483.38414
			18	6,061.44349	10,475.82320
			19	8,498.36540	15,716.33126
			21	11,741.43742	14,327.95619
			25	8,097.78092	14,338.47996
			28	5,885.03184	10,357.68956
			30	5,821.26805	10,477.08853
			32	11,656.20641	6,266.35146
			33	5,776.32174	5,988.67032
			34	5,797.91170	7,831.28207
			37	3,152.57818	7,882.42497
			39	3,170.37326	10,507.08084
			41	5,840.44413	13,805.42837
			42	5,831.31872	13,130.83409

START			39	3,170.37326	10,507.08084
39 TRAV NW	0 51 04.44	2632.65324	45	5,802.73596	10,467.96946 PRELIMINARY
START			34	5,797.91170	7,831.28207
34 INV NE	89 38 19.78	5299.65731	42	5,831.31872	13,130.83409
42 TRAV SW	89 38 19.78	2651.81454	100	5,814.60269	10,479.07224 TEMPORARY
100 B-B SE	0 21 40.22	11.70090	0	5,802.90202	10,479.14600
0 B-B SW	89 08 55.56	11.17777	45	5,802.73596	10,467.96946 TEMPORARY

ENTER & ASSIGN			45	5,802.90202	10,479.14600 FINAL
START			45	5,802.90202	10,479.14600
45 S.S. NW	1 05 40.19	2632.67697	10	8,435.09866	10,428.85808
45 S.S. NE	89 23 09.66	2651.84035	42	5,831.31872	13,130.83409
45 S.S. SE	0 36 28.68	2632.67697	39	3,170.37326	10,507.08084
45 S.S. SW	89 53 31.26	2647.86863	34	5,797.91170	7,831.28207
45 S.S. NW	6 23 31.05	18.48092	30	5,821.26805	10,477.08853

PTS 100 THRU 100 CLEARED
ENTER & ASSIGN

START			40	3,264.97307	13,834.55408
41 B-D SE	89 39 16.53	654.09750	0	5,840.44413	13,805.42837
0 B-D SW	89 46 35.52	1328.69000*	42	5,831.31872	13,130.83409

* From Bob Hamilton survey - 1976

READJUSTED COORDINATES

1	10522.28104	10416.57646
2	10000.00000	10000.00000
3	8024.09005	10177.06917
4	8489.27860	10529.42444
6	7113.04664	10807.23459
7	7102.49940	10481.71775
8	8439.07388	10761.08430
10	8435.09866	10428.85808
11	10828.36141	10435.19922
15	11700.71073	10428.85808
17	6416.21237	10483.38414
18	6061.44349	10475.82320
19	8498.36540	15716.33126
21	11741.43742	14327.95619
25	8097.78092	14338.47996
28	5885.03184	10357.68956
30	5821.26805	10477.08853
32	11656.20641	6266.35146
33	5776.32174	5988.67032
34	5797.91170	7831.28207
37	3152.57818	7882.42497
39	3170.37326	10507.08084
41	5840.44413	13805.42837
42	5831.31872	13130.83409
39	3170.37326	10507.08084
45	5802.73596	10467.96946 PRELIMINARY
34	5797.91170	7831.28207
42	5831.31872	13130.83409
100	5814.60269	10479.07224 TEMPORARY
0	5802.90202	10479.14600
45	5802.73596	10467.96946 TEMPORARY
45	5802.90202	10479.14600 FINAL
45	5802.90202	10479.14600
10	8435.09866	10428.85808
42	5831.31872	13130.83409
39	3170.37326	10507.08084
34	5797.91170	7831.28207
30	5821.26805	10477.08853
40	3264.97307	13834.55408
41	5840.44413	13805.42837
0	5836.50091	14459.51398 (APPROX.)
42	5831.31872	13130.83409

0 = APPROX. LOCATION OF CEN. N. NE 1/4 SEC. 8
OFFSETS FROM A LINE

BASE BRG SW 89 46 35.52	(Approx 1/2 W ² NE ² E prolonged W.)	42	5,831.31872	13,130.83409
PT	BASE DIST		OFFSET	
45	2651.77875		-18.07432	
30	2653.76458		0.29960	
34	5299.64201		-12.73735	
33	7142.32395		-27.14056	

START 33 5,776.32174 5,988.67032
OFFSETS FROM A LINE
33 5,776.32174 5,988.67032

BASE BRG NE 89 19 43.30				
PT	BASE DIST		OFFSET	
34	1842.73823		0.00000	
30	4488.63674		7.64415	
45	4490.47889		26.03303	
42	7142.31791		28.68609	

START 10 8,435.09866 10,428.85808
OFFSETS FROM A LINE
10 8,435.09866 10,428.85808

BASE BRG SE 2 16 17.53				
PT	BASE DIST		OFFSET	
7	1333.64723		0.00000	
17	2019.46103		25.53620	
18	2373.65145		47.15261	
30	2613.68832		55.40773	
45	2632.12146		54.07982	
39	5263.68881		130.50832	

OFFSETS FROM A LINE
10 8,435.09866 10,428.85808

BASE BRG SE 1 05 40.19				
PT	BASE DIST		OFFSET	
7	1333.36582		-27.39546	
17	2019.55947		-15.95248	
18	2374.11920		-1.61632	
30	2614.27499		1.70628	
45	2632.67697		0.00000	
39	5265.25902		22.35535	

OFFSETS FROM A LINE
10 8,435.09866 10,428.85808

BASE BRG SE 0 51 04.44				
PT	BASE DIST		OFFSET	
7	1333.23749		-33.05640	
17	2019.47354		-24.52694	
18	2374.09094		-11.69630	
30	2614.25867		-9.39338	
45	2632.65324		-11.17777	
39	5265.30648		0.00000	

START 42 5,831.31872 13,130.83409
42 INV SW 89 33 31.73 7142.37551 33 5,776.32174 5,988.67032
START 42 5,831.31872 13,130.83409
42 TRAV SW 89 33 31.73 2638.05608 46 5,811.00543 10,492.85621 PRELIMINARY
46 B-B SE 0 26 28.28 7.89904 0 5,803.10663 10,492.91704
0 B-B SW 89 08 55.56 13.77256 45 5,802.90202 10,479.14600

ENTER & ASSIGN
46 5,803.10663 10,492.91704 NOT USED
30 5,821.26805 10,477.08853
START 46 5,803.10663 10,492.91704
30 INV SE 41 04 25.12 24.09105 46 5,831.31872 13,130.83409
46 S.S. NE 89 23 14.12 2638.06791 42 5,831.31872 13,130.83409

COORDINATE FILE: 08828W LENGTH = 150 POINTS TIME ON FILE: 1 34 18.00
BRIDGE 107 ***** CODE *****
***** JOB #1991 *****

FROM TYPE BEARING DISTANCE TO NORTHING EASTING

PTS 1 THRU 30 CLEARED
ENTER & ASSIGN
SEE PAGE 10 FOR COORDINATES OF ALL POINTS
ENTER & ASSIGN

1	10,282.38184	10,418.27848		
2	10,000.00000	10,000.00000		
3	9,024.99002	10,177.08817		
4	8,489.27080	10,628.42444		
5	7,113.04864	10,807.23489		
6	7,103.48840	10,491.71775		
7	8,428.07388	10,781.08439		
8	8,428.07388	10,428.85808		
9	10,828.38141	10,428.19922		
10	11,709.71073	10,428.85808		
11	9,418.21293	10,483.38414		
12	8,981.44348	10,472.07258		
13	8,428.07388	12,718.23128		
14	11,741.42745	14,327.88218		
15	8,007.78092	14,328.47888		
16	8,022.03184	10,327.09928		
17	8,021.28092	10,477.08817		
18	11,828.38141	8,288.32148		
19	8,778.21174	8,008.87092		
20	8,787.81178	7,681.28292		
21	3,122.87810	7,802.42487		
22	3,170.27228	10,807.08808		
23	8,948.44413	12,002.44822		
24	2,801.21872	12,128.87408		
25	2,170.27228	10,207.08808		
26	2,002.78888	10,487.08808		
27	8,787.81178	7,802.42487		
28	8,801.21872	12,128.87408		
29	2,814.88288	10,478.08808		
30	2,802.88288	10,487.08808		
31	2,802.78888	10,478.08808		
32	2,802.90288	10,478.14888		
33	8,981.44348	10,478.14888		
34	8,428.07388	10,478.08808		
35	8,428.07388	10,478.08808		
36	8,428.07388	10,478.08808		
37	8,428.07388	10,478.08808		
38	8,428.07388	10,478.08808		
39	8,428.07388	10,478.08808		
40	2,284.27202	12,824.28488		
41	2,840.44413	12,808.42487		
42	8,981.28088	14,483.21288		
43	8,831.21872	12,128.87408		

PTS 100 THRU 100 CLEARED
ENTER & ASSIGN

START 41 B-B SE 89 38 18.82 24.09105 46 5,831.31872 13,130.83409
41 B-B SE 89 38 18.82 24.09105 46 5,831.31872 13,130.83409

46 S.S. SE	0 18 29.67	2632.77147	39	3,170.37326	10,507.08084
46 S.S. SW	89 53 17.42	2661.64004	34	5,797.91170	7,831.28207
46 S.S. SW	89 39 33.44	4504.32636	33	5,776.32174	5,988.67032
46 S.S. NW	0 29 37.72	1299.44103	7	7,102.49940	10,481.71775
46 S.S. NW	1 23 39.20	2632.77147	10	8,435.09866	10,428.85808

OFFSETS FROM A LINE
39 3,170.37326 10,507.08084

BASE BRG NW 0 51 04.44

PT	BASE DIST	OFFSET
46	2632.65324	24.95033
10	5265.30648	0.00000
7	3932.06899	33.05640
45	2632.65324	11.17777
30	2651.04781	9.39338
18	2891.21554	11.69630
17	3245.83294	24.52694

OFFSETS FROM A LINE
45 5,802.90202 10,479.14600

BASE BRG NW 1 05 40.19

PT	BASE DIST	OFFSET
30	18.40198	-1.70628
18	258.55777	1.61632
17	613.11750	15.95248
7	1299.31115	27.39546
10	2632.67697	0.00000

OFFSETS FROM A LINE
10 8,435.09866 10,428.85808

BASE BRG NE 0 00 00.00

PT	BASE DIST	OFFSET
2	1564.90134	-428.85808
1	1827.26328	-12.28162
11	2393.26275	6.34114
15	3265.61207	0.00000

START
21 11,741.43742 14,327.95619

21 TRAV NE	89 24 05.61	3.71000	24	11,741.47617	14,331.66599
19 TRAV NE	89 18 52.08	0.54000	19	8,498.36540	15,716.33126
19 TRAV NE	89 18 52.08	0.54000	26	8,498.37186	15,716.87122
26 S.S. SW	89 18 52.08	4956.14167	8	8,439.07388	10,761.08430
26 INV SW	89 18 52.08	5288.39167	10	8,435.09866	10,428.85808
10 S.S. NE	89 18 52.08	332.25000	8	8,439.07388	10,761.08430
10 S.S. NE	0 00 00.00	3265.61207	15	11,700.71073	10,428.85808
10 S.S. SE	1 05 40.19	2632.67697	45	5,802.90202	10,479.14600
10 INV SE	2 16 17.53	1333.64723	7	7,102.49940	10,481.71775
7 S.S. NE	88 08 39.04	325.68767	6	7,113.04664	10,807.23459
7 INV SW	0 06 48.17	1299.59992	45	5,802.90202	10,479.14600
45 S.S. NE	89 23 09.66	2651.84035	42	5,831.31872	13,130.83409
45 S.S. SW	89 53 31.26	2647.86863	34	5,797.91170	7,831.28207
45 S.S. SE	0 36 28.68	2632.67697	39	3,170.37326	10,507.08084
START			6	7,113.04664	10,807.23459
6 INV NW	1 59 35.83	1326.83009	8	8,439.07388	10,761.08430

PT-PT ANGLES

ANG 15 - 10 - 8	: C.W. 89 18 52.08	C.C.W. 270 41 07.92	332.25000
ANG 10 - 8 - 6	: C.W. 268 41 32.10	C.C.W. 91 18 27.90	1326.83009
ANG 8 - 6 - 7	: C.W. 270 08 14.87	C.C.W. 89 51 45.13	325.68767
ANG 6 - 7 - 10	: C.W. 269 35 03.42	C.C.W. 90 24 56.58	1333.64723
ANG 7 - 10 - 7	: C.W. 360 00 00.00	C.C.W. 0 00 00.00	1333.64723
ANG 10 - 7 - 6	: C.W. 90 24 56.58	C.C.W. 269 35 03.42	325.68767
ANG 7 - 6 - 7	: C.W. 360 00 00.00	C.C.W. 0 00 00.00	325.68767
ANG 6 - 7 - 45	: C.W. 91 58 09.13	C.C.W. 268 01 50.87	1299.59992
ANG 7 - 45 - 42	: C.W. 89 16 21.48	C.C.W. 270 43 38.52	2651.84035

APPROX. LOCATION OF CENTER OF LINE NE 1/4 SEC. 8
 START
 46 S.S. SE 0 18 29.67 2632.77147 39 3,170.37326 10,507.08084
 46 S.S. SW 89 53 17.42 2661.64004 34 5,797.91170 7,831.28207
 46 S.S. SW 89 39 33.44 4504.32636 33 5,776.32174 5,988.67032
 46 S.S. NW 0 29 37.72 1299.44103 7 7,102.49940 10,481.71775
 46 S.S. NW 1 23 39.20 2632.77147 10 8,435.09866 10,428.85808
 OFFSETS FROM A LINE
 39 3,170.37326 10,507.08084
 BASE BRG NW 0 51 04.44
 PT BASE DIST OFFSET
 46 2632.65324 24.95033
 10 5265.30648 0.00000
 7 3932.06899 33.05640
 45 2632.65324 11.17777
 30 2651.04781 9.39338
 18 2891.21554 11.69630
 17 3245.83294 24.52694
 OFFSETS FROM A LINE
 45 5,802.90202 10,479.14600
 BASE BRG NW 1 05 40.19
 PT BASE DIST OFFSET
 30 18.40198 -1.70628
 18 258.55777 1.61632
 17 613.11750 15.95248
 7 1299.31115 27.39546
 10 2632.67697 0.00000
 OFFSETS FROM A LINE
 10 8,435.09866 10,428.85808
 BASE BRG NE 0 00 00.00
 PT BASE DIST OFFSET
 2 1564.90134 -428.85808
 1 1827.26328 -12.28162
 11 2393.26275 6.34114
 15 3265.61207 0.00000
 START
 21 11,741.43742 14,327.95619
 21 TRAV NE 89 24 05.61 3.71000 24 11,741.47617 14,331.66599
 19 TRAV NE 89 18 52.08 0.54000 19 8,498.36540 15,716.33126
 19 TRAV NE 89 18 52.08 0.54000 26 8,498.37186 15,716.87122
 26 S.S. SW 89 18 52.08 4956.14167 8 8,439.07388 10,761.08430
 26 INV SW 89 18 52.08 5288.39167 10 8,435.09866 10,428.85808
 10 S.S. NE 89 18 52.08 332.25000 8 8,439.07388 10,761.08430
 10 S.S. NE 0 00 00.00 3265.61207 15 11,700.71073 10,428.85808
 10 S.S. SE 1 05 40.19 2632.67697 45 5,802.90202 10,479.14600
 10 INV SE 2 16 17.53 1333.64723 7 7,102.49940 10,481.71775
 7 S.S. NE 88 08 39.04 325.68767 6 7,113.04664 10,807.23459
 7 INV SW 0 06 48.17 1299.59992 45 5,802.90202 10,479.14600
 45 S.S. NE 89 23 09.66 2651.84035 42 5,831.31872 13,130.83409
 45 S.S. SW 89 53 31.26 2647.86863 34 5,797.91170 7,831.28207
 45 S.S. SE 0 36 28.68 2632.67697 39 3,170.37326 10,507.08084
 START
 6 INV NW 1 59 35.83 1326.83009 8 8,439.07388 10,761.08430
 PT-PT ANGLES
 ANG 15 - 10 - 8 : C.W. 89 18 52.08 C.C.W. 270 41 07.92 332.25000
 ANG 10 - 8 - 6 : C.W. 268 41 32.10 C.C.W. 91 18 27.90 1326.83009
 ANG 8 - 6 - 7 : C.W. 270 08 14.87 C.C.W. 89 51 45.13 325.68767
 ANG 6 - 7 - 10 : C.W. 269 35 03.42 C.C.W. 90 24 56.58 1333.64723
 ANG 7 - 10 - 7 : C.W. 360 00 00.00 C.C.W. 0 00 00.00 1333.64723
 ANG 10 - 7 - 6 : C.W. 90 24 56.58 C.C.W. 269 35 03.42 325.68767
 ANG 7 - 6 - 7 : C.W. 360 00 00.00 C.C.W. 0 00 00.00 325.68767
 ANG 6 - 7 - 45 : C.W. 91 58 09.13 C.C.W. 268 01 50.87 1299.59992
 ANG 7 - 45 - 42 : C.W. 89 16 21.48 C.C.W. 270 43 38.52 2651.84035

ANG 45 - 42 - 45 : C.W. 360 00 00.00 C.C.W. 0 00 00.00 2651.84035
ANG 42 - 45 - 39 : C.W. 90 00 21.67 C.C.W. 269 59 38.33 2632.67697
ANG 45 - 39 - 45 : C.W. 360 00 00.00 C.C.W. 0 00 00.00 2632.67697
ANG 39 - 45 - 34 : C.W. 90 29 59.94 C.C.W. 269 30 00.06 2647.86863
ANG 45 - 34 - 7 : C.W. 333 54 02.95 C.C.W. 26 05 57.05 2954.10873

START 15 11,700.71073 10,428.85808
15 S.S. SW 89 23 14.76 4162.74453 32 11,656.20641 6,266.35146
15 S.S. NE 89 24 05.61 3903.02080 24 11,741.47617 14,331.66599
15 INV SE 39 02 43.70 12.35900 12 11,691.11216 10,436.64347
12 INV SW 0 05 45.29 862.75196 11 10,828.36141 10,435.19922
11 INV SW 1 53 04.17 566.30575 1 10,262.36194 10,416.57646
1 INV SW 57 47 49.46 492.31061 2 10,000.00000 10,000.00000
2 INV SE 19 18 45.89 1600.80273 4 8,489.27860 10,529.42444
4 S.S. SW 61 41 11.46 114.23248 10 8,435.09866 10,428.85808
4 INV SW 37 08 31.08 583.57058 3 8,024.09005 10,177.06917
3 INV NE 88 59 07.81 4162.06320 25 8,097.78092 14,338.47996
START 37 3,152.57818 7,882.42497
37 INV NE 89 36 41.55 2624.71619 39 3,170.37326 10,507.08084

2625.03' by Shartle 4-25-47 = 1/211 CCF = 0.999 8014
START 37 3,152.57818 7,882.42497
37 INV NW 1 06 27.27 2645.82785 34 5,797.91170 7,831.28207
34 INV SW 89 19 43.30 1842.73823 33 5,776.32174 5,988.67032

ENTER & ASSIGN
38 3,163.48250 8,532.42687
35 5,748.33276 6,155.01366
36 3,146.03372 7,872.65859
31 12,784.68283 10,234.31311
30 5,821.26805 10,477.08853
START 30 INV NW 61 53 45.65 135.35854 28 5,885.03184 10,357.68956

LIST
1 10,262.36194 10,416.57646
2 10,000.00000 10,000.00000
3 8,024.09005 10,177.06917
4 8,489.27860 10,529.42444
6 7,113.04664 10,807.23459
7 7,102.49940 10,481.71775
8 8,439.07388 10,761.08430
10 8,435.09866 10,428.85808
11 10,828.36141 10,435.19922
12 11,691.11216 10,436.64347
15 11,700.71073 10,428.85808
17 6,416.21237 10,483.38414
18 6,061.44349 10,475.82320
19 8,498.36540 15,716.33126
21 11,741.43742 14,327.95619
24 11,741.47617 14,331.66599
25 8,097.78092 14,338.47996
26 8,498.37186 15,716.87122
28 5,885.03184 10,357.68956
30 5,821.26805 10,477.08853
31 12,784.68283 10,234.31311
32 11,656.20641 6,266.35146
33 5,776.32174 5,988.67032
34 5,797.91170 7,831.28207
35 5,748.33276 6,155.01366
36 3,146.03372 7,872.65859
37 3,152.57818 7,882.42497
38 3,163.48250 8,532.42687
39 3,170.37326 10,507.08084

38 3.170.37326
34 2.707.81170
33 2.718.32174
31 7.102.49940
30 8.432.09866
29 3.170.37326

15 15 S.S. SW 89 23 14.76 4162.74453
15 15 S.S. NE 89 24 05.61 3903.02080
15 15 INV SE 39 02 43.70 12.35900
12 12 INV SW 0 05 45.29 862.75196
11 11 INV SW 1 53 04.17 566.30575
1 1 INV SW 57 47 49.46 492.31061
2 2 INV SE 19 18 45.89 1600.80273
4 4 S.S. SW 61 41 11.46 114.23248
4 4 INV SW 37 08 31.08 583.57058
3 3 INV NE 88 59 07.81 4162.06320

37 37 INV NE 89 36 41.55 2624.71619
37 37 INV NW 1 06 27.27 2645.82785
34 34 INV SW 89 19 43.30 1842.73823

38 38 3,163.48250
35 35 5,748.33276
36 36 3,146.03372
31 31 12,784.68283
30 30 5,821.26805
30 30 INV NW 61 53 45.65 135.35854

1 1 10,262.36194
2 2 10,000.00000
3 3 8,024.09005
4 4 8,489.27860
6 6 7,113.04664
7 7 7,102.49940
8 8 8,439.07388
10 10 8,435.09866
11 11 10,828.36141
12 12 11,691.11216
15 15 11,700.71073
17 17 6,416.21237
18 18 6,061.44349
19 19 8,498.36540
21 21 11,741.43742
24 24 11,741.47617
25 25 8,097.78092
26 26 8,498.37186
28 28 5,885.03184
30 30 5,821.26805
31 31 12,784.68283
32 32 11,656.20641
33 33 5,776.32174
34 34 5,797.91170
35 35 5,748.33276
36 36 3,146.03372
37 37 3,152.57818
38 38 3,163.48250
39 39 3,170.37326

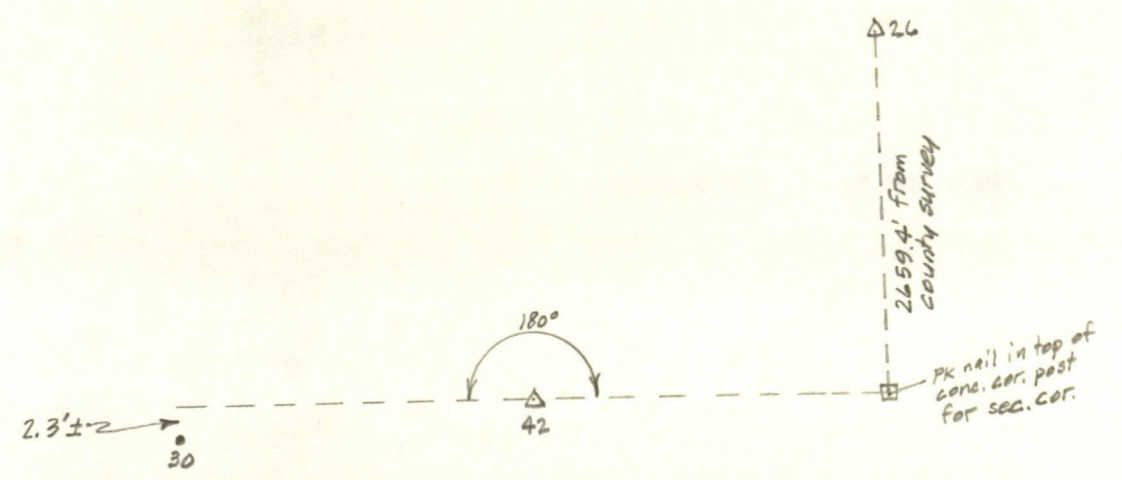
C.W. 360 00 00.00 C.C.W. 0 00 00.00
C.W. 90 00 21.67 C.C.W. 269 59 38.33
C.W. 360 00 00.00 C.C.W. 0 00 00.00
C.W. 90 29 59.94 C.C.W. 269 30 00.06
C.W. 333 54 02.95 C.C.W. 26 05 57.05

(4)

38	3,150.3252	3,150.3252	38	3,150.3252	3,150.3252
37	2,152.27818	2,152.27818	37	2,152.27818	2,152.27818
36	2,727.81170	2,727.81170	36	2,727.81170	2,727.81170
35	2,776.32174	2,776.32174	35	2,776.32174	2,776.32174
34	2,988.62932	2,988.62932	34	2,988.62932	2,988.62932
33	7,885.42487	7,885.42487	33	7,885.42487	7,885.42487
32	7,831.28207	7,831.28207	32	7,831.28207	7,831.28207
31	8,525.42887	8,525.42887	31	8,525.42887	8,525.42887
30	8,152.81388	8,152.81388	30	8,152.81388	8,152.81388
29	7,875.82888	7,875.82888	29	7,875.82888	7,875.82888
28	7,825.42487	7,825.42487	28	7,825.42487	7,825.42487
27	7,875.82888	7,875.82888	27	7,875.82888	7,875.82888
26	8,152.81388	8,152.81388	26	8,152.81388	8,152.81388
25	8,525.42887	8,525.42887	25	8,525.42887	8,525.42887
24	8,152.81388	8,152.81388	24	8,152.81388	8,152.81388
23	8,525.42887	8,525.42887	23	8,525.42887	8,525.42887
22	8,152.81388	8,152.81388	22	8,152.81388	8,152.81388
21	8,525.42887	8,525.42887	21	8,525.42887	8,525.42887
20	8,152.81388	8,152.81388	20	8,152.81388	8,152.81388
19	8,525.42887	8,525.42887	19	8,525.42887	8,525.42887
18	8,152.81388	8,152.81388	18	8,152.81388	8,152.81388
17	8,525.42887	8,525.42887	17	8,525.42887	8,525.42887
16	8,152.81388	8,152.81388	16	8,152.81388	8,152.81388
15	8,525.42887	8,525.42887	15	8,525.42887	8,525.42887
14	8,152.81388	8,152.81388	14	8,152.81388	8,152.81388
13	8,525.42887	8,525.42887	13	8,525.42887	8,525.42887
12	8,152.81388	8,152.81388	12	8,152.81388	8,152.81388
11	8,525.42887	8,525.42887	11	8,525.42887	8,525.42887
10	8,152.81388	8,152.81388	10	8,152.81388	8,152.81388
9	8,525.42887	8,525.42887	9	8,525.42887	8,525.42887
8	8,152.81388	8,152.81388	8	8,152.81388	8,152.81388
7	8,525.42887	8,525.42887	7	8,525.42887	8,525.42887
6	8,152.81388	8,152.81388	6	8,152.81388	8,152.81388
5	8,525.42887	8,525.42887	5	8,525.42887	8,525.42887
4	8,152.81388	8,152.81388	4	8,152.81388	8,152.81388
3	8,525.42887	8,525.42887	3	8,525.42887	8,525.42887
2	8,152.81388	8,152.81388	2	8,152.81388	8,152.81388
1	8,525.42887	8,525.42887	1	8,525.42887	8,525.42887
0	8,152.81388	8,152.81388	0	8,152.81388	8,152.81388

40	3,264.97307	13,834.55408
41	5,840.44413	13,805.42837
42	5,831.31872	13,130.83409
45	5,802.90202	10,479.14600
46	5,803.10663	10,492.91704

TIME FOR THIS RUN: 1 52 40.57; TOTAL TIME ON FILE: 3 26 59.37
 COORDINATES STORED



00A22.428,21 76378.482,2 0A
 13,824.22408 2,584.82307 1A
 13,802.42827 2,444.048,2 2A
 13,130.82403 2,831.21825 3A
 10,428.14600 2,802.80202 4A
 10,425.81204 2,802.10883 5A

78.82 82 3 3117 00 3MIT JAT01 172 0A 271
 1 25 40 271 TOTAL TIME ON FILE: 3 28 28.37

FOR THIS RUN:
 POINTS STORED

 COORDINATE FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 3 26 59.37
 BRIDGE 107 ***** JOB #1991

***** COGO *****

 FROM TYPE BEARING DISTANCE TO NORTHING EASTING

OFFSETS FROM A LINE

39 3,170.37326 10,507.08084
 BASE BRG NW 0 22 10.44
 PT BASE DIST OFFSET
 45 2632.65418 -10.95421
 46 2632.76996 2.81786
 30 2651.03310 -12.89318
 10 5265.12043 -44.26319
 18 2891.21170 -12.60933
 17 3245.92444 -2.76026
 7 3932.20794 0.00000
 1 7092.42491 -44.75854
 11 7658.29249 -22.48542
 15 8530.66457 -23.19970

OFFSETS FROM A LINE

39 3,170.37326 10,507.08084
 BASE BRG NW 0 31 31.38
 PT BASE DIST OFFSET
 45 2632.67424 -3.79453
 46 2632.75256 9.97781
 30 2651.05836 -5.68350
 18 2891.23530 -4.74647
 17 3245.91994 6.06722
 7 3932.19340 10.69386
 10 5265.22133 -29.94424
 1 7092.52041 -25.47013
 11 7658.32532 -1.65819
 15 8530.69611 0.00000

OFFSETS FROM A LINE

39 3,170.37326 10,507.08084
 BASE BRG NW 0 51 04.44
 PT BASE DIST OFFSET
 45 2632.65324 11.17777
 46 2632.65324 24.95033
 30 2651.04781 9.39338
 18 2891.21554 11.69630
 17 3245.83294 24.52694
 7 3932.06899 33.05640
 10 5265.30648 0.00000
 1 7092.55056 14.86603
 11 7658.21090 41.89537
 15 8530.55816 48.51478

OFFSETS FROM A LINE

39 3,170.37326 10,507.08084
 BASE BRG NW 0 36 28.68
 PT BASE DIST OFFSET
 45 2632.67697 0.00000
 46 2632.73545 13.77244
 30 2651.06380 -1.86248
 18 2891.23914 -0.57928

***** COGO *****
 DATE FILE: 08/28/84 * 120 POINTS: TIME ON FILE: 3 28 20.37
 ***** JOB #191 *****

PT	TYPE	BEARING	DISTANCE	NORTHING	EASTING
17	BRG	0 18 29.67			
45	PT	2632.64095			
46	PT	2632.77147			
30	PT	2651.01778			
18	PT	2891.19655			
17	PT	3245.91962			
7	PT	3932.20569			
10	PT	5265.07004			
1	PT	7092.37295			
11	PT	7658.26404			
15	PT	8530.63485			

PT	BASE DIST	OFFSET
45	2632.64095	-13.77194
46	2632.77147	0.00000
30	2651.01778	-15.73058
18	2891.19655	-15.70379
17	3245.91962	-6.23437
7	3932.20569	-4.20865
10	5265.07004	-49.89843
1	7092.37295	-52.34955
11	7658.26404	-30.68209
15	8530.63485	-32.33007

OFFSETS FROM A LINE

39 3,170.37326 10,507.08084

PT	BASE DIST	OFFSET
45	2632.64095	-13.77194
46	2632.77147	0.00000
30	2651.01778	-15.73058
18	2891.19655	-15.70379
17	3245.91962	-6.23437
7	3932.20569	-4.20865
10	5265.07004	-49.89843
1	7092.37295	-52.34955
11	7658.26404	-30.68209
15	8530.63485	-32.33007

TIME FOR THIS RUN: 0 10 13.29; TOTAL TIME ON FILE: 3 37 12.65
 COORDINATES STORED

COORDINATE FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 3 37 12.65
 BRIDGE 107 ***** JOB #1991

***** COGO *****

FROM	TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START				39	3,170.37326	10,507.08084
39	TRAV NW	0 31 31.38	2639.44805	100	5,809.71034	10,482.87825
START				34	5,797.91170	7,831.28207
34	TRAV NE	89 38 19.78	2647.84277	101	5,814.60269	10,479.07223
101	B-B SE	0 21 40.22	4.92706	47	5,809.67573	10,479.10329 <i>NOT USED</i>
47	B-B NE	89 28 28.62	3.77512	100	5,809.71034	10,482.87825
START				42	5,831.31872	13,130.83409
42	TRAV SW	89 33 31.73	2638.05608	102	5,811.00543	10,492.85622
102	B-B SE	0 26 28.27	1.20354	48	5,809.80193	10,492.86549 <i>NOT USED</i>
48	B-B SW	89 28 28.62	9.98765	100	5,809.71034	10,482.87825
PTS 100 THRU 102 CLEARED						
PT-PT ANGLES						
ANG 33 - 34 - 42 :	C.W. 180 18 36.48		C.C.W. 179 41 23.52		5299.65731	
ANG 34 - 42 - 37 :	C.W. 333 19 18.54		C.C.W. 26 40 41.46		5892.49091	
PT-PT ANGLES						
ANG 33 - 34 - 45 :	C.W. 180 33 47.96		C.C.W. 179 26 12.04		2647.86863	
ANG 34 - 45 - 34 :	C.W. 360 00 00.00		C.C.W. 0 00 00.00		2647.86863	
ANG 45 - 34 - 37 :	C.W. 89 00 01.47		C.C.W. 270 59 58.53		2645.82785	
ANG 34 - 37 - 39 :	C.W. 90 43 08.83		C.C.W. 269 16 51.17		2624.71619	
ANG 37 - 39 - 45 :	C.W. 89 46 49.77		C.C.W. 270 13 10.23		2632.67697	
ANG 39 - 45 - 34 :	C.W. 90 29 59.94		C.C.W. 269 30 00.06		2647.86863	
ANG 45 - 34 - 45 :	C.W. 360 00 00.00		C.C.W. 0 00 00.00		2647.86863	
ANG 34 - 45 - 10 :	C.W. 89 00 48.54		C.C.W. 270 59 11.46		2632.67697	
ANG 45 - 10 - 45 :	C.W. 360 00 00.00		C.C.W. 0 00 00.00		2632.67697	
ANG 10 - 45 - 42 :	C.W. 90 28 49.85		C.C.W. 269 31 10.15		2651.84035	
ANG 45 - 42 - 45 :	C.W. 360 00 00.00		C.C.W. 0 00 00.00		2651.84035	
ANG 42 - 45 - 39 :	C.W. 90 00 21.67		C.C.W. 269 59 38.33		2632.67697	
START				45	5,802.90202	10,479.14600
45	TRAV NE	12 21 28.95	76.19000	0	5,877.32664	10,495.45219
START				45	5,802.90202	10,479.14600
45	S.S. NE	49 12 28.95	36.60000	0	5,826.81332	10,506.85538
45	S.S. SE	79 23 31.05	37.06000	0	5,796.07967	10,515.57263
45	S.S. SW	15 36 28.95	8.17000	0	5,795.03329	10,476.94782
45	S.S. NW	71 47 31.05	26.52000	0	5,811.18868	10,453.95390
45	S.S. NW	54 55 31.05	35.89000	0	5,823.52600	10,449.77350
START				4	8,489.27860	10,529.42444
4	S.S. NE	64 08 31.08	27.58000	0	8,501.30742	10,554.24306
4	S.S. SW	3 04 31.08	89.80000	0	8,399.60792	10,524.60682
START				10	8,435.09866	10,428.85808
10	S.S. NE	62 09 50.34	141.79208	0	8,501.30742	10,554.24306
10	INV SE	69 39 43.21	102.11471	0	8,399.60792	10,524.60682

TIME FOR THIS RUN: 0 35 14.83; TOTAL TIME ON FILE: 4 12 27.49
 COORDINATES STORED

38 31.10 37.52 10.20 08.08

3 37 12.65 TOTAL TIME ON FILE: 3 37 12.65

TIME FOR THIS RUN: 0 10 49.99; TOTAL TIME ON FILE: 0 23 56.89
COORDINATES STORED

COORDINATE FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 4 12 27.49
BRIDGE 107 ***** JOB #1991

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			2	10,000.00000	10,000.00000
2 TRAV NE	85 38 56.46	908.15800	49	10,068.89835	10,905.54071
START			11	10,828.36141	10,435.19922
11 TRAV NW	0 02 07.83	532.56700	50	11,360.92831	10,434.86916
50 S.S. SE	20 00 57.95	1375.09022	49	10,068.89835	10,905.54071
50 S.S. SW	17 43 14.48	1428.71867	2	10,000.00000	10,000.00000
50 INV SE	0 02 07.83	532.56700	11	10,828.36141	10,435.19922
11 INV SW	1 53 04.17	566.30575	1	10,262.36194	10,416.57646
1 S.S. SE	68 24 47.80	525.84617	49	10,068.89835	10,905.54071
1 INV SW	57 47 49.46	492.31061	2	10,000.00000	10,000.00000
2 INV NE	85 38 56.46	908.15800	49	10,068.89835	10,905.54071

TIME FOR THIS RUN: 0 03 52.01; TOTAL TIME ON FILE: 4 16 19.50
COORDINATES STORED

START			2	10,000.00000	10,000.00000
2 TRAV NE	85 38 56.46	908.15800	49	10,068.89835	10,905.54071
START			11	10,828.36141	10,435.19922
11 TRAV NW	0 02 07.83	532.56700	50	11,360.92831	10,434.86916
50 S.S. SE	20 00 57.95	1375.09022	49	10,068.89835	10,905.54071
50 S.S. SW	17 43 14.48	1428.71867	2	10,000.00000	10,000.00000
50 INV SE	0 02 07.83	532.56700	11	10,828.36141	10,435.19922
11 INV SW	1 53 04.17	566.30575	1	10,262.36194	10,416.57646
1 S.S. SE	68 24 47.80	525.84617	49	10,068.89835	10,905.54071
1 INV SW	57 47 49.46	492.31061	2	10,000.00000	10,000.00000
2 INV NE	85 38 56.46	908.15800	49	10,068.89835	10,905.54071

COORDINATE FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 3 37 15.82
***** JOB #1991

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			2	10,000.00000	10,000.00000
2 TRAV NE	85 38 56.46	908.15800	49	10,068.89835	10,905.54071
START			11	10,828.36141	10,435.19922
11 TRAV NW	0 02 07.83	532.56700	50	11,360.92831	10,434.86916
50 S.S. SE	20 00 57.95	1375.09022	49	10,068.89835	10,905.54071
50 S.S. SW	17 43 14.48	1428.71867	2	10,000.00000	10,000.00000
50 INV SE	0 02 07.83	532.56700	11	10,828.36141	10,435.19922
11 INV SW	1 53 04.17	566.30575	1	10,262.36194	10,416.57646
1 S.S. SE	68 24 47.80	525.84617	49	10,068.89835	10,905.54071
1 INV SW	57 47 49.46	492.31061	2	10,000.00000	10,000.00000
2 INV NE	85 38 56.46	908.15800	49	10,068.89835	10,905.54071

TIME FOR THIS RUN: 0 03 52.01; TOTAL TIME ON FILE: 4 16 19.50
COORDINATES STORED

START			2	10,000.00000	10,000.00000
2 TRAV NE	85 38 56.46	908.15800	49	10,068.89835	10,905.54071
START			11	10,828.36141	10,435.19922
11 TRAV NW	0 02 07.83	532.56700	50	11,360.92831	10,434.86916
50 S.S. SE	20 00 57.95	1375.09022	49	10,068.89835	10,905.54071
50 S.S. SW	17 43 14.48	1428.71867	2	10,000.00000	10,000.00000
50 INV SE	0 02 07.83	532.56700	11	10,828.36141	10,435.19922
11 INV SW	1 53 04.17	566.30575	1	10,262.36194	10,416.57646
1 S.S. SE	68 24 47.80	525.84617	49	10,068.89835	10,905.54071
1 INV SW	57 47 49.46	492.31061	2	10,000.00000	10,000.00000
2 INV NE	85 38 56.46	908.15800	49	10,068.89835	10,905.54071

TIME FOR THIS RUN: 0 03 52.01; TOTAL TIME ON FILE: 4 16 19.50
COORDINATES STORED

COORDINATE FILE:0565WA LENGTH = 152 POINTS; TIME ON FILE: 4 37 22.96
MIDLAND CO-OP RUSSELLVILLE ***** JOB #1993

***** COGO *****

FROM TYPE BEARING DISTANCE TO NORTHING EASTING

TIME FOR THIS RUN: 0 00 17.22; TOTAL TIME ON FILE: 4 37 40.19
COORDINATES STORED

COORDINATE FILE:0662WB LENGTH = 120 POINTS; TIME ON FILE: 4 16 50.94
BRIDGE 107 ***** JOB #1991

***** COGO *****

FROM TYPE BEARING DISTANCE TO NORTHING EASTING

START			2	10,000.00000	10,000.00000
2 TRAV NW	82 33 53.04	1008.26000	51	10,130.47484	9,000.21775
START			2	10,000.00000	10,000.00000
2 TRAV NW	82 33 53.04	1008.32600	51	10,130.48338	9,000.15231
51 S.S. SW	79 29 11.46	65.09900	52	10,118.60496	8,936.14619
51 TRAV SW	88 20 35.96	1037.43000	53	10,100.49078	7,963.15595
53 TRAV NE	88 56 00.41	1204.50000	54	10,122.91110	9,167.44727
LINE TANGENT TO CIRCLES			54	10,122.91110	9,167.44727
RADIUS =	0.000		2	10,000.00000	10,000.00000
RADIUS =	5.000				
TANGENT PTS (2nd,1st)			55	9,995.05804	9,999.24038
START			54	10,122.91110	9,167.44727
54 TRAV SE	81 15 41.70	1097.58000	56	9,956.16284	10,252.28683
START			15	11,700.71073	10,428.85808
15 TRAV SW	0 00 00.00	1659.90000	57	10,040.81073	10,428.85808
57 INV SW	64 23 13.33	195.81285	56	9,956.16284	10,252.28683
56 INV NW	81 15 41.70	1097.58000	54	10,122.91110	9,167.44727
54 S.S. SW	88 56 00.41	231.34116	52	10,118.60496	8,936.14619
54 INV SW	88 56 00.41	1204.50000	53	10,100.49078	7,963.15595
ENTER & ASSIGN			58	10,069.00000	10,265.00000
			59	10,137.00000	10,302.00000
ENTER & ASSIGN			60	10,243.00000	10,428.85808
START			58	10,069.00000	10,265.00000
58 INV NE	28 33 05.01	77.41447	59	10,137.00000	10,302.00000
59 INV NE	50 07 06.83	165.31477	60	10,243.00000	10,428.85808
ENTER & ASSIGN			59	10,148.00000	10,302.00000
START			58	10,069.00000	10,265.00000
58 INV NE	25 05 46.50	87.23531	59	10,148.00000	10,302.00000
59 INV NE	53 10 17.84	158.48651	60	10,243.00000	10,428.85808
ENTER & ASSIGN			59	10,148.00000	10,312.00000
START			58	10,069.00000	10,265.00000
58 INV NE	30 44 59.88	91.92388	59	10,148.00000	10,312.00000
59 INV NE	50 53 25.97	150.60150	60	10,243.00000	10,428.85808

FOR THIS RUN: 4 12 27.48
TOTAL TIME ON FILE: 4 37 22.96
***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			2	10,000.00000	10,000.00000
2 TRAV NW	82 33 53.04	1008.26000	51	10,130.47484	9,000.21775
START			2	10,000.00000	10,000.00000
2 TRAV NW	82 33 53.04	1008.32600	51	10,130.48338	9,000.15231
51 S.S. SW	79 29 11.46	65.09900	52	10,118.60496	8,936.14619
51 TRAV SW	88 20 35.96	1037.43000	53	10,100.49078	7,963.15595
53 TRAV NE	88 56 00.41	1204.50000	54	10,122.91110	9,167.44727
LINE TANGENT TO CIRCLES			54	10,122.91110	9,167.44727
RADIUS =	0.000		2	10,000.00000	10,000.00000
RADIUS =	5.000				
TANGENT PTS (2nd,1st)			55	9,995.05804	9,999.24038
START			54	10,122.91110	9,167.44727
54 TRAV SE	81 15 41.70	1097.58000	56	9,956.16284	10,252.28683
START			15	11,700.71073	10,428.85808
15 TRAV SW	0 00 00.00	1659.90000	57	10,040.81073	10,428.85808
57 INV SW	64 23 13.33	195.81285	56	9,956.16284	10,252.28683
56 INV NW	81 15 41.70	1097.58000	54	10,122.91110	9,167.44727
54 S.S. SW	88 56 00.41	231.34116	52	10,118.60496	8,936.14619
54 INV SW	88 56 00.41	1204.50000	53	10,100.49078	7,963.15595
ENTER & ASSIGN			58	10,069.00000	10,265.00000
			59	10,137.00000	10,302.00000
ENTER & ASSIGN			60	10,243.00000	10,428.85808
START			58	10,069.00000	10,265.00000
58 INV NE	28 33 05.01	77.41447	59	10,137.00000	10,302.00000
59 INV NE	50 07 06.83	165.31477	60	10,243.00000	10,428.85808
ENTER & ASSIGN			59	10,148.00000	10,302.00000
START			58	10,069.00000	10,265.00000
58 INV NE	25 05 46.50	87.23531	59	10,148.00000	10,302.00000
59 INV NE	53 10 17.84	158.48651	60	10,243.00000	10,428.85808
ENTER & ASSIGN			59	10,148.00000	10,312.00000
START			58	10,069.00000	10,265.00000
58 INV NE	30 44 59.88	91.92388	59	10,148.00000	10,312.00000
59 INV NE	50 53 25.97	150.60150	60	10,243.00000	10,428.85808

FOR THIS RUN: 4 16 18.29
TOTAL TIME ON FILE: 4 16 50.94
***** COGO *****

60 INV NE 0 00 00.00 1457.71073 15 11,700.71073 10,428.85808
LIST

1	10,262.36194	10,416.57646
2	10,000.00000	10,000.00000
3	8,024.09005	10,177.06917
4	8,489.27860	10,529.42444
6	7,113.04664	10,807.23459
7	7,102.49940	10,481.71775
8	8,439.07388	10,761.08430
10	8,435.09866	10,428.85808
11	10,828.36141	10,435.19922
12	11,691.11216	10,436.64347
15	11,700.71073	10,428.85808
17	6,416.21237	10,483.38414
18	6,061.44349	10,475.82320
19	8,498.36540	15,716.33126
21	11,741.43742	14,327.95619
24	11,741.47617	14,331.66599
25	8,097.78092	14,338.47996
26	8,498.37186	15,716.87122
28	5,885.03184	10,357.68956
30	5,821.26805	10,477.08853
31	12,784.68283	10,234.31311
32	11,656.20641	6,266.35146
33	5,776.32174	5,988.67032
34	5,797.91170	7,831.28207
35	5,748.33276	6,155.01366
36	3,146.03372	7,872.65859
37	3,152.57818	7,882.42497
38	3,163.48250	8,532.42687
39	3,170.37326	10,507.08084
40	3,264.97307	13,834.55408
41	5,840.44413	13,805.42837
42	5,831.31872	13,130.83409
45	5,802.90202	10,479.14600
46	5,803.10663	10,492.91704
47	5,809.67573	10,479.10329
48	5,809.80193	10,492.86549
49	10,068.89835	10,905.54071
50	11,360.92831	10,434.86916
51	10,130.48338	9,000.15231
52	10,118.60496	8,936.14619
53	10,100.49078	7,963.15595
54	10,122.91110	9,167.44727
55	9,995.05804	9,999.24038
56	8,956.16204	10,252.28683 Rev. p. 22
57	10,040.81073	10,428.85808
58	10,069.00000	10,265.00000
59	10,148.00000	10,312.00000
60	10,243.00000	10,428.85808

TIME FOR THIS RUN: 0 42 41.85; TOTAL TIME ON FILE: 4 59 32.78
COORDINATES STORED

***** COORD *****

***** COORD *****

***** COORD *****

LINE NO	TYPE	BEARING	DISTANCE	NORTHING	EASTING
1	TRAV NM	03 33 23.04	1008.28000	10,130.47484	10,000.00000
2	TRAV NM	03 33 23.04	1008.28000	10,130.47484	9,000.21775
3	TRAV NM	78 28 11.48	62.02000	10,118.60496	10,000.00000
4	TRAV NM	69 28 28.98	1037.43000	10,100.49078	8,936.14619
5	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
6	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.15231
7	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
8	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
9	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
10	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
11	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
12	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
13	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
14	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
15	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
16	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
17	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
18	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
19	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
20	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
21	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
22	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
23	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
24	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
25	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
26	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
27	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
28	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
29	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
30	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
31	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
32	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
33	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
34	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
35	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
36	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
37	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
38	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
39	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
40	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
41	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
42	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
43	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
44	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
45	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
46	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
47	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
48	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
49	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
50	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
51	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
52	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
53	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
54	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
55	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
56	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595
57	TRAV NE	88 28 00.41	1304.20000	10,122.91110	8,187.44727
58	TRAV NM	03 33 23.04	1008.28000	10,130.47484	8,000.21775
59	TRAV NM	78 28 11.48	62.02000	10,118.60496	8,936.14619
60	TRAV NM	69 28 28.98	1037.43000	10,100.49078	7,963.15595

***** COORD *****

***** COORD *****

***** COORD *****

COORDINATE FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 5 06 58.22
 BRIDGE 107 ***** JOB #1991

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
ENTER & ASSIGN					
			58	10,225.27591	10,423.63490
			59	10,225.27591	10,423.63490
			58	10,105.94835	10,252.55431
			60	9,994.69043	10,269.24680
			77	9,975.32321	10,138.08952
			78	10,067.38652	10,760.38853
START			78	10,067.38652	10,760.38853
START			100 <i>temp.</i>	10,056.49356	10,687.78532
100 S.S. NW	8 24 55.20	15.00000	81	10,071.33206	10,685.59010
100 TRAV SE	8 24 55.20	15.00000	82	10,041.65506	10,689.98054
ENTER & ASSIGN					
			100 <i>temp.</i>	1,068.53453	10,833.79538
OFFSETS FROM A LINE					
			100 <i>temp.</i>	1,068.53453	10,833.79538
BASE BRG SE	0 28 02.54				
PT	BASE DIST	OFFSET			
49	-8999.47915	-145.15968			
OFFSETS FROM A LINE					
			100 <i>temp.</i>	1,068.53453	10,833.79538
BASE BRG SE	0 28 02.54				
PT	BASE DIST	OFFSET			
ENTER & ASSIGN					
			100 <i>temp.</i>	10,068.53453	10,833.79538
OFFSETS FROM A LINE					
			100 <i>temp.</i>	10,068.53453	10,833.79538
BASE BRG NE	89 06 14.49				
PT	BASE DIST	OFFSET			
49	71.74224	0.75811			
START			100 <i>temp.</i>	10,068.53453	10,833.79538
100 TRAV NW	0 53 45.51	15.00000	84	10,083.53270	10,833.56082
START			78	10,067.38652	10,760.38853
78 TRAV NE	89 06 14.49	345.00000	83	10,072.78132	11,105.34635
START			83	10,072.78132	11,105.34635
OFFSET INTERSECTION					
SW	89 06 14.49	15.00000			
NE	84 30 00.00	-15.00000			
START			85	10,087.77005	11,104.50888
OFFSET INTERSECTION			77	9,975.32321	10,138.08952
NW	81 21 15.47	20.00000			
NE	81 35 04.80	-20.00000			
START			70	9,995.54690	10,138.13018
OFFSET INTERSECTION			77	9,975.32321	10,138.08952
NW	81 21 15.47	-20.00000			
NE	81 35 04.80	20.00000			
START			71	9,955.09952	10,138.04886
PTS 100 THRU 100 CLEARED					
START			77	9,975.32321	10,138.08952

FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 5 06 58.22
 BRIDGE 107 ***** JOB #1991

EASTING	NORTHING	TO	DISTANCE	BEARING
10,458.88890	10,046.81073	81	104.81749	84 43 57.52
10,458.88890	10,046.81073	82	104.81749	84 43 57.52
10,458.88890	10,046.81073	83	104.81749	84 43 57.52
10,458.88890	10,046.81073	84	104.81749	84 43 57.52
10,458.88890	10,046.81073	85	104.81749	84 43 57.52
10,458.88890	10,046.81073	86	104.81749	84 43 57.52
10,458.88890	10,046.81073	87	104.81749	84 43 57.52
10,458.88890	10,046.81073	88	104.81749	84 43 57.52
10,458.88890	10,046.81073	89	104.81749	84 43 57.52
10,458.88890	10,046.81073	90	104.81749	84 43 57.52
10,458.88890	10,046.81073	91	104.81749	84 43 57.52
10,458.88890	10,046.81073	92	104.81749	84 43 57.52
10,458.88890	10,046.81073	93	104.81749	84 43 57.52
10,458.88890	10,046.81073	94	104.81749	84 43 57.52
10,458.88890	10,046.81073	95	104.81749	84 43 57.52
10,458.88890	10,046.81073	96	104.81749	84 43 57.52
10,458.88890	10,046.81073	97	104.81749	84 43 57.52
10,458.88890	10,046.81073	98	104.81749	84 43 57.52
10,458.88890	10,046.81073	99	104.81749	84 43 57.52
10,458.88890	10,046.81073	100	104.81749	84 43 57.52

FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 5 06 58.22
 BRIDGE 107 ***** JOB #1991

FILE: 0000001.PRT
***** JOB #1901 *****
***** CODE *****

Table with columns: BEARING, DISTANCE TO, NORTHING, EASTING. Includes various coordinate points and intersection data.

Main data table with columns: POINT ID, BEARING, DISTANCE, AREA, and other values. Includes sections for START, ENTER & ASSIGN, and OFFSET INTERSECTION.

LIST

1	10,262.36194	10,416.57646
2	10,000.00000	10,000.00000
3	8,024.09005	10,177.06917
4	8,489.27860	10,529.42444
6	7,113.04664	10,807.23459
7	7,102.49940	10,481.71775
8	8,439.07388	10,761.08430
10	8,435.09866	10,428.85808
11	10,828.36141	10,435.19922
12	11,691.11216	10,436.64347
15	11,700.71073	10,428.85808
17	6,416.21237	10,483.38414
18	6,061.44349	10,475.82320
19	8,498.36540	15,716.33126
21	11,741.43742	14,327.95619
24	11,741.47617	14,331.66599
25	8,097.78092	14,338.47996
26	8,498.37186	15,716.87122
28	5,885.03184	10,357.68956
30	5,821.26805	10,477.08853
31	12,784.68283	10,234.31311
32	11,656.20641	6,266.35146
33	5,776.32174	5,988.67032
34	5,797.91170	7,831.28207
35	5,748.33276	6,155.01366
36	3,146.03372	7,872.65859
37	3,152.57818	7,882.42497
38	3,163.48250	8,532.42687
39	3,170.37326	10,507.08084
40	3,264.97307	13,834.55408
41	5,840.44413	13,805.42837
42	5,831.31872	13,130.83409
45	5,802.90202	10,479.14600
46	5,803.10663	10,492.91704
47	5,809.67573	10,479.10329
48	5,809.80193	10,492.86549
49	10,068.89835	10,905.54071
50	11,360.92831	10,434.86916
51	10,130.48338	9,000.15231
52	10,118.60496	8,936.14619
53	10,100.49078	7,963.15595
54	10,122.91110	9,167.44727
55	9,995.05804	9,999.24038
56	9,957.91849	10,252.55523
57	10,040.81073	10,428.85808
58	10,105.94835	10,252.55431
59	10,225.27591	10,423.63490
60	9,994.69043	10,269.24680
61	10,263.16197	10,413.85808
62	10,255.13372	10,443.85808
63	10,218.97846	10,388.38618
64	10,198.19953	10,411.03538
65	10,171.49568	10,320.30986
66	10,146.88978	10,337.47231
67	10,012.30954	10,251.43667
68	10,016.40628	10,281.15685
69	10,011.60503	10,281.86715
70	9,995.54690	10,138.13018
71	9,955.09952	10,138.04886

87	10,991.84329	10,303.31728
88	10,373.98329	10,303.31728
89	10,382.88888	10,458.88888
90	10,373.98888	10,303.31728
91	10,081.84329	10,303.31728
92	10,975.78135	10,102.24832
93	10,046.81073	10,458.88888
94	10,358.11474	10,458.88888
95	10,168.18888	10,411.03538
96	10,382.88888	10,458.88888
97	10,382.88888	10,443.88888
98	10,382.88888	10,443.88888
99	10,382.88888	10,443.88888
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101	10,382.88888	10,443.88888
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107	10,382.88888	10,443.88888
108	10,382.88888	10,443.88888
109	10,382.88888	10,443.88888
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128	10,382.88888	10,443.88888
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139	10,382.88888	10,443.88888
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141	10,382.88888	10,443.88888
142	10,382.88888	10,443.88888
143	10,382.88888	10,443.88888
144	10,382.88888	10,443.88888
145	10,382.88888	10,443.88888
146	10,382.88888	10,443.88888
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166	10,382.88888	10,443.88888
167	10,382.88888	10,443.88888
168	10,382.88888	10,443.88888
169	10,382.88888	10,443.88888
170	10,382.88888	10,443.88888
171	10,382.88888	10,443.88888

10,418.27848	10,383.28194	1
10,000.00000	10,000.00000	2
10,177.08817	8,054.08006	3
10,258.42444	8,488.27880	4
10,097.23428	7,113.04884	5
10,481.71728	7,102.48840	6
10,781.08720	8,438.07388	7
10,428.88808	8,438.08888	8
10,432.18825	10,828.38711	9
10,438.84347	11,881.11218	10
10,428.88800	11,700.21022	11
10,483.28414	8,418.21222	12
10,428.88800	8,081.44348	13
10,428.88800	8,488.38840	14
10,428.88800	11,741.43242	15
10,428.88800	11,741.43242	16
10,428.88800	8,087.28882	17
10,428.88800	8,488.38840	18
10,428.88800	8,087.28882	19
10,428.88800	8,488.38840	20
10,428.88800	8,087.28882	21
10,428.88800	8,488.38840	22
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10,428.88800	8,087.28882	35
10,428.88800	8,488.38840	36
10,428.88800	8,087.28882	37
10,428.88800	8,488.38840	38
10,428.88800	8,087.28882	39
10,428.88800	8,488.38840	40
10,428.88800	8,087.28882	41
10,428.88800	8,488.38840	42
10,428.88800	8,087.28882	43
10,428.88800	8,488.38840	44
10,428.88800	8,087.28882	45
10,428.88800	8,488.38840	46
10,428.88800	8,087.28882	47
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10,428.88800	8,087.28882	49
10,428.88800	8,488.38840	50
10,428.88800	8,087.28882	51
10,428.88800	8,488.38840	52
10,428.88800	8,087.28882	53
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10,428.88800	8,087.28882	59
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10,428.88800	8,087.28882	63
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10,428.88800	8,488.38840	68
10,428.88800	8,087.28882	69
10,428.88800	8,488.38840	70
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10,428.88800	8,087.28882	87
10,428.88800	8,488.38840	88
10,428.88800	8,087.28882	89
10,428.88800	8,488.38840	90
10,428.88800	8,087.28882	91
10,428.88800	8,488.38840	92

72	9,971.73722	10,250.51088
73	9,976.68338	10,249.77914
74	9,965.07584	10,205.48348
75	9,985.89791	10,312.06443
76	10,029.92606	10,405.70755
77	9,975.32321	10,138.08952
78	10,067.38652	10,760.38853
79	10,033.35096	10,428.85808
80	9,989.55246	10,234.45183
81	10,071.33206	10,685.59010
82	10,041.65506	10,689.98054
83	10,072.78132	11,105.34635
84	10,083.53270	10,833.56082
85	10,087.77005	11,104.50888
86	10,106.91317	11,303.31778
87	10,091.84380	11,303.31778
88	10,373.99381	11,303.31778
89	10,365.59866	10,428.85808
90	10,365.74267	10,443.85808
91	10,229.11474	10,428.85808
92	8,968.66903	10,850.99620

TIME FOR THIS RUN: 1 18 56.00; TOTAL TIME ON FILE: 6 25 54.22
COORDINATES STORED

Recalc. to correct error

COORDINATE FILE:0662WB LENGTH = 120 POINTS; TIME ON FILE: 7 51 01.82
BRIDGE 107 ***** JOB #1991

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
ENTER & ASSIGN					
			78	10,067.40691	10,761.69188
OFFSETS FROM A LINE					
			77	9,975.32321	10,138.08952
BASE BRG NE 81 36 00.61					
PT	BASE DIST	OFFSET			
70	2.99450	-20.00081			
71	-2.99450	20.00081			
80	97.40722	0.00001			
60	132.57949	0.00001			
69	147.53534	-14.88956			
75	173.65340	14.95301			
START			77	9,975.32321	10,138.08952
OFFSET INTERSECTION					
NE 81 36 00.61		-20.00000			
NW 81 21 15.47		20.00000			
			70	9,995.54649	10,138.13291
START			77	9,975.32321	10,138.08952
OFFSET INTERSECTION					
NE 81 36 00.61		20.00000			
NW 81 21 15.47		-20.00000			
			71	9,955.09993	10,138.04613
START			70	9,995.54649	10,138.13291
70 B-D NE 81 36 00.61		114.53703	67	10,012.27807	10,251.44127
67 B-D NE 81 40 36.13		165.00000	93	10,036.16323	10,414.70333
START			60	9,994.69043	10,269.24680
OFFSET INTERSECTION					
NW 8 23 59.39		15.00000			
NE 81 36 00.61		-15.00000			
			69	10,011.72072	10,281.89469
START			71	9,955.09993	10,138.04613
71 B-B NE 81 36 00.61		113.69247	72	9,971.70814	10,250.51899
72 B-B SE 8 23 59.39		13.93918	56	9,957.91849	10,252.55523
START			72	9,971.70814	10,250.51899
72 TRAV NW 8 23 59.39		5.00000	73	9,976.65450	10,249.78859
73 B-B NE 81 36 00.61		62.80225	75	9,985.82866	10,311.91715
75 B-B SW 64 49 06.66		65.59585	56	9,957.91849	10,252.55523
56 B-B NE 64 49 06.66		169.50085	76	10,030.03887	10,405.94750
76 B-B SW 81 36 00.61		125.39799	69	10,011.72072	10,281.89469
69 B-B NE 81 36 00.61		148.55700	79	10,033.42194	10,428.85808
79 B-B NE 0 00 00.00		7.38879	57	10,040.81073	10,428.85808
START			69	10,011.72072	10,281.89469
69 INV NE 81 36 00.61		408.07291	81	10,071.33206	10,685.59010
81 INV SE 8 24 55.20		30.00000	82	10,041.65506	10,689.98054
START			69	10,011.72072	10,281.89469
69 B-B NE 81 36 00.61		410.62753	81	10,071.70523	10,688.11732
81 B-B SE 8 23 59.39		1114.99704	92	8,968.66903	10,850.99620
92 TRAV NW 8 23 59.39		1084.99704	82	10,042.02705	10,692.49972
START			78	10,067.40691	10,761.69188
78 B-B SW 81 36 00.61		72.15741	0	10,056.86615	10,690.30852

10.520.01	8.971.72755	75
10.548.01	8.978.82238	73
10.508.01	8.988.07284	74
10.315.01	8.988.82781	72
10.408.01	10.028.82808	78
10.128.01	8.978.32321	77
10.780.01	10.067.30825	79
10.428.01	10.028.32088	78
10.324.01	8.988.82248	80
10.888.01	10.071.32208	81
10.888.01	10.041.82208	82
11.108.01	10.071.78132	83
10.888.01	10.083.22270	84
11.104.01	10.087.72088	88
11.508.01	10.108.91312	88
11.303.01	10.091.84380	87
11.303.01	10.073.92381	88
10.428.01	10.388.82808	83
10.443.01	10.388.74287	80
10.428.01	10.528.11474	81
10.888.01	8.988.82803	82

FOR THIS RUN: 1 18 28.00; TOTAL TIME ON FILE: 8 28 24.55
COORDINATES STORED

10.138.04813	8.882.08888	1
10.138.13281	8.882.08888	2
10.138.13281	8.882.08888	3
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10.138.13281	8.882.08888	33
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10.138.13281	8.882.08888	36
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10.138.13281	8.882.08888	39
10.138.13281	8.882.08888	40
10.138.13281	8.882.08888	41
10.138.13281	8.882.08888	42
10.138.13281	8.882.08888	43
10.138.13281	8.882.08888	44
10.138.13281	8.882.08888	45
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10.138.13281	8.882.08888	66
10.138.13281	8.882.08888	67
10.138.13281	8.882.08888	68
10.138.13281	8.882.08888	69
10.138.13281	8.882.08888	70
10.138.13281	8.882.08888	71

72	9,971.70814	10,250.51899
73	9,976.65450	10,249.78859
74	8,965.07584	10,205.48340
75	9,985.82866	10,311.91715
76	10,030.03887	10,405.94750
77	9,975.32321	10,138.08952
78	10,067.40691	10,761.69188
79	10,033.42194	10,428.85808
80	9,989.55246	10,234.45183
81	10,071.70851	10,688.13953
82	10,042.03033	10,692.52193
83	10,072.80171	11,106.64970
84	10,083.53305	10,833.58346
85	10,007.77005	11,104.60000
86	10,106.80817	11,303.31879
87	10,091.73879	11,303.31879
88	10,373.88879	11,303.31879
89	10,365.59866	10,428.85808
90	10,365.74267	10,443.85808
91	10,229.11474	10,428.85808
92	8,968.66938	10,851.01884
93	10,036.16323	10,414.70333

TIME FOR THIS RUN: 1 12 07.49; TOTAL TIME ON FILE: 9 03 09.32
COORDINATES STORED

COORDINATE FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 9 03 09.37
BRIDGE 107 ***** JOB #1991

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			77	9,975.32321	10,138.08952
77 B-B SE	81 21 15.47	68.22874	74	9,965.06679	10,205.54296
74 B-B SW	81 36 00.61	68.22874	71	9,955.09993	10,138.04613
OFFSETS FROM A LINE			77	9,975.32321	10,138.08952

BASE BRG NE 81 36 00.61

PT	BASE DIST	OFFSET
71	-2.99715	20.00000
74	65.23160	20.00000
72	110.69533	20.00000
73	110.69533	15.00000
75	173.49758	15.00000
70	2.99715	-20.00000
67	117.53417	-20.00000
69	147.57949	-14.99999
76	272.97748	-14.99999
79	296.13649	-14.99999
57	297.21584	-22.30952
68	147.53403	-19.77960
93	282.53403	-19.77960

TIME FOR THIS RUN: 0 03 24.87; TOTAL TIME ON FILE: 9 06 34.18
COORDINATES STORED

10,520.51889 8,971.70814 75
10,428.78829 8,978.84229 73
10,308.48848 8,989.07284 74
10,311.81718 8,988.82888 75
10,402.04220 8,980.03887 76
10,138.08882 8,978.32321 77
10,181.88198 10,021.40891 78
10,428.82898 10,023.42184 79
10,324.48183 8,988.82328 80
10,888.13822 10,971.70814 81
10,882.82322 10,942.03093 82
11,188.84870 10,027.80171 83
10,832.82328 10,083.82328 84
11,104.82098 10,087.72098 85
11,302.31873 10,108.80873 86
11,308.31873 10,081.72878 87
11,308.31873 10,323.80873 88
10,428.82898 10,382.88888 89
10,428.82898 10,382.74287 90
10,428.82898 10,328.11424 91
10,881.01884 8,988.82888 92
10,414.70322 10,028.18322 93

TIME FOR THIS RUN: 0 03 24.87; TOTAL TIME ON FILE: 9 06 34.18
COORDINATES STORED

COORDINATE FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 9 06 34.18
BRIDGE 107 ***** JOB #1991

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			83	10,072.80171	11,106.64970
OFFSET INTERSECTION					
NE 84 30 00.00	-15.00000				
SW 89 06 14.48	15.00000				
			85	10,087.79045	11,105.81223
JONES NORTH RESIDUE RECALCULATED:					
LOT SUMMARY					
79	NE 0 00 00.00	195.69280	91	10,229.11474	10,428.85808
91	NE 29 57 48.79	30.03310	62	10,255.13372	10,443.85808
62	NE 0 00 00.00	110.60895	90	10,365.74267	10,443.85808
90	NE 89 27 25.04	859.49931	88	10,373.88881	11,303.31879
88	SW 0 00 00.00	267.08062	86	10,106.80819	11,303.31879
86	SW 84 30 00.00	198.42005	85	10,087.79047	11,105.81222
85	SW 89 06 14.48	272.26205	84	10,083.53307	10,833.58346

RADIAL BRG IN: SE 0 53 45.52

DELTA- 7 30 13.87 R= 1115.00000 A= 146.02814 C= 145.92379 T= 73.118

RADIAL BRG OUT: NW	8 23 59.39		92	8,968.66940	10,851.01886
RADIUS PT					
P.C. TO P.T.					
84	SW 85 21 07.54	145.92379	81	10,071.70853	10,688.13954
81	SW 81 36 00.61	262.09298	79	10,033.42196	10,428.85810
			79	10,033.42194	10,428.85808

SW 37 17 11.11 0.00002 CLOSING LINE
2,341.718 DIST TRAV
94,574,156.628 PRECISION

AREA 253785.91 SF 5.8261 ACRES

TIME FOR THIS RUN: 0 03 42.43; TOTAL TIME ON FILE: 9 10 16.62
COORDINATES STORED

COORDINATE FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 9 06 34.18
BRIDGE 107 ***** JOB #1991

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			77	9,972.25231	10,138.08825
NE 84 30 00.00	-15.00000				
SW 89 06 14.48	15.00000				
			74	9,982.08278	10,202.24228
			71	9,982.08278	10,138.08825
			77	9,972.25231	10,138.08825

TIME FOR THIS RUN: 0 03 24.87; TOTAL TIME ON FILE: 9 06 34.18
COORDINATES STORED

COORDINATE FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 9 10 16.62
BRIDGE 107 ***** JOB #1991

***** COGO *****
FROM TYPE BEARING DISTANCE TO NORTHING EASTING

Table with 6 columns: FROM TYPE, BEARING, DISTANCE, TO, NORTHING, EASTING. Contains data for points 89, 59, 95, 120, 59, 120, 112, 59, 60, 120, 120, 93.

DELTA 40 19 29.17 R= 150.00000 A= 105.57000 C= 103.40460 T= 55.077

Table with 6 columns: FROM TYPE, BEARING, DISTANCE, TO, NORTHING, EASTING. Contains data for points 119, 97, 94, 120, 120, 94.

DELTA- 13 39 11.32 R= 650.00000 A= 154.89000 C= 154.52380 T= 77.813

Table with 6 columns: FROM TYPE, BEARING, DISTANCE, TO, NORTHING, EASTING. Contains data for points 119, 98, 0, 120, 0, 99, 120, 0, 100, 101, 120, 0, 102.

COORDINATE FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 9 08 34.18
BRIDGE 107 ***** JOB #1991

***** COGO *****
FROM TYPE BEARING DISTANCE TO NORTHING EASTING

Table with 6 columns: FROM TYPE, BEARING, DISTANCE, TO, NORTHING, EASTING. Contains data for points 83, 82, 78, 81, 82, 80, 88, 88, 88, 82, 84.

DELTA 7 30 13.67 R= 115.00000 A= 148.05814 C= 142.05328 T= 73.118

Table with 6 columns: FROM TYPE, BEARING, DISTANCE, TO, NORTHING, EASTING. Contains data for points 82, 81, 78, 78.

DELTA 0 03 45.43 TOTAL TIME ON FILE: 9 10 18.85

35

Coordinate file data for Bridge 107, including coordinates, bearings, distances, and offsets for various points.

COORDINATES STORED
TIME FOR THIS RUN: 08 05.77
TOTAL TIME ON FILE: 10 18 19.39

36

COORDINATE FILE: 0662WB LENGTH = 120 POINTS; TIME ON FILE: 10 18 19.39
BRIDGE 107 ***** JOB #1991

***** COGO *****
FROM TYPE BEARING DISTANCE TO NORTHING EASTING
START
100 TRAV SW 8 38 44.53 20.00000 113 10,034.32772 9,750.03418
113 INV SW 8 38 44.53 20.00000 101 10,014.55498 9,747.02770
OFFSETS FROM A LINE
BASE BRG SW 0 00 00.00 15 11,700.71073 10,428.85808
PT BASE DIST OFFSET
95 1284.11523 15.00000
57 1659.90000 0.00000
105 1774.27467 0.00000
10 3265.61207 0.00000
START 15 11,700.71073 10,428.85808
15 TRAV SW 0 00 00.00 1204.11523 114 10,416.50550 10,420.05000
START 59 10,225.27591 10,423.63490
59 B-B NE 1 10 13.00 140.32967 0 10,365.57631 10,426.50096
0 B-B NE 89 27 24.61 2.35722 89 10,365.59866 10,428.85808
89 INV SW 0 00 00.00 1930.50000 10 8,435.09866 10,428.85808
McGOWN PARCEL: (2)
LOT SUMMARY
57 10,040.81073 10,428.85808
57 SW 0 00 00.00 114.37467 105 9,926.43606 10,428.85808
105 SW 78 01 25.81 146.87451 104 9,895.95890 10,285.18044
104 SW 88 56 10.76 166.41799 103 9,892.86958 10,118.79113
103 NW 75 26 34.87 237.09196 102 9,952.46092 9,889.31025
102 NW 66 25 22.37 155.24175 101 10,014.55499 9,747.02769
101 NE 8 38 44.53 20.00000 113 10,034.32772 9,750.03417
113 SE 81 21 15.47 508.29694 56 9,957.91850 10,252.55523
56 NE 64 49 06.66 194.81740 57 10,040.81074 10,428.85808
57 10,040.81073 10,428.85808
SE 12 05 41.13 0.00001 CLOSING LINE
1,543.115 DIST TRAV
PERFECT CLOSURE

AREA 48433.90 SF 1.1119 ACRES

SIMON PARCEL: (1)
LOT SUMMARY
114 10,416.59550 10,428.85808
95 10,416.59550 10,413.85808
96 10,249.48118 10,344.71799
97 10,157.33606 10,219.21127
98 10,059.77432 10,189.68869
99 10,064.96906 9,881.12998
100 10,054.10045 9,753.04066
113 10,034.32772 9,750.03418
56 9,957.91849 10,252.55524
57 10,040.81074 10,428.85809
114 10,416.59551 10,428.85809
57 10,416.59550 10,428.85808

SW 52 19 35.06 0.00001 CLOSING LINE
1,989.535 DIST TRAV
PERFECT CLOSURE

AREA 87073.48 SF 1.9989 ACRES

JONES PARCEL: ②
LOT SUMMARY

105	NE	0 00 00.00	439.16260	89	10,365.59866	10,428.85808
89	NE	89 27 24.61	27.65620	112	10,365.86084	10,456.51304
112	SE	21 10 30.00	92.05992	111	10,280.01667	10,489.76671
111	SE	1 22 23.56	151.18741	110	10,128.87268	10,493.38988
110	NE	87 04 44.54	212.84212	109	10,139.71875	10,705.95547
109	SE	70 43 31.05	168.71092	108	10,084.02766	10,865.20960
108	SE	0 53 45.51	30.00000	107	10,054.03132	10,865.67871
107	SW	68 19 16.82	202.78404	106	9,979.12276	10,677.23754
106	SW	78 01 25.81	253.90597	105	9,926.43607	10,428.85808
				105	9,926.43606	10,428.85808

SW 62 13 32.59 0.00001 CLOSING LINE
1,578.309 DIST TRAV
PERFECT CLOSURE

AREA 76594.01 SF 1.7584 ACRES

TIME FOR THIS RUN: 0 15 04.86; TOTAL TIME ON FILE: 10 33 24.24
COORDINATES STORED

COORDINATE FILE 02... BRIDGE 107... TIME ON FILE: 10 18 18.38

105	NE	0 00 00.00	439.16260	89	10,365.59866	10,428.85808
89	NE	89 27 24.61	27.65620	112	10,365.86084	10,456.51304
112	SE	21 10 30.00	92.05992	111	10,280.01667	10,489.76671
111	SE	1 22 23.56	151.18741	110	10,128.87268	10,493.38988
110	NE	87 04 44.54	212.84212	109	10,139.71875	10,705.95547
109	SE	70 43 31.05	168.71092	108	10,084.02766	10,865.20960
108	SE	0 53 45.51	30.00000	107	10,054.03132	10,865.67871
107	SW	68 19 16.82	202.78404	106	9,979.12276	10,677.23754
106	SW	78 01 25.81	253.90597	105	9,926.43607	10,428.85808
				105	9,926.43606	10,428.85808

PERFECT CLOSURE
1,578.309 DIST TRAV
AREA 76594.01 SF 1.7584 ACRES

105	NE	0 00 00.00	439.16260	89	10,365.59866	10,428.85808
89	NE	89 27 24.61	27.65620	112	10,365.86084	10,456.51304
112	SE	21 10 30.00	92.05992	111	10,280.01667	10,489.76671
111	SE	1 22 23.56	151.18741	110	10,128.87268	10,493.38988
110	NE	87 04 44.54	212.84212	109	10,139.71875	10,705.95547
109	SE	70 43 31.05	168.71092	108	10,084.02766	10,865.20960
108	SE	0 53 45.51	30.00000	107	10,054.03132	10,865.67871
107	SW	68 19 16.82	202.78404	106	9,979.12276	10,677.23754
106	SW	78 01 25.81	253.90597	105	9,926.43607	10,428.85808
				105	9,926.43606	10,428.85808