

CROSS STATE
LAND SURVEY, PLLC

Tracy A. Spada, P.L.S.
NYS WBE Certified

SURVEY CONTROL REPORT

Jacobs Road Bridge Replacement over Yanty Creek

355 Jacobs Road • Hamlin, Monroe County, New York

P.I.N. 4BNY50

B.I.N. 3317670

S.I.N. 06-555-060

Prepared For
Project Owner
Prepared By
Professional Surveyor
Report Type
Date

Rochester Earth Inc.- Attn: Nick Vieira, Project Manager
Monroe County
Cross State Land Survey, PLLC
Tracy A. Spada, P.L.S.- NYS LS License #050806
Survey Control / Contract Control Documentation
August 12, 2026

PROJECT CONTROL DOCUMENTATION

This report documents the survey control review, recovery, field verification, and adjustment procedures performed in support of the Jacobs Road Bridge Replacement project.

PROJECT SURVEY CONTROL CERTIFICATION

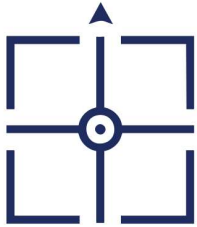
Cross State Land Survey, PLLC hereby certifies that the survey control work for the Jacobs Road Bridge Replacement project was completed in accordance with the applicable project requirements. The control was recovered, observed, verified, and adjusted as documented herein.

tracy spada

Tracy A. Spada, P.L.S.
New York State Licensed Land Surveyor
N.Y.S. License No. 050806

Date: 8/21/2026

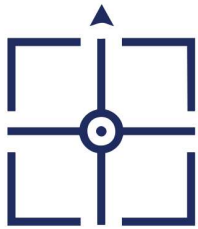




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Jacobs Road Bridge Replacement over Yanty Creek

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PROJECT LOCATION & OVERVIEW

Jacobs Road Bridge Replacement over Yanty Creek

PROJECT LOCATION MAP

355 Jacobs Road

Hamlin, Monroe County, New York



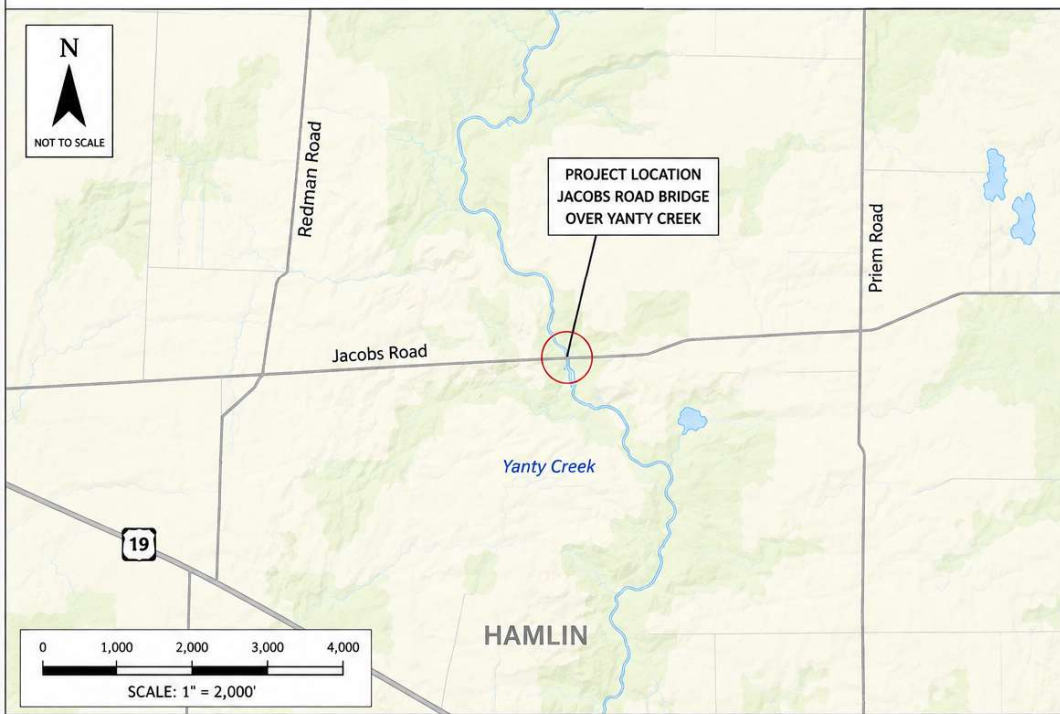
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VICINITY MAP

JACOBS ROAD BRIDGE REPLACEMENT OVER YANTY CREEK

TOWN OF HAMLIN, MONROE COUNTY, NEW YORK

PIN: 4BNY50 | BIN: 3317670 | S.I.N.: 06-555-060

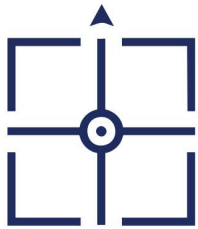


LOCATION MAP



PROJECT LOCATION

Jacobs Road Bridge over Yanty Creek
Jacobs Road
Town of Hamlin
Monroe County, New York



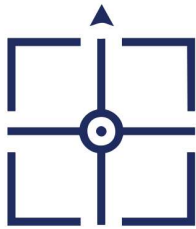
Project Overview

Cross State Land Survey, PLLC was retained by Rochester Earth Inc. to provide survey control documentation for the Jacobs Road Bridge Replacement over Yanty Creek project located at 355 Jacobs Road in the Town of Hamlin, Monroe County, New York. The control work is intended to establish a dependable horizontal and vertical reference framework for project surveying and subsequent construction activities.

The control review includes examination of available project plans and existing survey control, recovery and verification of control monuments and benchmarks, field observations, processing of survey measurements, and preparation of adjusted control information. The final report will document the control used, the methods employed, the results of the control verification, and any conditions affecting the final solution.

Primary Control Objectives

- Establish and/or verify reliable horizontal project control suitable for construction surveying.
- Establish and/or verify vertical control and benchmark elevations supporting project construction.
- Document the recovery condition and location of each control point used in the final control network.
- Evaluate field observations and identify discrepancies, disturbed monuments, or control that cannot be reliably used.
- Provide an adjusted control network and supporting documentation suitable for project use.



SURVEY TEAM & CONTROL NARRATIVE

Jacobs Road Bridge Replacement over Yanty Creek

Survey Team Members and Responsibilities

Team Member / Role	Primary Responsibility
Tracy A. Spada, P.L.S.	Professional oversight, planning and review of survey control procedures, evaluation of results, and preparation / certification of the final report.
Field Crew / Party Chief- Corey Eggert	Field recovery, monument verification, control observations, field documentation, and coordination of survey operations.
Survey / CAD Support- Tracy A. Spada, P.L.S.	Processing of field observations, drafting of control documentation, tables, sketches, and supporting exhibits.

Control Narrative

Cross State Land Survey, PLLC completed a field investigation and verification of the existing survey control for the Jacobs Road Bridge Replacement project. Field crews recovered **4 existing control points AND 1 existing benchmark** within the project area and evaluated their condition and suitability for use as project control. BM 10 was not able to be recovered.

The referenced benchmark could not be located in the field. The utility pole in which the benchmark was reportedly set has been removed. The replacement pole appeared relatively new, indicating that the original pole and benchmark were likely removed prior to the time of this survey.

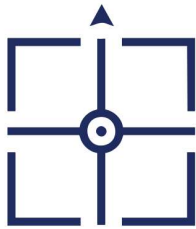
Initial observations were collected using GNSS equipment to establish and verify the horizontal positions of the recovered control points. Following the GNSS observations, a total station was established at two separate instrument locations. The recovered control points were then independently observed from both total station setups, providing redundant measurements and an independent check of the relationships between the control points.

The collected observations were processed and analyzed using a least-squares network adjustment. The adjustment was performed to evaluate the consistency of the observed measurements, identify any discrepancies within the control network, and determine the final adjusted coordinates for the project control. The redundant observations from the GNSS and total station work provided additional checks on the reliability and consistency of the recovered control.

The recovered control points were evaluated based on their physical condition, field observations, and agreement with the project control network. The final adjusted control values presented in this report represent the results of the completed field observations and network adjustment.

The least-squares network adjustment converged successfully after two iterations. The Standard Error of Unit Weight was 0.611, with 174 degrees of freedom. The 95% Chi-Square acceptance interval was 139.367 to 212.419, while the calculated test statistic was 64.977. Because the test statistic falls below the lower limit, Carlson reports the Chi-Square test as failed at the 95% significance level.

This lower-tail result indicates that the observations fit the network better than the statistical model expected them to. The residuals are smaller than anticipated based on the assigned observation standard errors, resulting in a variance factor below 1.00. This is not, by itself, an indication of a deficient or unstable control network. The final adjusted coordinates are supported by the redundant GNSS and total station observations and the resulting network adjustment.

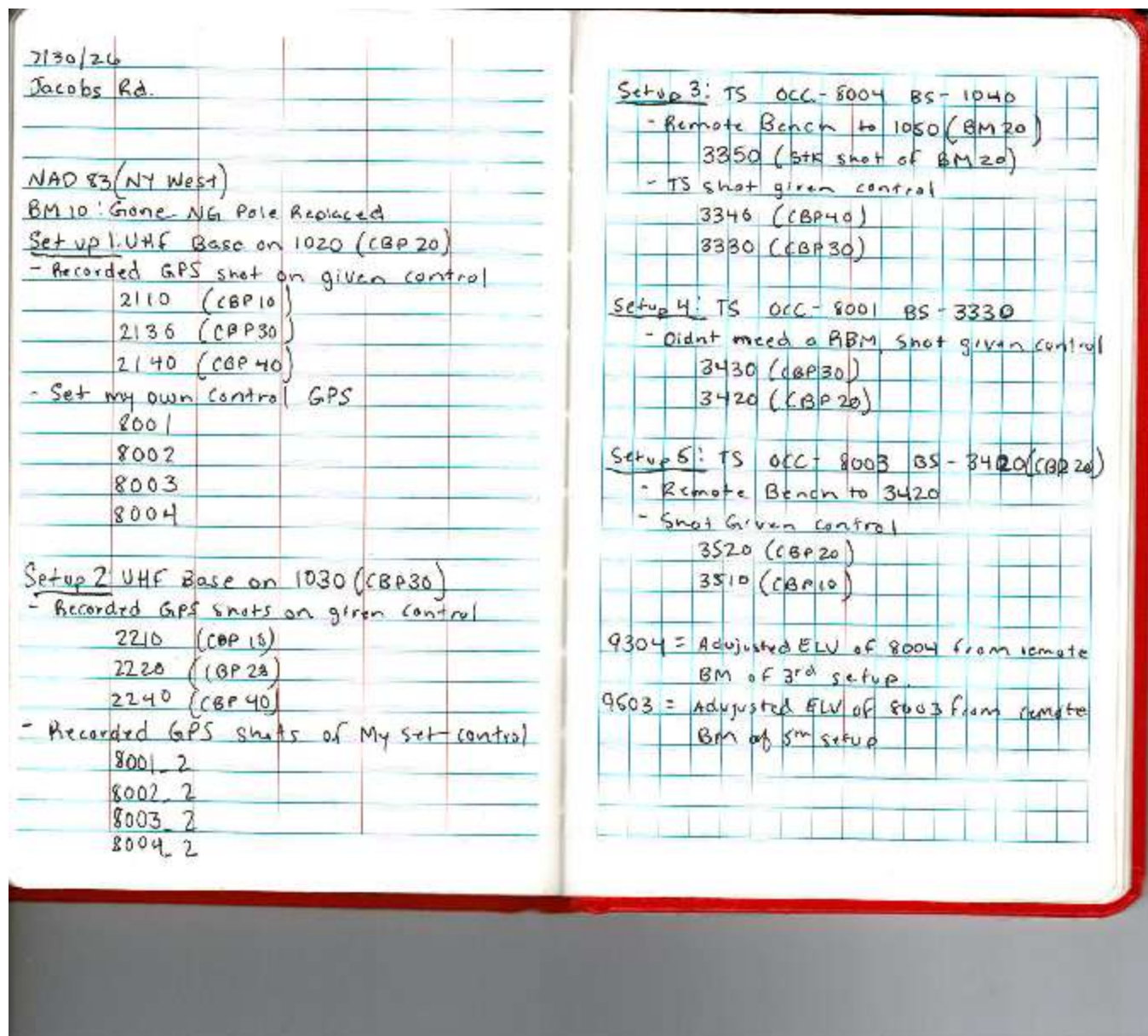
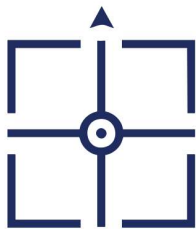


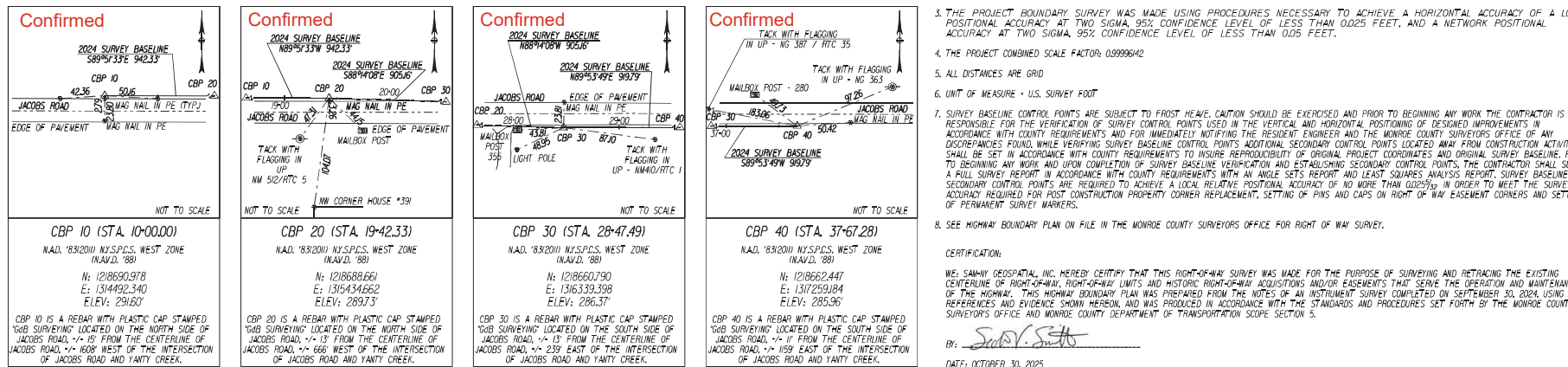
CONTRACT CONTROL COORDINATE COMPARISON

Jacobs Road Bridge Replacement over Yanty Creek

Published contract control coordinates are compared below with the final adjusted grid coordinates from the least-squares network adjustment. Differences are shown as Published – Adjusted. Horizontal coordinates are in U.S. Survey Feet; elevations are NAVD 88.

Control Point	Published Contract Control			Least-Squares Adjusted			Difference		
	Northing	Easting	Elev.	Northing	Easting	Elev.	ΔN	ΔE	ΔZ
CBP 10	1218690.978	1314492.340	291.60	1218690.985	1314492.313	291.575	-0.007	+0.027	+0.025
CBP 20	1218688.661	1315434.662	289.73	1218688.666	1315434.664	289.738	-0.005	-0.002	-0.008
CBP 30	1218660.790	1316339.398	286.37	1218660.783	1316339.394	286.356	+0.007	+0.004	+0.014
CBP 40	1218662.447	1317259.184	285.96	1218662.405	1317259.168	285.921	+0.042	+0.016	+0.039
BM 20			288.117			288.114			-0.003






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LEAST SQUARES ADJUSTMENT REPORT
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Carlson 2026, build 260730
 Mon Aug 17 09:50:29 2026
 3D Geodetic Model
 Input File: Jacobs_Rd_Edited_BP_Records.rw5
 Output File: SurvNET_Jacobs_Rd.RPT
 Curvature, refraction correction: ON
 Maximum iterations: 10 , Convergence Limit: 0.001000
 Coordinate System: USA/NAD83(2011)/New York (West)
 Horizontal Units: US Feet
 Confidence Interval: 95.00
 Geoid Height computed from geoid grid files using the GEOID 2018 model.
 Default Standard Errors:
 Distance: Constant 0.010 ,PPM: 5.000
 Horiz. Angle: Pointing 3.0" ,Reading: 3.0"
 Vert. Angle: Pointing 30.0" ,Reading: 3.0"
 Total Station: Centering 0.005 ,Height: 0.005
 Target: Centering 0.005 ,Height: 0.005
 Azimuth: 5"
 Coordinate Control: N:0.010, E:0.010, Z:0.010,
 GPS: Centering:0.005, Rod Ht:0.005, Vector Err. Factor:1.0

Statistics

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Solution converged in 2 iterations

Total Observations: 210

Total Unknowns: 36

Degrees of Freedom: 174

Observation Count		Sum Squares of StdRes	Std. Error of Unit Wt.
Coordinate:	6	7.958	1.265
Angle:	5	3.105	0.866
Distance:	8	1.361	0.453 (Mark-to-Mark)
ZenithAng:	8	1.813	0.523 (Mark-to-Mark)
Vector:	183	50.697	0.578
Total:	210	64.935	0.611

Reference Variance:0.373

Standard Error Unit Weight: (+/-)0.611

Failed the Chi-Square test at the 95.00 significance level

139.367 <= 64.977 <= 212.419

All confidence regions were computed using the following factors:

Variance factor: 0.6109

1-D Expansion Factor: 1.9600

2-D Expansion Factor: 2.4477

Expansion factors for 95.00 confidence regions taken from normal distribution table

TOLERANCE REPORT

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NE Values for 1020 exceeds tolerance:

Low X: 1315434.662, High X: 1315434.662, Diff: 0.000

Low Y: 1218688.661, High Y: 1218688.662, Diff: 0.001

Z Values for 1020 exceeds tolerance:

Low Z: 289.729, High Z: 289.730, Diff: 0.001

Z Values for 1030 exceeds tolerance:

Low Z: 286.369, High Z: 286.370, Diff: 0.001

Duplicate Observation Tolerance Check

Mark to Mark GPS Vectors (US Feet) - (Bearing - HDist - VDist):

From: 1020 To: 8001

S 86B036'55.5"E 512.918 -11.222 High

S 86B037'06.2"E 512.914 -11.248 Low

000B000'10.7" Pass Pass Delta

From: 1020 To: 8003

N 89B020'19.4"W 409.573 1.315 High

N 89B020'41.2"W 409.557 1.243 Low

000B000'21.8" Pass 0.073 Delta

3-DIMENSIONAL ADJUSTMENT REPORT

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Unadjusted Observations

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Control Coordinates:	2 Observed Points,	0 Fixed Points,	0 Approx. Points
Sta. Latitude Longitude Z (Ellip.)			StErr N: StErr
E: StErr Z:NE			
1020 43B020'34.53137"N 77B057'18.02877"W 172.292			0.006
0.006 0.006			
1030 43B020'34.18865"N 77B057'05.78842"W 168.939			0.007
0.007 0.007			

Grid XYZ

Sta.	N:	E:	Z (Geoid):	StErr N:	StErr E:	StErr
Z:						

1020	1218688.661	1315434.662	289.729	0.006	0.006
0.006					
1030	1218660.790	1316339.398	286.369	0.007	0.007
0.007					

Geocentric XYZ

Sta.	X:	Y:	Z:	StErr X(m):	StErr Y(m):
1020	969510.506	-4543641.190	4355322.750	0.002	0.002
0.002					
1030	969781.497	-4543590.021	4355314.356	0.002	0.002
0.002					

Grouped Unadjusted Observations

=====

Mark to Mark GPS Vectors (US Feet) - (Bearing - HDist - VDist):

From: 1020	To: 2110		
N 89B025'40.0"W	942.387	1.824	
N 89B025'41.2"W	942.391	1.779	
N 89B025'42.0"W	942.394	1.796	
N 89B025'38.8"W	942.400	1.785	
From: 1020	To: 8001		
S 86B037'06.2"E	512.914	-11.222	
S 86B037'05.7"E	512.918	-11.230	
S 86B037'02.0"E	512.917	-11.237	
S 86B036'55.5"E	512.915	-11.248	
From: 1020	To: 8003		
N 89B020'28.4"W	409.573	1.243	
N 89B020'20.5"W	409.563	1.249	
N 89B020'20.8"W	409.566	1.246	
N 89B020'19.4"W	409.560	1.253	
N 89B020'41.2"W*	409.557	1.315	
N 89B020'29.7"W	409.564	1.283	
N 89B020'29.4"W	409.563	1.282	
N 89B020'32.3"W	409.566	1.286	
From: 1020	To: 2140		
S 88B044'38.1"E	1824.758	-3.907	
S 88B044'39.1"E	1824.757	-3.913	
S 88B044'39.4"E	1824.757	-3.902	
S 88B044'39.6"E	1824.751	-3.888	
From: 1020	To: 2130		
S 87B048'12.6"E	905.200	-3.403	
S 87B048'11.3"E	905.199	-3.421	
S 87B048'11.5"E	905.204	-3.416	
S 87B048'11.4"E	905.201	-3.415	
From: 1020	To: 8004		
S 89B029'55.7"E	1284.331	-2.130	
S 89B029'55.2"E	1284.316	-2.174	
S 89B029'55.8"E	1284.323	-2.178	

S 89B029'55.1"E	1284.319	-2.180
From: 1020	To: 8002	
S 87B003'06.9"E	510.909	-10.967
S 87B003'09.8"E	510.907	-10.972
S 87B003'10.6"E	510.908	-10.970
S 87B003'09.2"E	510.904	-10.969
From: 1030	To: 8001	
N 89B021'02.1"W	392.536	-7.887
N 89B021'01.2"W	392.544	-7.864
N 89B020'56.0"W	392.533	-7.858
N 89B020'58.6"W	392.533	-7.835
From: 1030	To: 8002	
N 88B046'13.7"W	394.387	-7.593
N 88B046'15.8"W	394.384	-7.563
N 88B046'13.2"W	394.377	-7.574
N 88B046'13.4"W	394.376	-7.575
From: 1030	To: 2120	
N 87B047'57.4"W	905.183	3.366
N 87B047'57.4"W	905.185	3.350
N 87B047'57.7"W	905.187	3.348
N 87B047'58.3"W	905.186	3.340
From: 1030	To: 8003	
N 88B016'47.0"W	1314.655	4.611
N 88B016'48.3"W	1314.656	4.604
N 88B016'48.3"W	1314.657	4.594
N 88B016'47.3"W	1314.657	4.585
From: 1030	To: 2110	
N 88B037'46.9"W	1847.397	5.143
N 88B037'46.4"W	1847.398	5.134
N 88B037'46.5"W	1847.398	5.138
N 88B037'46.8"W	1847.398	5.151
From: 1030	To: 2140	
S 89B040'02.7"E	919.820	-0.443
S 89B040'02.7"E	919.819	-0.435
S 89B040'02.9"E	919.819	-0.438
S 89B040'03.8"E	919.819	-0.430
From: 1030	To: 8004	
N 86B028'03.3"E	380.468	1.281
N 86B028'05.1"E	380.462	1.274
N 86B028'07.5"E	380.454	1.291
N 86B028'12.5"E	380.456	1.293

Statistical Unadjusted Observations

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Mark to Mark Slope Distances:		8 Observations	
From Sta.	To Sta.	Dist.	StErr
8004	2140	540.823	0.012
8004	2150	88.120	0.013
8004	2130	380.459	0.013

8001	2130	392.596	0.011
8001	8002	4.389	0.012
8001	2120	513.032	0.015
8003	2120	409.578	0.010
8003	2110	532.822	0.015

Mark to Mark Zenith Angles: 8 Observations

From Sta.	To Sta.	Vertical Ang.	StErr (Sec.)
8004	2140	090B010'41.0"	15.1
8004	2150	089B041'32.8"	34.4
8004	2130	090B011'31.9"	21.5
8001	2130	088B051'08.3"	15.2
8001	8002	085B058'23.4"	333.6
8001	2120	088B044'39.7"	21.4
8003	2120	090B010'50.4"	12.4
8003	2110	089B056'13.7"	21.4

Horizontal Angles: 5 Observations

BS Sta.	Occ. Sta.	FS Sta.	Angle	StErr (Sec.)
2140	8004	2150	353B004'27.0"	15.0
2140	8004	2130	173B024'45.0"	07.6
2130	8001	8002	245B005'06.0"	290.0
2130	8001	2120	182B043'48.5"	06.3
2120	8003	2110	179B051'05.0"	06.2

GPS Vectors: 61 Observations (US Feet)

Multiplication factor applied to Variance and Covariance values: 1.000

From Sta. StErr(Sec)	Delta X	Variance Delta X	Covariance XY	Bearing	
To Sta.	Delta Y	Variance Delta Y	Covariance XZ	H.Distance	StErr
	Delta Z	Variance Delta Z	Covariance YZ	V.Distance	StErr
1020	-922.664	0.0003285	-1.775E-05	N 89B051'32.5"W	
07.2					
2110	-191.627	0.0004322	1.227E-05	942.350	0.045
	8.097	0.0003274	-9.114E-05	1.851	0.040
1020	-922.674	0.0001017	-1.375E-05	N 89B051'33.8"W	
04.0					
2110	-191.600	0.0001817	9.121E-06	942.354	0.026
	8.062	0.0001506	-5.643E-05	1.806	0.027
1020	-922.675	0.0001012	-1.129E-05	N 89B051'34.5"W	
04.0					
2110	-191.614	0.0001787	7.415E-06	942.357	0.026
	8.071	0.0001509	-5.509E-05	1.823	0.027
1020	-922.684	0.0001069	-1.558E-05	N 89B051'31.3"W	
04.0					

2110	-191.598	0.0001929	8.989E-06	942.363	0.027
	8.074	0.0001584	-6.237E-05	1.812	0.028
1020	503.379	0.0001135	-1.076E-05	S 87B002'58.8"E	
07.8					
8001	94.522	0.0002082	1.253E-05	512.895	0.028
	-29.706	0.0001689	-5.814E-05	-11.220	0.029
1020	503.381	0.0001042	-1.07E-05	S 87B002'58.4"E	
07.4					
8001	94.527	0.0001869	9.219E-06	512.898	0.027
	-29.712	0.0001571	-6.03E-05	-11.228	0.028
1020	503.380	0.000102	-1.135E-05	S 87B002'54.6"E	
07.3					
8001	94.525	0.0001809	8.563E-06	512.898	0.026
	-29.723	0.0001503	-5.604E-05	-11.234	0.027
1020	503.377	0.0001067	-1.201E-05	S 87B002'48.1"E	
07.5					
8001	94.522	0.0001956	8.924E-06	512.895	0.027
	-29.743	0.0001621	-6.375E-05	-11.246	0.028
1020	-401.015	0.000365	-1.312E-07	N 89B046'20.9"W	
17.5					
8003	-83.187	0.0004042	1.27E-05	409.557	0.047
	4.278	0.0003735	-7.802E-05	1.249	0.039
1020	-401.006	0.0001018	-1.119E-05	N 89B046'13.0"W	
09.2					
8003	-83.178	0.0001878	1.444E-05	409.547	0.027
	4.293	0.0001716	-6.381E-05	1.255	0.028
1020	-401.010	0.000101	-1.083E-05	N 89B046'13.2"W	
09.1					
8003	-83.177	0.000185	1.388E-05	409.550	0.026
	4.291	0.0001669	-6.204E-05	1.252	0.028
1020	-401.004	0.0001024	-1.125E-05	N 89B046'11.9"W	
09.2					
8003	-83.180	0.0001895	1.411E-05	409.544	0.027
	4.298	0.0001729	-6.516E-05	1.260	0.029
1020	1789.291	0.0001061	-1.673E-05	S 89B010'30.7"E	
02.1					
2140	356.627	0.0002273	1.027E-05	1824.688	0.027
	-31.773	0.0001725	-7.661E-05	-3.840	0.030
1020	1789.289	0.000104	-6.726E-06	S 89B010'31.7"E	
02.1					

2140	356.637 -31.770	0.0002161 0.0001629	4.199E-06 -7.579E-05	1824.688 -3.845	0.027 0.029
1020 02.1	1789.290	0.0001017	-6.627E-06	S 89B010'32.0"E	
2140	356.630 -31.761	0.00021 0.0001573	4.495E-06 -7.175E-05	1824.687 -3.834	0.026 0.029
1020 02.1	1789.286	0.0001034	-8.399E-06	S 89B010'32.2"E	
2140	356.621 -31.749	0.0002143 0.0001655	7.251E-06 -7.592E-05	1824.681 -3.820	0.027 0.030
1020 02.9	1342.281	0.0001153	-1.45E-05	N 89B047'44.0"E	
1520	283.845 -5.099	0.0002328 0.0001969	9.482E-06 -8.274E-05	1371.920 -1.637	0.028 0.031
1020 04.2	889.073	0.0001039	-8.104E-06	S 88B014'05.3"E	
2130	167.890 -27.566	0.0001938 0.0001655	8.235E-06 -6.335E-05	905.165 -3.389	0.027 0.028
1020 04.2	889.070	9.861E-05	-3.379E-06	S 88B014'03.9"E	
2130	167.899 -27.583	0.0001907 0.0001677	4.724E-06 -6.716E-05	905.164 -3.407	0.026 0.028
1020 04.2	889.076	0.0001001	-3.412E-06	S 88B014'04.2"E	
2130	167.897 -27.579	0.000195 0.0001733	4.987E-06 -6.995E-05	905.169 -3.403	0.027 0.029
1020 04.2	889.073	9.907E-05	-3.018E-06	S 88B014'04.0"E	
2130	167.895 -27.579	0.0001891 0.0001698	5.348E-06 -6.722E-05	905.166 -3.401	0.026 0.028
1020 03.0	1257.293	0.0001087	-9.186E-06	S 89B055'48.3"E	
8004	261.977 -9.632	0.0001955 0.0001732	1.086E-05 -6.955E-05	1284.281 -2.098	0.027 0.029
1020 02.9	1257.272	9.91E-05	-4.068E-06	S 89B055'47.8"E	
8004	262.003 -9.665	0.0001774 0.000166	6.693E-06 -6.234E-05	1284.267 -2.142	0.026 0.028
1020 02.9	1257.278	9.946E-05	-4.298E-06	S 89B055'48.4"E	

8004	262.010 -9.665	0.0001804 0.0001707	6.923E-06 -6.522E-05	1284.274 -2.146	0.026 0.028
1020 02.9	1257.274	9.989E-05	-3.576E-06	S 89B055'47.7"E	
8004	262.008 -9.670	0.000182 0.0001709	6.726E-06 -6.549E-05	1284.269 -2.149	0.026 0.028
1020 07.8	501.098	0.0001091	-2.001E-06	S 87B028'59.6"E	
8002	96.637 -26.637	0.0002023 0.0001749	6.463E-06 -6.867E-05	510.889 -10.964	0.027 0.029
1020 07.4	501.095	0.0001013	-2.953E-06	S 87B029'02.4"E	
8002	96.646 -26.636	0.000178 0.0001626	4.659E-06 -6.22E-05	510.887 -10.970	0.026 0.028
1020 07.4	501.097	0.000101	-4.068E-06	S 87B029'03.3"E	
8002	96.646 -26.633	0.0001753 0.000162	5.971E-06 -6.05E-05	510.889 -10.968	0.026 0.027
1020 07.3	501.093	9.88E-05	-4.429E-06	S 87B029'01.9"E	
8002	96.641 -26.634	0.0001713 0.0001575	5.446E-06 -5.948E-05	510.884 -10.966	0.026 0.027
1030 10.0	-385.700	0.0001138	-1.362E-05	N 89B047'03.0"W	
8001	-73.336 -2.178	0.000184 0.0001767	1.28E-05 -7.103E-05	392.522 -7.881	0.027 0.029
1030 09.6	-385.704	0.0001024	-8.727E-06	N 89B047'02.1"W	
8001	-73.353 -2.160	0.0001752 0.0001685	6.627E-06 -6.483E-05	392.529 -7.858	0.026 0.028
1030 09.7	-385.694	0.0001029	-6.89E-06	N 89B046'56.8"W	
8001	-73.348 -2.149	0.0001693 0.0001644	4.232E-06 -6.135E-05	392.518 -7.852	0.026 0.027
1030 09.8	-385.689	0.0001056	-7.546E-06	N 89B046'59.5"W	
8001	-73.368 -2.137	0.000174 0.0001722	4.298E-06 -6.526E-05	392.518 -7.829	0.026 0.028
1030 10.2	-387.975	0.0001154	-6.594E-06	N 89B012'14.6"W	

8002	-71.223 0.943	0.0001812 0.0001699	3.642E-06 -6.302E-05	394.372 -7.587	0.027 0.028
1030 09.6	-387.967	0.0001034	-1.014E-05	N 89B012'16.6"W	
8002	-71.247 0.961	0.0001644 0.0001658	7.808E-06 -6.112E-05	394.369 -7.556	0.026 0.027
1030 09.7	-387.963	0.0001059	-1.027E-05	N 89B012'14.0"W	
8002	-71.235 0.957	0.0001705 0.0001733	7.283E-06 -6.558E-05	394.362 -7.568	0.026 0.028
1030 10.0	-387.962	0.0001126	-1.204E-05	N 89B012'14.2"W	
8002	-71.234 0.956	0.0001819 0.0001845	8.858E-06 -7.008E-05	394.361 -7.569	0.027 0.029
1030 04.4	-889.059	0.0001152	-1.129E-05	N 88B013'58.3"W	
2120	-167.868 27.589	0.0001866 0.0001945	9.416E-06 -7.375E-05	905.148 3.392	0.028 0.029
1030 04.1	-889.064	0.0001026	-1.083E-05	N 88B013'58.3"W	
2120	-167.858 27.579	0.000165 0.0001827	8.005E-06 -6.545E-05	905.150 3.376	0.026 0.028
1030 04.2	-889.066	0.0001041	-1.129E-05	N 88B013'58.6"W	
2120	-167.857 27.576	0.0001697 0.000191	7.316E-06 -7.067E-05	905.152 3.373	0.026 0.029
1030 04.1	-889.066	0.0001009	-1.083E-05	N 88B013'59.2"W	
2120	-167.854 27.569	0.0001609 0.0001879	7.316E-06 -6.657E-05	905.151 3.366	0.026 0.028
1030 02.9	-1290.070	0.0001087	-1.804E-05	N 88B042'47.9"W	
8003	-251.083 31.867	0.0001739 0.0001942	1.677E-05 -7.198E-05	1314.604 4.661	0.027 0.029
1030 02.9	-1290.071	0.0001104	-2.031E-05	N 88B042'49.2"W	
8003	-251.084 31.856	0.0001802 0.0002038	1.89E-05 -7.69E-05	1314.605 4.654	0.027 0.030
1030 02.9	-1290.074	0.0001135	-2.215E-05	N 88B042'49.2"W	

8003	-251.076	0.0001869	2.083E-05	1314.606	0.027
	31.849	0.0002142	-8.179E-05	4.644	0.031
1030	-1290.076	0.0001132	-2.031E-05	N 88B042'48.2"W	
03.0					
8003	-251.066	0.000182	1.795E-05	1314.606	0.027
	31.848	0.0002034	-7.572E-05	4.635	0.030
1030	-1811.734	0.0001088	-1.706E-05	N 89B003'47.8"W	
02.1					
2110	-359.515	0.0001721	1.322E-05	1847.325	0.026
	35.660	0.0001703	-6.804E-05	5.237	0.028
1030	-1811.737	0.0001082	-1.893E-05	N 89B003'47.3"W	
02.1					
2110	-359.505	0.0001728	1.48E-05	1847.326	0.026
	35.657	0.0001773	-6.762E-05	5.227	0.028
1030	-1811.736	0.0001124	-2.133E-05	N 89B003'47.5"W	
02.1					
2110	-359.509	0.0001822	1.677E-05	1847.326	0.027
	35.658	0.0001878	-7.392E-05	5.231	0.029
1030	-1811.733	0.0001115	-2.113E-05	N 89B003'47.7"W	
02.1					
2110	-359.520	0.0001794	1.66E-05	1847.326	0.027
	35.666	0.0001852	-7.221E-05	5.245	0.029
1030	900.241	0.0001172	-1.88E-05	N 89B053'56.3"E	
04.3					
2140	188.729	0.0001755	1.083E-05	919.785	0.027
	-4.187	0.0001706	-6.014E-05	-0.429	0.028
1030	900.241	0.0001142	-2.333E-05	N 89B053'56.3"E	
04.2					
2140	188.723	0.0001837	1.473E-05	919.784	0.027
	-4.182	0.0001769	-6.864E-05	-0.420	0.029
1030	900.240	0.0001105	-2.133E-05	N 89B053'56.1"E	
04.2					
2140	188.726	0.0001746	1.391E-05	919.784	0.026
	-4.183	0.0001673	-6.332E-05	-0.423	0.028
1030	900.241	0.0001069	-2.008E-05	N 89B053'55.1"E	
04.1					
2140	188.723	0.0001662	1.273E-05	919.784	0.026
	-4.175	0.0001585	-5.755E-05	-0.415	0.027
1030	368.216	0.0001138	-1.785E-05	N 86B002'02.2"E	
10.3					

8004	94.091	0.0001817	1.06E-05	380.454	0.027
	17.928	0.000162	-6.293E-05	1.283	0.028
1030	368.210	0.0001148	-2.444E-05	N 86B002'04.1"E	
10.2					
8004	94.093	0.000184	1.604E-05	380.447	0.027
	17.920	0.0001685	-6.48E-05	1.276	0.028
1030	368.205	0.0001117	-2.31E-05	N 86B002'06.4"E	
10.1					
8004	94.076	0.0001769	1.503E-05	380.439	0.027
	17.928	0.0001612	-6.076E-05	1.293	0.028
1030	368.209	0.0001144	-2.372E-05	N 86B002'11.4"E	
10.2					
8004	94.068	0.0001868	1.581E-05	380.441	0.027
	17.923	0.0001664	-6.591E-05	1.295	0.029
1020	-400.985	0.0001099	-1.706E-05	N 89B046'33.7"W	
09.4					
8003	-83.252	0.0001732	-1.181E-06	409.541	0.028
	4.309	0.0001793	-5.361E-05	1.322	0.027
1020	-401.000	0.0001021	-1.411E-05	N 89B046'22.2"W	
09.1					
8003	-83.216	0.0001736	-2.001E-06	409.548	0.027
	4.303	0.0001804	-6.171E-05	1.290	0.028
1020	-400.999	0.0001006	-1.407E-05	N 89B046'21.8"W	
09.0					
8003	-83.214	0.0001707	-1.28E-06	409.547	0.027
	4.303	0.0001787	-6.07E-05	1.289	0.028
1020	-401.001	9.949E-05	-1.371E-05	N 89B046'24.7"W	
09.0					
8003	-83.221	0.000167	-3.543E-06	409.550	0.027
	4.302	0.0001788	-5.768E-05	1.293	0.027

Adjusted Geographic Coordinates

Sta.	Latitude	Longitude	Z (Ellip.)	Conv. Ang.	Grid
Factor	Z Factor	Combined Factor			
1020	43B020'34.53141"N	77B057'18.02873"W	172.301	000B025'52.6"	
0.99996941	0.99999176	0.99996117			
1030	43B020'34.18859"N	77B057'05.78847"W	168.925	000B026'01.0"	
0.99996976	0.99999192	0.99996168			
8004	43B020'34.42007"N	77B057'00.64975"W	170.192	000B026'04.5"	
0.99996991	0.99999186	0.99996177			
2140	43B020'34.13566"N	77B056'53.34164"W	168.495	000B026'09.5"	

0.99997012	0.99999194	0.99996206			
2130	43B020'34.18840"N	77B057'05.78846"W	168.913	000B026'01.0"	
0.99996976	0.99999192	0.99996168			
8001	43B020'34.23259"N	77B057'11.09988"W	161.056	000B025'57.3"	
0.99996961	0.99999230	0.99996191			
8002	43B020'34.27200"N	77B057'11.12418"W	161.357	000B025'57.3"	
0.99996961	0.99999228	0.99996189			
2120	43B020'34.53166"N	77B057'18.02859"W	172.294	000B025'52.6"	
0.99996941	0.99999176	0.99996117			
8003	43B020'34.57789"N	77B057'23.57068"W	173.573	000B025'48.8"	
0.99996926	0.99999170	0.99996096			
2110	43B020'34.62418"N	77B057'30.78073"W	174.132	000B025'43.8"	
0.99996906	0.99999167	0.99996073			

Average Combined Scale

Factor: 0.99996150

Adjusted Grid Coordinates, (US Feet)

Sta.	N:	E:	Z (Geoid):	StErr N:	StErr E:	StErr
Z: DN	DE	DZ				
1020	1218688.666	1315434.664	289.738	0.003	0.003	0.003
0.005	0.002	0.009				
1030	1218660.783	1316339.394	286.356	0.003	0.003	0.003
-0.007	-0.004	-0.013				
8004	1218687.097	1316718.932	287.622	0.004	0.004	0.006
2140	1218662.405	1317259.168	285.921	0.005	0.005	0.007
2150	1218693.717	1316806.798	288.094	0.009	0.006	0.011
2130	1218660.764	1316339.395	286.344	0.005	0.005	0.008
8001	1218662.272	1315946.885	278.489	0.004	0.004	0.005
8002	1218666.248	1315945.060	278.791	0.004	0.004	0.005
2120	1218688.691	1315434.675	289.731	0.005	0.006	0.008
8003	1218690.293	1315025.119	291.013	0.004	0.004	0.006
2110	1218690.985	1314492.313	291.575	0.005	0.005	0.007
1520	1218693.561	1316806.576	288.102	0.013	0.012	0.019

Sideshots

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From Sta	To Sta	Bearing	Distance	Northing	Easting
Elevation	StDev N	StDev E	StDev Z		
8004	2150	N 85B041'27.9"E	88.115	1218693.717	1316806.798

288.094 0.003 0.005 0.003

Adjusted Geocentric Coordinates, (Metric)

Sta.	X:	Y:	Z:	StErr X(m):	StErr Y(m):	StErr Z(m):
1020	969510.507	-4543641.191	4355322.752	0.001	0.002	0.002
1030	969781.496	-4543590.019	4355314.352	0.002	0.002	0.002
8004	969893.726	-4543561.337	4355319.812	0.002	0.003	0.003
2140	970055.886	-4543532.494	4355313.074	0.002	0.003	0.003
2130	969781.496	-4543590.021	4355314.345	0.003	0.005	0.005
8001	969663.937	-4543612.373	4355313.693	0.003	0.003	0.003
8002	969663.242	-4543611.736	4355314.640	0.002	0.002	0.002
2120	969510.509	-4543641.183	4355322.756	0.002	0.002	0.002
8003	969388.281	-4543666.551	4355324.062	0.003	0.003	0.003
2110	969229.277	-4543699.596	4355325.217	0.002	0.002	0.002

Adjusted Grid Coordinates (N,E) Error Ellipses, 95% CI

Sta.	Semi Major Axis	Semi Minor Axis	Max. Error Az.	Elev.
1020	0.007	0.007	S 11B050'53.7"E	0.010
1030	0.008	0.008	S 12B004'59.1"E	0.011
8004	0.011	0.011	N 08B025'40.8"E	0.017
2140	0.012	0.011	N 89B053'34.4"E	0.018
2150	0.023	0.014	N 03B042'09.6"E	0.022
2130	0.013	0.012	N 85B022'30.5"E	0.032
8001	0.010	0.010	S 43B047'16.3"E	0.021
8002	0.011	0.010	S 64B007'13.3"E	0.015
2120	0.013	0.012	S 88B033'45.7"E	0.015
8003	0.010	0.010	S 07B000'28.4"E	0.022
2110	0.012	0.012	S 73B048'54.1"E	0.016
1520	0.032	0.030	N 05B011'41.1"E	0.038

Adjusted Observations

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Adjusted Mark to Mark Distances

From Sta.	To Sta.	Distance	Residual	StdRes.	StdDev
8004	2140	540.824	0.001	0.1	0.004
8004	2130	380.465	0.006	0.5	0.005
8001	2130	392.607	0.010	1.0	0.004
8001	8002	4.385	-0.004	0.3	0.004
8001	2120	513.034	0.002	0.1	0.005
8003	2120	409.577	-0.000	0.0	0.004
8003	2110	532.827	0.005	0.3	0.005
Root Mean Square (RMS)			0.005		

Adjusted Horizontal Angles

BS Sta.	Occ. Sta.	FS Sta.	Angle	Residual	StdRes
StdDev(Sec.)					
2140	8004	2130	173B024'51.2"	06.2	0.8
03.3					
2130	8001	8002	245B007'06.1"	120.1	0.4
144.8					
2130	8001	2120	182B043'57.2"	08.7	1.4
03.0					
2120	8003	2110	179B051'01.2"	-03.8	0.6
02.9					
Root Mean Square (RMS)				54.0	

Adjusted Mark to Mark Zenith Angles

From Sta.	To Sta.	Vertical Ang.	Residual	StdRes	StdDev(Sec.)
8004	2140	090B010'49.8"	-08.8	0.6	03.1
8004	2130	090B011'35.5"	-03.6	0.2	05.0
8001	2130	088B051'13.8"	-05.5	0.4	04.4
8001	8002	086B003'27.1"	-303.7	0.9	180.6
8001	2120	088B044'44.0"	-04.3	0.2	03.5
8003	2120	090B010'46.4"	04.0	0.3	04.2
8003	2110	089B056'26.2"	-12.5	0.6	03.0
Root Mean Square (RMS)			107.6		

GPS Vectors: 61 Observations (US Feet)

From Sta.	Delta X	Residual	StdRes	StdDev	Bearing
Residual(Sec)	StdRes	StdDev(Sec)			
To Sta.	Delta Y	Residual	StdRes	StdDev	H.Distance
Residual	StdRes	StdDev			
Delta Z	Residual	StdRes	StdDev	V.Distance	
Residual	StdRes	StdDev			
1020	-922.6705	-0.0062	0.2	0.0042	N 89B051'32.4"W
00.1	0.0	00.9			
2110	-191.6172	0.0096	0.3	0.0042	942.354
0.004	0.1	0.007			
	8.0875	-0.0091	0.3	0.0064	1.837
-0.014	0.4	0.005			
1020	-922.6705	0.0040	0.2	0.0042	N 89B051'32.4"W
01.4	0.4	00.9			
2110	-191.6172	-0.0175	0.7	0.0042	942.354
-0.000	0.0	0.007			
	8.0875	0.0259	1.2	0.0064	1.837
0.031	1.1	0.005			
1020	-922.6705	0.0041	0.2	0.0042	N 89B051'32.4"W
02.1	0.5	00.9			
2110	-191.6172	-0.0028	0.1	0.0042	942.354
-0.003	0.1	0.007			

0.014	0.5	0.005	8.0875	0.0167	0.8	0.0064	1.837
1020			-922.6705	0.0137	0.7	0.0042	N 89B051'32.4"W
-01.1	0.3	00.9					
2110			-191.6172	-0.0190	0.8	0.0042	942.354
-0.010	0.4	0.007					
			8.0875	0.0134	0.6	0.0064	1.837
0.025	0.9	0.005					
1020			503.3796	0.0009	0.0	0.0032	S 87B003'00.8"E
-02.1	0.3	01.3					
8001			94.5471	0.0254	1.0	0.0033	512.901
0.006	0.2	0.005					
			-29.7223	-0.0166	0.7	0.0048	-11.249
-0.029	1.0	0.004					
1020			503.3796	-0.0017	0.1	0.0032	S 87B003'00.8"E
-02.5	0.3	01.3					
8001			94.5471	0.0199	0.8	0.0033	512.901
0.002	0.1	0.005					
			-29.7223	-0.0102	0.4	0.0048	-11.249
-0.021	0.8	0.004					
1020			503.3796	-0.0007	0.0	0.0032	S 87B003'00.8"E
-06.3	0.9	01.3					
8001			94.5471	0.0218	0.9	0.0033	512.901
0.003	0.1	0.005					
			-29.7223	0.0010	0.0	0.0048	-11.249
-0.015	0.6	0.004					
1020			503.3796	0.0022	0.1	0.0032	S 87B003'00.8"E
-12.8	1.7	01.3					
8001			94.5471	0.0253	1.0	0.0033	512.901
0.006	0.2	0.005					
			-29.7223	0.0204	0.9	0.0048	-11.249
-0.004	0.1	0.004					
1020			-401.0033	0.0120	0.3	0.0031	N 89B046'20.6"W
00.4	0.0	01.6					
8003			-83.2027	-0.0159	0.4	0.0033	409.549
-0.008	0.2	0.005					
			4.2955	0.0179	0.5	0.0051	1.275
0.025	0.6	0.004					
1020			-401.0033	0.0029	0.2	0.0031	N 89B046'20.6"W
-07.5	0.8	01.6					
8003			-83.2027	-0.0243	1.0	0.0033	409.549
0.002	0.1	0.005					
			4.2955	0.0025	0.1	0.0051	1.275

0.019	0.7	0.004				
1020		-401.0033	0.0068	0.4	0.0031	N 89B046'20.6"W
-07.3	0.8	01.6				
8003		-83.2027	-0.0253	1.0	0.0033	409.549
-0.002	0.1	0.005				
		4.2955	0.0048	0.2	0.0051	1.275
0.022	0.8	0.004				
1020		-401.0033	0.0004	0.0	0.0031	N 89B046'20.6"W
-08.6	0.9	01.6				
8003		-83.2027	-0.0231	0.9	0.0033	409.549
0.004	0.2	0.005				
		4.2955	-0.0021	0.1	0.0051	1.275
0.015	0.5	0.004				
1020		1789.2989	0.0075	0.4	0.0042	S 89B010'31.3"E
-00.6	0.3	00.5				
2140		356.6162	-0.0110	0.4	0.0039	1824.693
0.005	0.2	0.007				
		-31.7534	0.0193	0.8	0.0063	-3.817
0.022	0.7	0.005				
1020		1789.2989	0.0097	0.5	0.0042	S 89B010'31.3"E
00.3	0.2	00.5				
2140		356.6162	-0.0205	0.8	0.0039	1824.693
0.005	0.2	0.007				
		-31.7534	0.0167	0.7	0.0063	-3.817
0.027	0.9	0.005				
1020		1789.2989	0.0087	0.5	0.0042	S 89B010'31.3"E
00.6	0.3	00.5				
2140		356.6162	-0.0143	0.5	0.0039	1824.693
0.006	0.2	0.007				
		-31.7534	0.0072	0.3	0.0063	-3.817
0.016	0.6	0.005				
1020		1789.2989	0.0131	0.7	0.0042	S 89B010'31.3"E
00.8	0.4	00.5				
2140		356.6162	-0.0044	0.2	0.0039	1824.693
0.012	0.5	0.007				
		-31.7534	-0.0039	0.2	0.0063	-3.817
0.002	0.1	0.005				
1020		1342.2811	-0.0000	0.0	0.0118	N 89B047'44.0"E
-00.0	0.0	01.8				
1520		283.8450	-0.0000	0.0	0.0127	1371.920
-0.000	0.0	0.020				
		-5.0987	0.0000	0.0	0.0191	-1.637
-0.000	0.0	0.016				

1020			889.0706	-0.0024	0.1	0.0045	S 88B014'00.8"E
04.4	1.0	01.0					
2130			167.8803	-0.0099	0.4	0.0042	905.161
-0.004	0.1	0.007					
			-27.5838	-0.0175	0.7	0.0075	-3.395
-0.005	0.2	0.006					
1020			889.0706	0.0007	0.0	0.0045	S 88B014'00.8"E
03.0	0.7	01.0					
2130			167.8803	-0.0185	0.7	0.0042	905.161
-0.003	0.1	0.007					
			-27.5838	-0.0007	0.0	0.0075	-3.395
0.013	0.4	0.006					
1020			889.0706	-0.0049	0.3	0.0045	S 88B014'00.8"E
03.3	0.8	01.0					
2130			167.8803	-0.0169	0.7	0.0042	905.161
-0.008	0.3	0.007					
			-27.5838	-0.0047	0.2	0.0075	-3.395
0.008	0.3	0.006					
1020			889.0706	-0.0025	0.1	0.0045	S 88B014'00.8"E
03.1	0.7	01.0					
2130			167.8803	-0.0148	0.6	0.0042	905.161
-0.005	0.2	0.007					
			-27.5838	-0.0051	0.2	0.0075	-3.395
0.007	0.2	0.006					
1020			1257.2773	-0.0152	0.8	0.0035	S 89B055'48.0"E
00.3	0.1	00.6					
8004			261.9863	0.0090	0.4	0.0037	1284.268
-0.013	0.5	0.006					
			-9.6462	-0.0140	0.6	0.0060	-2.117
-0.018	0.6	0.005					
1020			1257.2773	0.0051	0.3	0.0035	S 89B055'48.0"E
-00.2	0.1	00.6					
8004			261.9863	-0.0171	0.7	0.0037	1284.268
0.001	0.1	0.006					
			-9.6462	0.0183	0.8	0.0060	-2.117
0.025	0.9	0.005					
1020			1257.2773	-0.0008	0.0	0.0035	S 89B055'48.0"E
00.4	0.1	00.6					
8004			261.9863	-0.0235	1.0	0.0037	1284.268
-0.006	0.2	0.006					
			-9.6462	0.0185	0.8	0.0060	-2.117
0.029	1.0	0.005					

1020		1257.2773	0.0035	0.2	0.0035	S 89B055'48.0"E
-00.3	0.1	00.6				
8004		261.9863	-0.0217	0.9	0.0037	1284.268
-0.001	0.0	0.006				
		-9.6462	0.0236	1.0	0.0060	-2.117
0.032	1.1	0.005				
1020		501.0980	-0.0005	0.0	0.0038	S 87B029'06.0"E
-06.5	0.8	01.5				
8002		96.6359	-0.0012	0.0	0.0035	510.888
-0.002	0.1	0.006				
		-26.6139	0.0231	1.0	0.0049	-10.948
0.017	0.6	0.004				
1020		501.0980	0.0028	0.2	0.0038	S 87B029'06.0"E
-03.6	0.5	01.5				
8002		96.6359	-0.0098	0.4	0.0035	510.888
0.000	0.0	0.006				
		-26.6139	0.0219	0.9	0.0049	-10.948
0.022	0.8	0.004				
1020		501.0980	0.0012	0.1	0.0038	S 87B029'06.0"E
-02.8	0.4	01.5				
8002		96.6359	-0.0100	0.4	0.0035	510.888
-0.001	0.0	0.006				
		-26.6139	0.0190	0.8	0.0049	-10.948
0.020	0.7	0.004				
1020		501.0980	0.0052	0.3	0.0038	S 87B029'06.0"E
-04.2	0.6	01.5				
8002		96.6359	-0.0055	0.2	0.0035	510.888
0.003	0.1	0.006				
		-26.6139	0.0200	0.9	0.0049	-10.948
0.018	0.7	0.004				
1030		-385.6893	0.0103	0.5	0.0033	N 89B046'57.7"W
05.4	0.5	01.7				
8001		-73.3371	-0.0010	0.0	0.0033	392.512
-0.010	0.4	0.005				
		-2.1608	0.0168	0.7	0.0049	-7.867
0.014	0.5	0.004				
1030		-385.6893	0.0143	0.8	0.0033	N 89B046'57.7"W
04.5	0.5	01.7				
8001		-73.3371	0.0158	0.7	0.0033	392.512
-0.017	0.7	0.005				
		-2.1608	-0.0003	0.0	0.0049	-7.867
-0.009	0.3	0.004				
1030		-385.6893	0.0043	0.2	0.0033	N 89B046'57.7"W

-00.8	0.1	01.7				
8001		-73.3371	0.0111	0.5	0.0033	392.512
-0.007	0.3	0.005				
		-2.1608	-0.0116	0.5	0.0049	-7.867
-0.015	0.6	0.004				
1030		-385.6893	-0.0001	0.0	0.0033	N 89B046'57.7"W
01.8	0.2	01.7				
8001		-73.3371	0.0304	1.3	0.0033	392.512
-0.006	0.2	0.005				
		-2.1608	-0.0234	1.0	0.0049	-7.867
-0.038	1.4	0.004				
1030		-387.9709	0.0043	0.2	0.0038	N 89B012'22.0"W
-07.3	0.7	02.0				
8002		-71.2483	-0.0250	1.0	0.0036	394.372
0.001	0.0	0.006				
		0.9476	0.0048	0.2	0.0050	-7.565
0.022	0.8	0.004				
1030		-387.9709	-0.0037	0.2	0.0038	N 89B012'22.0"W
-05.2	0.5	02.0				
8002		-71.2483	-0.0011	0.0	0.0036	394.372
0.004	0.1	0.006				
		0.9476	-0.0133	0.6	0.0050	-7.565
-0.009	0.3	0.004				
1030		-387.9709	-0.0083	0.4	0.0038	N 89B012'22.0"W
-07.8	0.8	02.0				
8002		-71.2483	-0.0138	0.6	0.0036	394.372
0.011	0.4	0.006				
		0.9476	-0.0091	0.4	0.0050	-7.565
0.002	0.1	0.004				
1030		-387.9709	-0.0085	0.4	0.0038	N 89B012'22.0"W
-07.6	0.8	02.0				
8002		-71.2483	-0.0145	0.6	0.0036	394.372
0.011	0.4	0.006				
		0.9476	-0.0079	0.3	0.0050	-7.565
0.004	0.1	0.004				
1030		-889.0629	-0.0039	0.2	0.0047	N 88B013'59.4"W
-01.0	0.2	01.1				
2120		-167.8598	0.0085	0.3	0.0041	905.149
0.002	0.1	0.008				
		27.5745	-0.0148	0.6	0.0075	3.375
-0.017	0.6	0.006				
1030		-889.0629	0.0010	0.1	0.0047	N 88B013'59.4"W
-01.1	0.3	01.1				

2120		-167.8598	-0.0021	0.1	0.0041	905.149
-0.001	0.0	0.008				
		27.5745	-0.0042	0.2	0.0075	3.375
-0.001	0.0	0.006				
1030		-889.0629	0.0034	0.2	0.0047	N 88B013'59.4"W
-00.7	0.2	01.1				
2120		-167.8598	-0.0027	0.1	0.0041	905.149
-0.003	0.1	0.008				
		27.5745	-0.0015	0.1	0.0075	3.375
0.001	0.1	0.006				
1030		-889.0629	0.0031	0.2	0.0047	N 88B013'59.4"W
-00.1	0.0	01.1				
2120		-167.8598	-0.0062	0.3	0.0041	905.149
-0.002	0.1	0.008				
		27.5745	0.0056	0.2	0.0075	3.375
0.009	0.3	0.006				
1030		-1290.0723	-0.0026	0.1	0.0032	N 88B042'49.5"W
-01.5	0.5	00.5				
8003		-251.0869	-0.0042	0.2	0.0034	1314.607
0.003	0.1	0.005				
		31.8569	-0.0097	0.4	0.0054	4.657
-0.004	0.1	0.004				
1030		-1290.0723	-0.0011	0.1	0.0032	N 88B042'49.5"W
-00.2	0.1	00.5				
8003		-251.0869	-0.0032	0.1	0.0034	1314.607
0.002	0.1	0.005				
		31.8569	0.0009	0.0	0.0054	4.657
0.003	0.1	0.004				
1030		-1290.0723	0.0018	0.1	0.0032	N 88B042'49.5"W
-00.3	0.1	00.5				
8003		-251.0869	-0.0104	0.4	0.0034	1314.607
0.000	0.0	0.005				
		31.8569	0.0076	0.3	0.0054	4.657
0.013	0.4	0.004				
1030		-1290.0723	0.0036	0.2	0.0032	N 88B042'49.5"W
-01.2	0.4	00.5				
8003		-251.0869	-0.0211	0.9	0.0034	1314.607
0.001	0.0	0.005				
		31.8569	0.0094	0.4	0.0054	4.657
0.022	0.7	0.004				
1030		-1811.7394	-0.0053	0.3	0.0043	N 89B003'47.7"W
00.2	0.1	00.5				
2110		-359.5014	0.0132	0.6	0.0041	1847.328

0.002	0.1	0.007				
		35.6489	-0.0108	0.5	0.0064	5.219
-0.018	0.6	0.005				
1030		-1811.7394	-0.0025	0.1	0.0043	N 89B003'47.7"W
-00.3	0.1	00.5				
2110		-359.5014	0.0037	0.2	0.0041	1847.328
0.002	0.1	0.007				
		35.6489	-0.0077	0.3	0.0064	5.219
-0.008	0.3	0.005				
1030		-1811.7394	-0.0035	0.2	0.0043	N 89B003'47.7"W
-00.2	0.1	00.5				
2110		-359.5014	0.0075	0.3	0.0041	1847.328
0.002	0.1	0.007				
		35.6489	-0.0094	0.4	0.0064	5.219
-0.012	0.4	0.005				
1030		-1811.7394	-0.0060	0.3	0.0043	N 89B003'47.7"W
00.1	0.0	00.5				
2110		-359.5014	0.0183	0.8	0.0041	1847.328
0.002	0.1	0.007				
		35.6489	-0.0168	0.7	0.0064	5.219
-0.025	0.9	0.005				
1030		900.2300	-0.0108	0.5	0.0041	N 89B053'56.4"E
00.0	0.0	00.9				
2140		188.7320	0.0025	0.1	0.0039	919.775
-0.010	0.4	0.007				
		-4.1919	-0.0046	0.2	0.0062	-0.435
-0.007	0.2	0.005				
1030		900.2300	-0.0106	0.5	0.0041	N 89B053'56.4"E
00.0	0.0	00.9				
2140		188.7320	0.0088	0.4	0.0039	919.775
-0.009	0.3	0.007				
		-4.1919	-0.0104	0.4	0.0062	-0.435
-0.015	0.5	0.005				
1030		900.2300	-0.0098	0.5	0.0041	N 89B053'56.4"E
00.2	0.1	00.9				
2140		188.7320	0.0061	0.3	0.0039	919.775
-0.008	0.3	0.007				
		-4.1919	-0.0088	0.4	0.0062	-0.435
-0.012	0.4	0.005				
1030		900.2300	-0.0108	0.6	0.0041	N 89B053'56.4"E
01.2	0.3	00.9				
2140		188.7320	0.0087	0.4	0.0039	919.775
-0.009	0.3	0.007				

-0.020	0.7	-4.1919 0.005	-0.0173	0.8	0.0062	-0.435
1030		368.2084	-0.0077	0.4	0.0037	N 86B002'02.5"E
00.2	0.0	02.0				
8004		94.1021	0.0112	0.5	0.0037	380.448
-0.005	0.2	0.006				
		17.9152	-0.0127	0.6	0.0061	1.266
-0.018	0.6	0.005				
1030		368.2084	-0.0011	0.1	0.0037	N 86B002'02.5"E
-01.7	0.2	02.0				
8004		94.1021	0.0094	0.4	0.0037	380.448
0.001	0.0	0.006				
		17.9152	-0.0046	0.2	0.0061	1.266
-0.010	0.4	0.005				
1030		368.2084	0.0030	0.2	0.0037	N 86B002'02.5"E
-04.1	0.4	02.0				
8004		94.1021	0.0265	1.1	0.0037	380.448
0.009	0.3	0.006				
		17.9152	-0.0128	0.6	0.0061	1.266
-0.027	1.0	0.005				
1030		368.2084	-0.0010	0.1	0.0037	N 86B002'02.5"E
-09.0	0.9	02.0				
8004		94.1021	0.0337	1.4	0.0037	380.448
0.007	0.3	0.006				
		17.9152	-0.0079	0.3	0.0061	1.266
-0.029	1.0	0.005				
1020		-401.0033	-0.0183	1.0	0.0031	N 89B046'20.6"W
13.1	1.4	01.6				
8003		-83.2027	0.0497	*	2.1	0.0033
0.008	0.3	0.005				409.549
		4.2955	-0.0135	0.6	0.0051	1.275
-0.047	1.7	0.004				
1020		-401.0033	-0.0033	0.2	0.0031	N 89B046'20.6"W
01.7	0.2	01.6				
8003		-83.2027	0.0129	0.5	0.0033	409.549
0.001	0.0	0.005				
		4.2955	-0.0080	0.3	0.0051	1.275
-0.015	0.5	0.004				
1020		-401.0033	-0.0045	0.2	0.0031	N 89B046'20.6"W
01.3	0.1	01.6				
8003		-83.2027	0.0115	0.5	0.0033	409.549
0.002	0.1	0.005				
		4.2955	-0.0078	0.3	0.0051	1.275

-0.014	0.5	0.004				
1020		-401.0033	-0.0026	0.1	0.0031	N 89B046'20.6"W
04.2	0.5	01.6				
8003		-83.2027	0.0187	0.8	0.0033	409.549
-0.001	0.0	0.005				
		4.2955	-0.0063	0.3	0.0051	1.275
-0.018	0.7	0.004				