

GROUND CONTROL SURVEY REPORT

GROUND TRUTH SURVEY FOR LIDAR CONTROL

**IN HIGHLANDS COUNTY, FLORIDA
FOR
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
2379 BROAD STREET (U.S. 41 SOUTH)
BROOKSVILLE, FL 34604-6899**

PROJECT TITLE:	FY 2007 DIGITAL LiDAR (L473)
WORK ORDER NAME:	Lake Placid LiDAR
WORK ORDER NUMBER:	1
CONSULTANT NAME:	3001, Inc.
PROJECT MANAGERS:	Rodney Ghioto, Brown and Caldwell's Project Manager Cheryl Glenn, District's Project Manager Peter Briere, Consultant's Project Manager



**3001, INC. THE GEOSPATIAL COMPANY
501 Robert Blvd. 2nd Floor
Slidell, Louisiana 70458**



November 2007

Southwest Florida Water Management District
2379 Broad Street
Brooksville, FL 34604-6899

Attn: Jim Owens, PSM

Re: Lake Placid LIDAR

This photogrammetric mapping ground control survey is certified to the Southwest Florida Water Management District as meeting or exceeding, in quality and precision, the standards applicable for this work, as set forth in Chapter 61G17-6, Florida Administrative Code.

Dean T. Epling, PSM
Florida Professional Surveyor and Mapper
License # 5417
401 Dividend Drive, Suite K
Peachtree City, GA 30269
(770) 631-0903

Signed: _____

A handwritten signature in black ink, appearing to read "Dean T. Epling", written over a horizontal line.

Date: _____

11/29/07

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ABSTRACT

ABSTRACT

This report documents the GPS ground surveys conducted in support of LIDAR data collection for the Lake Placid LiDAR project (L473). The data was collected between April 15 and April 18, 2007. The ground control stations were established utilizing three Trimble 4700 GPS receivers, five Trimble 4000 series receivers, one Trimble microcentered L1/L2 antenna, two Trimble microcentered L1/L2 antennas with ground plane, and five Trimble Compact L1/L2 antennas with ground plane. There were no problems encountered during this survey.

Following the control network surveys, surveys were conducted at 6 sites utilizing the base stations established in the static network. These surveys established "Ground Truth" data at each site on different surface types, including urban, bare ground / short grass, forest and brush.

Statistical comparisons were made between ground truth points collected in the survey and airborne LIDAR points which fell within 3 feet of the ground truth points. These statistics can be seen on pages 11-13. Comparisons were also made between the survey points and the LIDAR derived terrain surface. These comparisons provide an additional verification of the LIDAR data against the survey data.

The horizontal and vertical datums used for this project are listed below:

Coordinate System: US State Plane
Zone: Florida West 0902
Horizontal Datum: NAD83 (1999)
Vertical Datum: NAVD88
Geoid Model: Geoid03
Units: US Survey Feet

SURVEY METHODOLOGY

SURVEY METHODOLOGY

Prior to beginning the survey collection, a reconnaissance was done of the existing control in the project area, and surrounding areas. Based on the results of the findings, the controls to be included in the network were selected based on their locations, horizontal and vertical orders, and their accessibility. In addition to the survey control, several Continuously Operating Reference Stations (CORS) were included into the GPS network. All control monuments and CORS can be found in the Fully-Constrained Adjustment table, found in Section 4-B, and can also be seen on the GPS Network Map shown in Section 4-A.

After the static GPS network was completed, the groundtruthing data points were collected using a total station and data collector. The groundtruthing points can be seen in Section 5. This data was collected from base stations tied into the static GPS network, and additional “check-in” points were collected and compared to positions established in the static network. The groundtruthing data was then processed and used to verify the LIDAR positions. The LIDAR point comparisons can be seen on pages 11-13.

The horizontal and vertical datums used for this project are listed below:

Coordinate System: US State Plane
Zone: Florida West 0902
Horizontal Datum: NAD83 (1999)
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Geoid Model: Geoid03
Units: US Survey Feet

MAIN REPORT

STATIC GPS SUMMARY

The Standard Operating Procedure for the data collection includes a geodetic control network plan designed to maximize the use of the highest order control points in the area of interest, and to optimize the spatial distribution of geodetic control across the network. Also included is the simultaneous occupation of points designed to provide redundant vectors and loop closures, as well as a collection of a superfluity of points to compare observed values against published values of geodetic control points.

In addition, the static GPS network was established to verify the compatibility and correlation of existing published NGS controls in the project area. Horizontal and vertical constraints were selected based on the order of accuracy and correlation of the controls selected.

PRELIMINARY ANALYSIS

The baselines were processed using Trimble Geomatics Offices's baseline processing module, WAVE (*Weighted Ambiguity Vector Estimator*). Ionosphere-free fixed solutions were found to provide the best results. Preliminary blunder detections were undertaken using "Redundant Vectors" and Global Network Closures and any extremely large errors were eliminated.

MINIMALLY CONSTRAINED ADJUSTMENT

The data are then processed using a minimally constrained geodetic control network to test the network internally, without external constraints, and produce a statistical summary. The statistics from this process are required to be within the tolerance outlined in the Geometric Geodetic Accuracy Standards and Specifications for using GPS Relative Positioning Techniques, published by the FGCC. These tolerances are represented as ellipsoids showing the margin of error value on a graph of the theoretical points, covariance values that indicate the degree of error of the vectors relative to the other vectors in the network, and a chi-squared test that compares the predicted variance determined through a least-squares analysis to the observed variance. The summary is evaluated to eliminate vectors that are outside of the error tolerances to be replaced with redundant vectors that are within the tolerances until all tolerances are met.

FULLY CONSTRAINED ADJUSTMENT

The quality of the existing horizontal controls is assessed before undertaking the constrained adjustment. Geodetic inverses between the published NAD83 (1999) coordinates of existing stations were compared with the geodetic inverses derived from the minimally constrained least square adjustment results. This distance analysis is especially useful, since it provides a datum invariant means of comparison.

Once the minimally constrained network satisfies the requirements of the above tests, the highest order control points in the control network are selected with an optimum spatial relationship to fully constrain the network to known control points, and have their published values entered as the position for those points and the network re-adjusted. The fully constrained report is given in Section 4-B. The same statistical tests are rerun on the adjusted network, as well as visually comparing adjusted values of geodetic control points to published values of control points not used as constraints. Again, the summary is evaluated to identify vectors outside of the tolerances and constraining points reselected to obtain the best fit to the geoid where all vectors are within the prescribed tolerances.

ERROR ELLIPSES

The adjustment results show that the a posteriori variance factor of the network was close to 1.0, as should be desired, and passed the χ^2 test. None of the residual components in the network were flagged for possible rejection under the τ -max test at the 0.05 level of significance. The relative confidence ellipses reveal that the horizontal positional accuracy between all directly connected pairs of stations in the network were better than (1:100,000) at the 95% level of confidence. The horizontal and vertical Error ellipses are included in this report in Section 4-C.

GROUND TRUTH SUMMARY

Surveys were conducted to establish ground truth data at representative sites throughout the project area. These sites were selected on the basis of the various types of ground surfaces and vegetation covers that would be encountered by the LIDAR surveys. As a quality control measure, a number of “check-in” points consisted of published horizontal and vertical control points within the area. The base stations used to collect survey data were included in the static GPS network, and were selected on the basis of their having an unobstructed view of the sky, as well as being in a location considered favorable for collecting ground truth data. The vertical and horizontal accuracy of each base station was determined by the statistical tests performed in the least squares adjustment process.

SAMPLE POINTS / TEST POINTS

The test points were distributed and categorized into sites as shown in the Map of Ground Truth Locations attached in this report (Section 5-A). These sites were selected on the basis of various types of ground surfaces and vegetation covers. At the time of LIDAR data acquisition, checkpoints were collected on surfaces with urban, bare ground / short grass, forest and brush.

DATA ANALYSIS

Data analysis was accomplished by comparing ground truth checkpoints with LIDAR points from the edited data set, which were within 3 feet horizontally from the ground truth points. The only exception to this were the ground truth points collected under tree canopy, where comparisons were made with LIDAR pulses that fell within 4 feet of the check points. This is because fewer LIDAR pulses are able to reach the ground in heavily forested areas, so the point spacing is larger than in cleared areas. Based on the number of returns and the density of points in this project, it was not necessary to compare to anything further away than 3 feet from the ground truth points. Note that the edited LIDAR points are simply a subset of the raw LIDAR points. The points that fell above the ground surface on vegetation canopies, buildings, or other obstructions were removed from the data set. Comparisons were also made between the survey points and the LIDAR derived terrain surface. These comparisons provide an additional verification of the LIDAR data against the survey data.

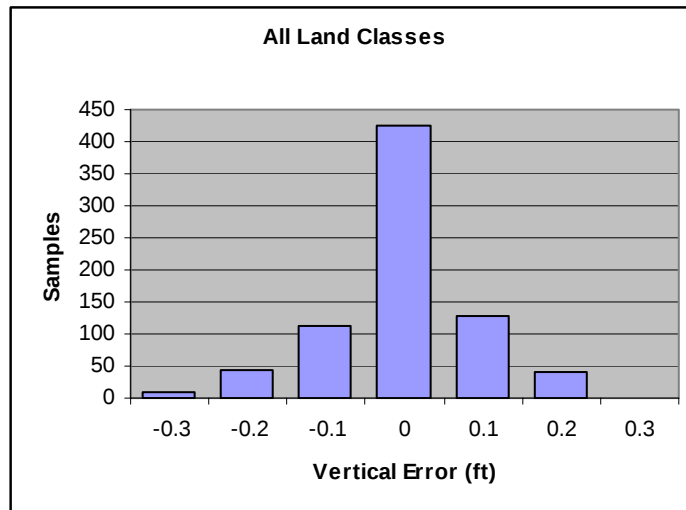
LIDAR POINT COMPARISON

The result of these comparisons of these values indicated a Vertical Root Mean Square Error (RMSEz) of 0.12 feet, which equates to Vertical Accuracy of 0.24 feet at the 95 percent confidence level.

OVERALL ACCURACY

A comparison of these values indicated a Vertical Root Mean Square Error (RMSEz) of 0.12 feet. This is within the vertical accuracy tolerance. The mean elevation difference for all points is -0.01 feet. Skewness is -0.19, indicating an approximately normal distribution. Descriptive statistics and a histogram of the vertical error distribution for all samples are shown below.

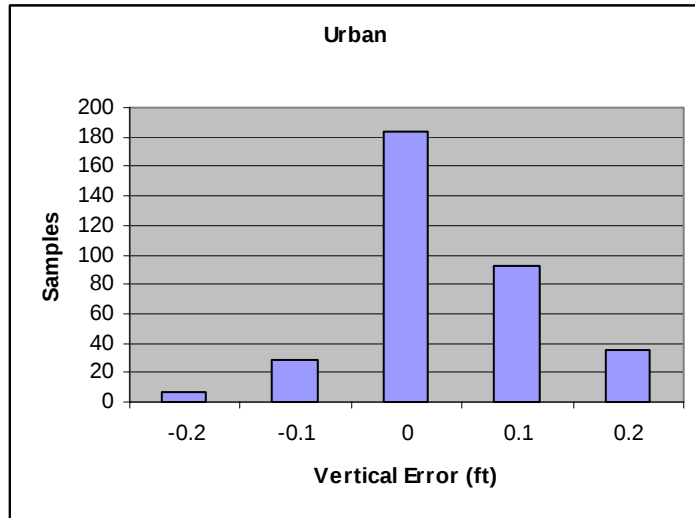
All Land Classes (ft)	
RMSEz	0.12
Mean	-0.01
Standard Error	0.00
Median	-0.01
Mode	-0.02
Standard Deviation	0.12
Sample Variance	0.01
Kurtosis	-0.28
Skewness	-0.19
Range	0.65
Minimum	-0.34
Maximum	0.31
Count	760



URBAN

This set includes only those points that were collected in areas of urban land cover. The resulting RMSEz is 0.12 feet, which is within the accuracy specification. The skewness value is -0.22.

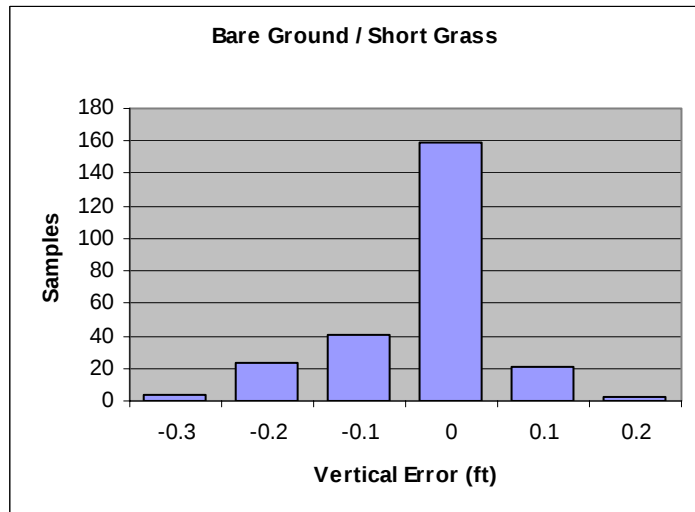
Urban (ft)	
RMSEz	0.12
Mean	0.04
Standard Error	0.01
Median	0.05
Mode	-0.07
Standard Deviation	0.11
Sample Variance	0.01
Kurtosis	-0.71
Skewness	-0.22
Range	0.53
Minimum	-0.27
Maximum	0.26
Sum	14.97
Count	348



BARE GROUND / SHORT GRASS

This set includes only those points that were collected in areas of bare ground / short grass land cover. The resulting RMSEz is 0.12 feet, which is within the accuracy specification. The skewness value is -0.53.

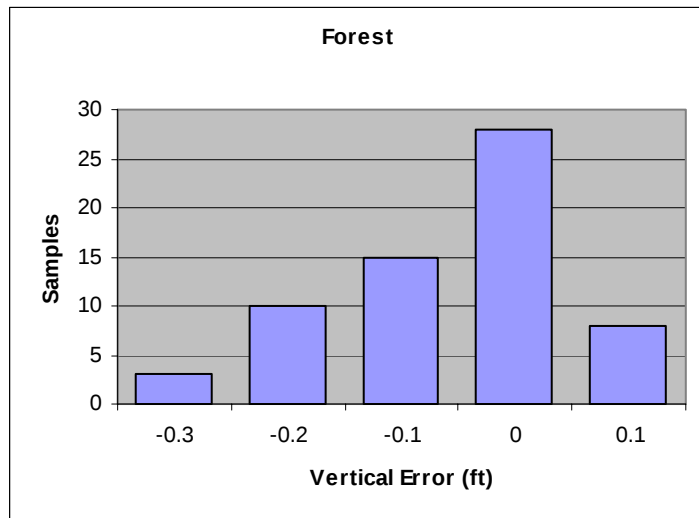
Bare Ground / Short Grass (ft)	
RMSEz	0.12
Mean	-0.04
Standard Error	0.01
Median	-0.01
Mode	0.00
Standard Deviation	0.11
Sample Variance	0.01
Kurtosis	-0.07
Skewness	-0.53
Range	0.60
Minimum	-0.33
Maximum	0.27
Count	251



FOREST

This set includes only those points that were collected in areas of forest land cover. The resulting RMSEz is 0.15 feet, which is within the accuracy specification. The skewness is -0.13.

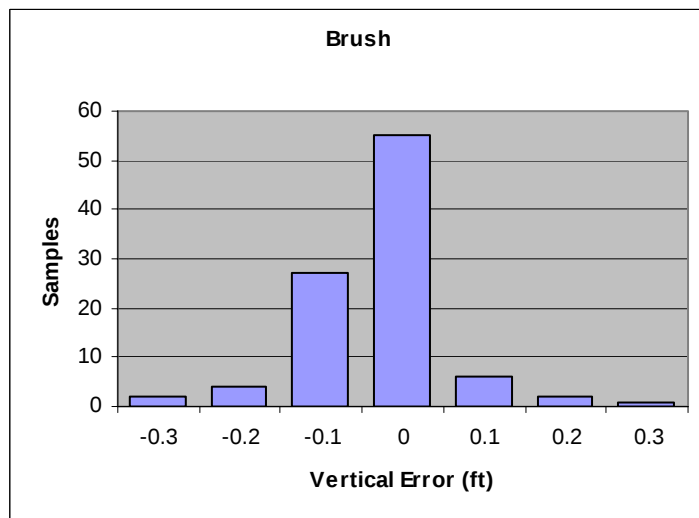
Forest (ft)	
RMSEz	0.15
Mean	-0.07
Standard Error	0.02
Median	-0.07
Mode	-0.17
Standard Deviation	0.13
Sample Variance	0.02
Kurtosis	-0.99
Skewness	-0.13
Range	0.49
Minimum	-0.34
Maximum	0.15
Count	64



BRUSH

This set includes only those points that were collected in areas of brush. The resulting RMSEz is 0.12 feet, which is within the accuracy specification. The skewness is 0.68.

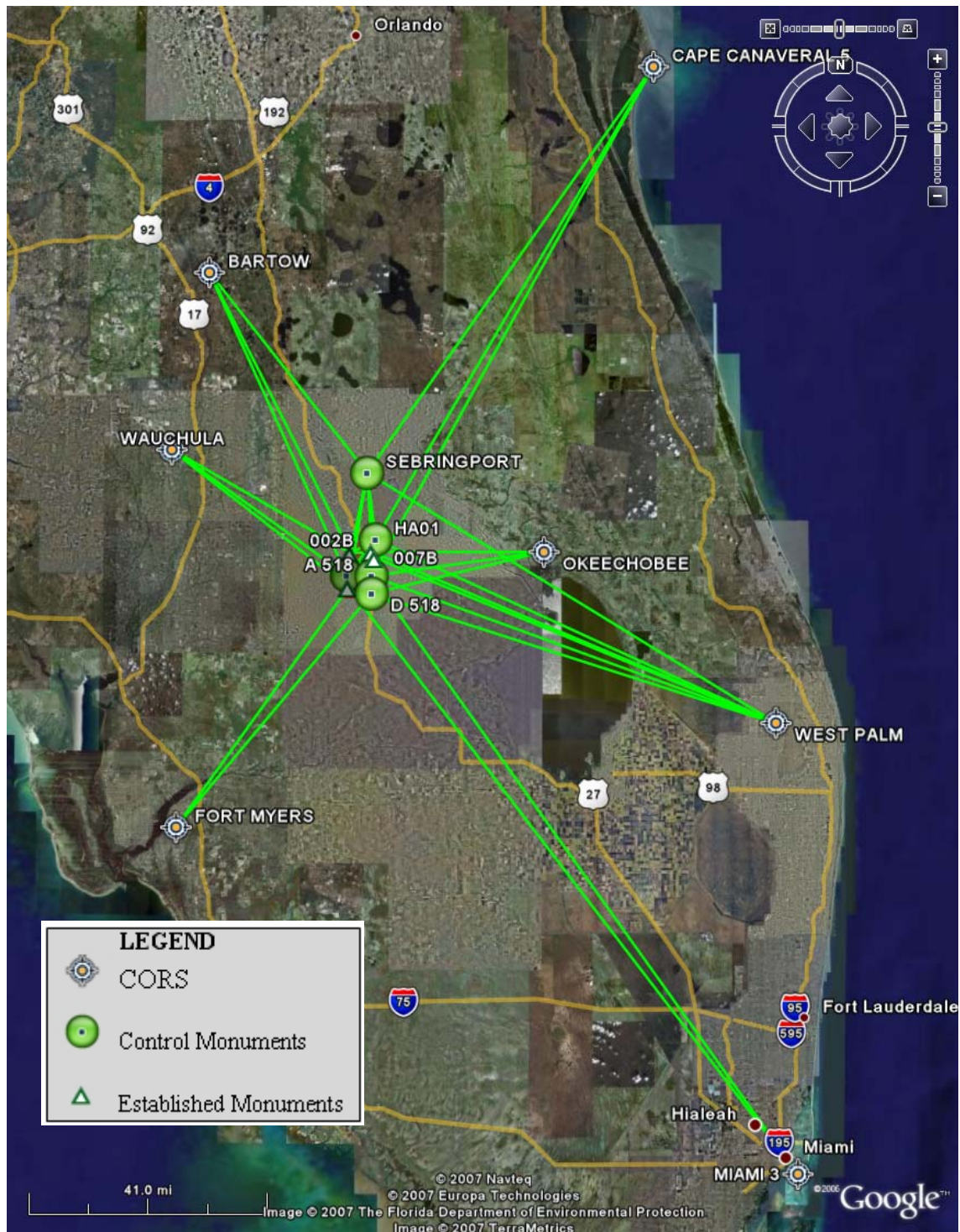
Brush (ft)	
RMSEz	0.12
Mean	-0.06
Standard Error	0.01
Median	-0.06
Mode	-0.05
Standard Deviation	0.10
Sample Variance	0.01
Kurtosis	2.05
Skewness	0.68
Range	0.64
Minimum	-0.33
Maximum	0.31
Count	97



GPS NETWORK

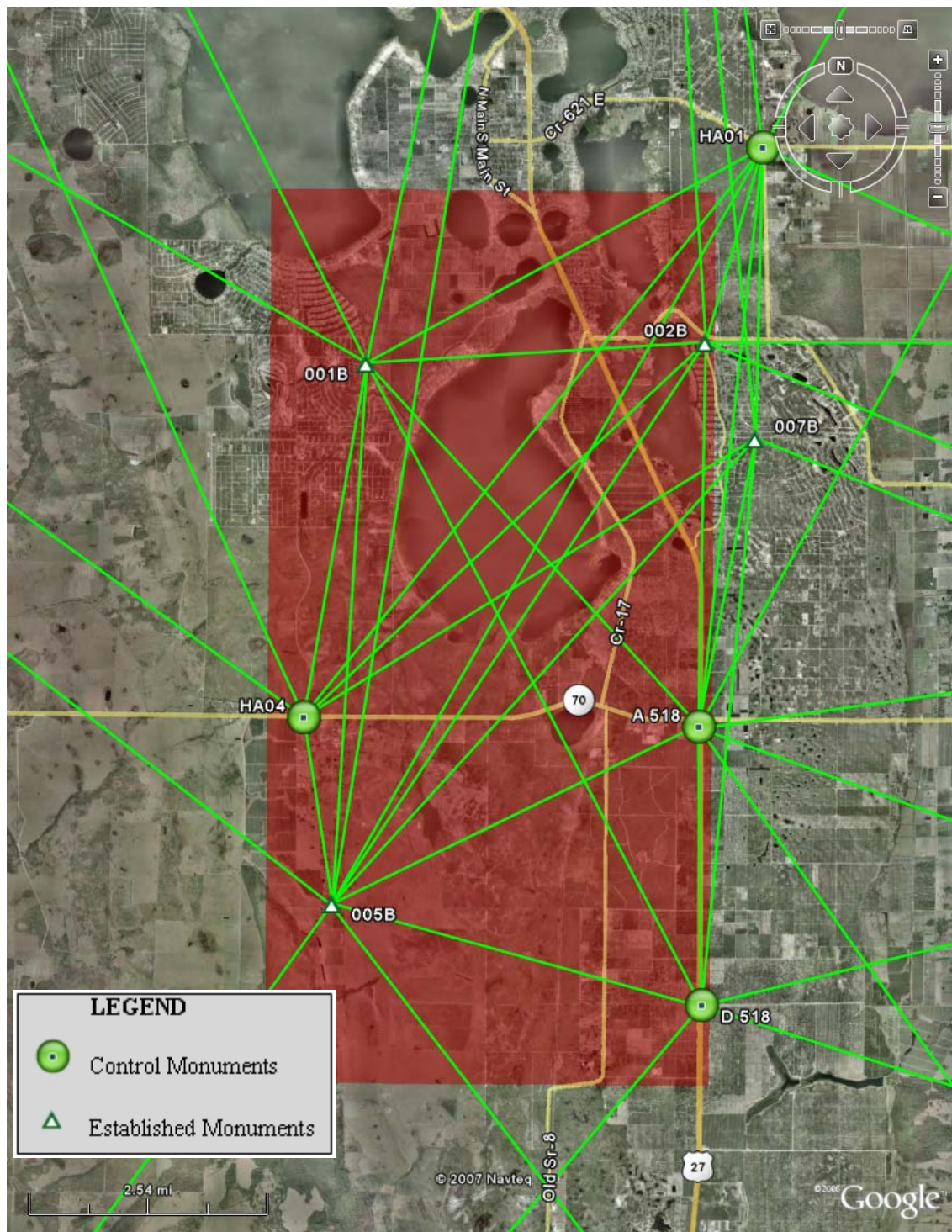
A. GPS Network Map

GPS Network Map

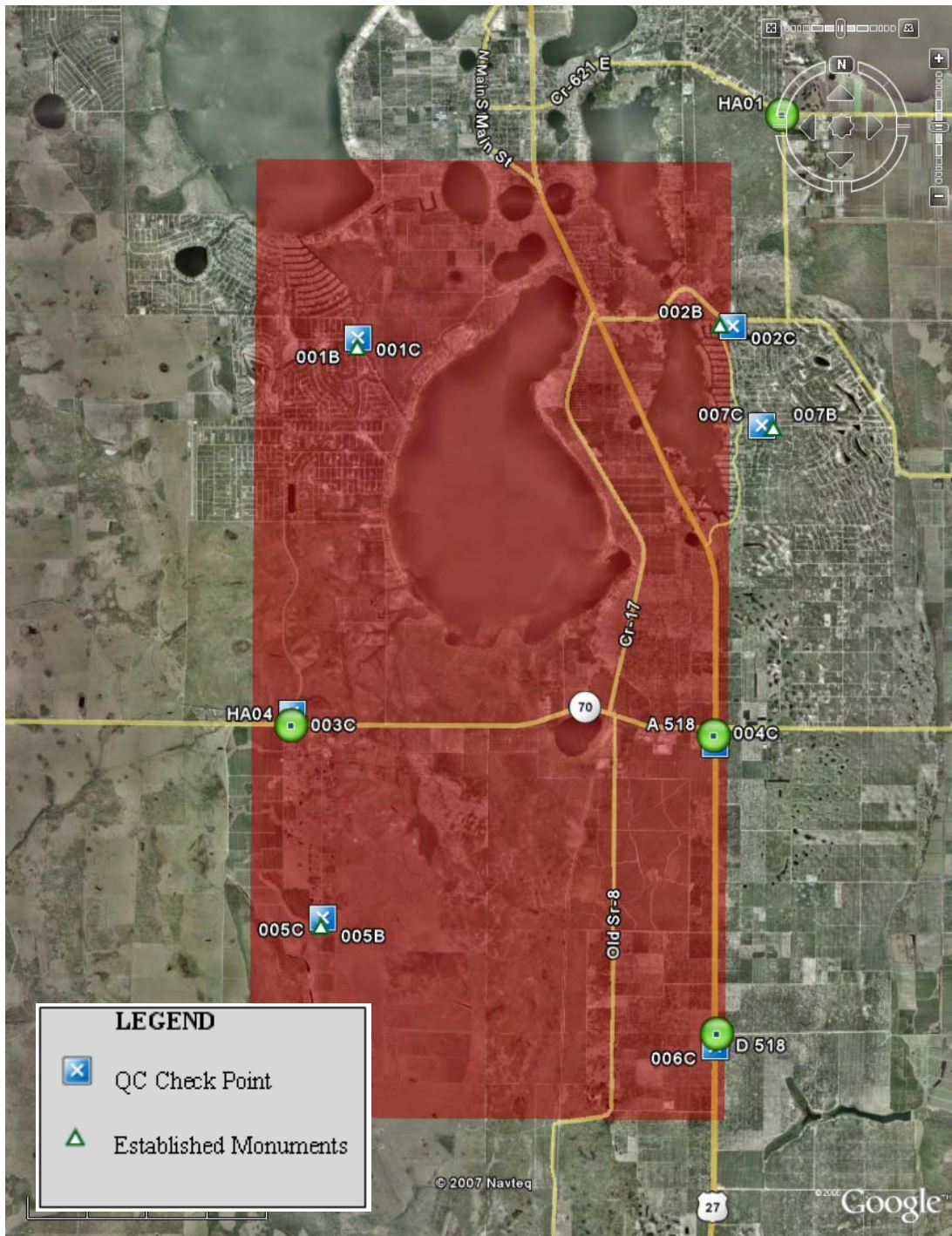


This map shows the GPS baselines processed for this network. The CORS and control monuments can be distinguished from the newly established monuments (see the legend above). The project area can be seen more closely on the next page. A hardcopy of this map is included as Attachment A.

GPS Network Map Project Area



QC Check Points



The check points can be seen in the above map. The QC procedures are described in Section 3, in the Ground Truth Summary. The individual check sites can be seen in detail on pages 31 - 36. Site 7 does not fall in the project area, it is located on the boresight location.

A hardcopy of this map is included as Attachment B.

B. Fully Constrained

Lake Placid LIDAR Ground Truth
GPS Control Network
Fully-Constrained Adjustment

Coordinate System: US State Plane
Zone: Florida West 0902
Horizontal Datum: NAD83 (1999)
Vertical Datum: NAVD88
Geoid Model: Geoid03
Units: US Survey Feet

Name	Latitude	Longitude	Northing	Easting	Elevation	Ellip Ht	Northing error	Easting error	Ellip error	Fix
BARTOW CORS	27 56 58.64223	81 46 58.20127	1314451.27	726276.70	130.51	44.54	0.00	0.00	0.00	LLe
CAPE CANAVERAL 5 CORS	28 27 36.79995	80 32 42.81934	1502855.90	1123625.10	18.39	-74.38	0.00	0.00	0.00	LLe
FORT MYERS CORS	26 35 27.50814	81 51 50.97251	820515.88	700558.08	35.66	-43.55	0.00	0.00	0.00	LLe
MIAMI 3 CORS	25 43 58.09808	80 09 36.60080	512802.22	1261886.02	36.49	-47.71	0.00	0.00	0.00	LLe
OKEECHOBEE CORS	27 15 57.71572	80 51 19.18214	1067579.58	1028027.52	42.12	-45.13	0.00	0.00	0.00	LLe
WEST PALM CORS	26 50 46.63829	80 13 09.30061	917372.95	1236855.77	36.67	-50.23	0.00	0.00	0.00	LLe
WAUCHULA CORS	27 30 51.04277	81 52 56.61649	1156103.63	694285.96	117.36	35.20	0.00	0.00	0.00	LLe
A 518	27 12 26.16948	81 19 44.24927	1045100.28	874271.94	136.22	54.06	0.01	0.01	0.01	
D 518	27 09 52.27930	81 19 42.03066	1029561.40	874555.48	165.56	83.81	0.01	0.01	0.01	
HA01	27 17 46.48923	81 19 05.32499	1077465.73	877610.02	88.60	5.35	0.01	0.01	0.01	
HA04	27 12 30.85052	81 23 49.97086	1045460.21	852084.26	140.61	58.83	0.01	0.01	0.01	
SEBRINGPORT	27 27 32.29360	81 20 31.11199	1136580.71	869558.29	57.17	-27.70	0.01	0.01	0.01	
001B	27 15 46.86724	81 23 11.47643	1065271.01	855462.75	87.70	5.27	0.01	0.01	0.01	
001C	27 15 50.61724	81 23 12.17689	1065649.38	855397.68	85.06	2.62	0.02	0.02	0.02	
002B	27 15 58.84275	81 19 40.50856	1066578.16	874494.38	93.33	10.51	0.01	0.01	0.01	
002C	27 15 57.05573	81 19 34.11303	1066400.80	875072.48	95.51	12.68	0.02	0.02	0.02	
003C	27 12 36.97402	81 23 49.60213	1046078.73	852114.58	140.40	58.61	0.02	0.02	0.03	
004C	27 12 21.50497	81 19 43.89952	1044629.42	874306.04	135.05	52.91	0.02	0.02	0.02	
005B	27 10 48.16882	81 23 31.67583	1035099.38	853786.31	141.28	59.72	0.01	0.01	0.01	
005C	27 10 51.38781	81 23 31.70235	1035424.42	853782.34	141.17	59.61	0.02	0.02	0.02	
006C	27 09 45.51813	81 19 43.42060	1028877.99	874433.59	169.62	87.89	0.02	0.02	0.03	
007B	27 15 05.85660	81 19 09.30880	1061242.74	877338.94	99.51	16.79	0.01	0.01	0.01	
007C	27 15 05.84548	81 19 17.03327	1061237.83	876641.81	103.65	20.95	0.02	0.02	0.03	

ERRORS ARE REPORTED AT THE 95% CONFIDENCE LEVEL.

C. NGS Published Positions vs GPS Derived Positions

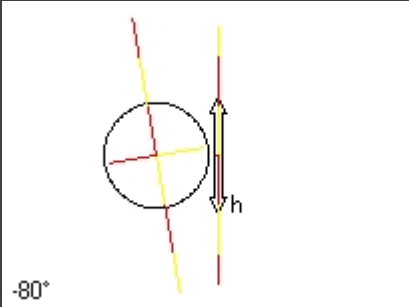
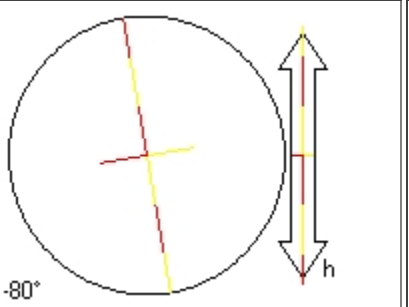
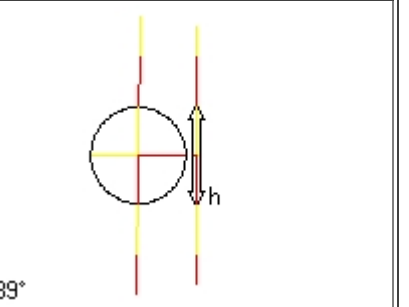
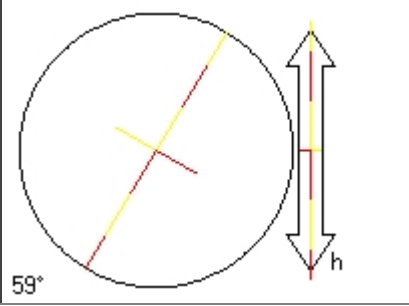
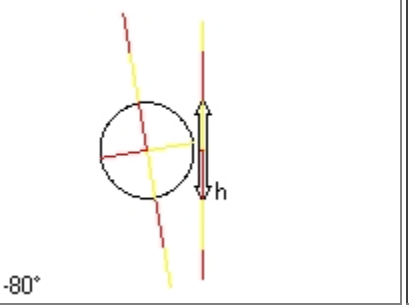
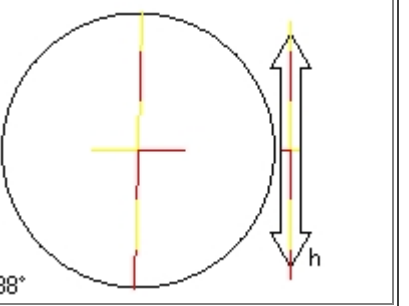
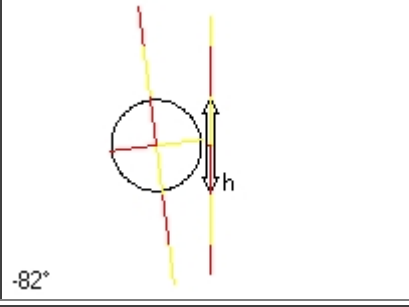
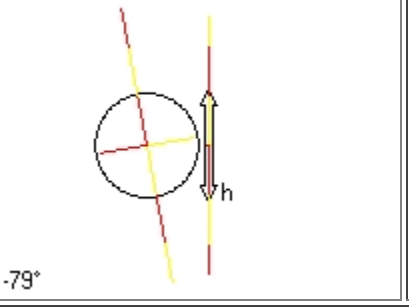
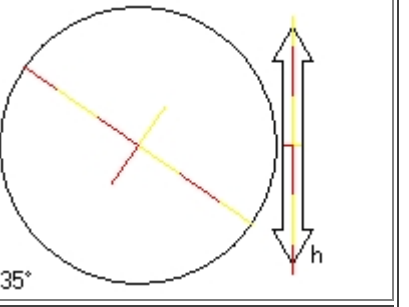
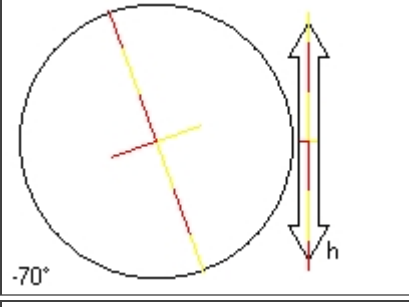
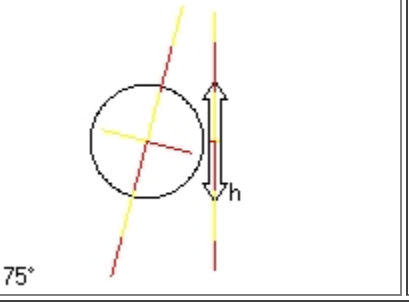
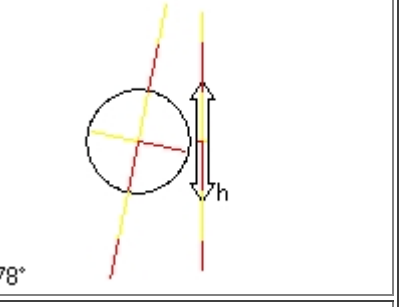
NGS Published Positions vs GPS Derived Positions

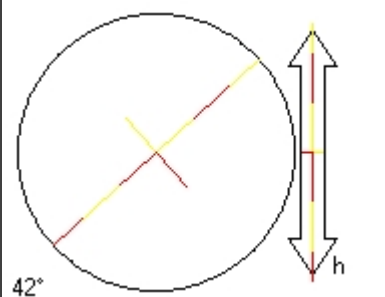
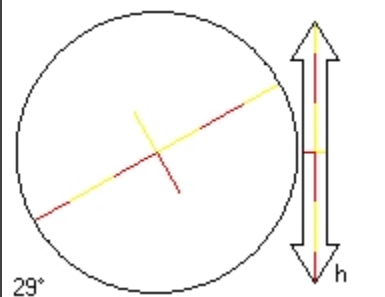
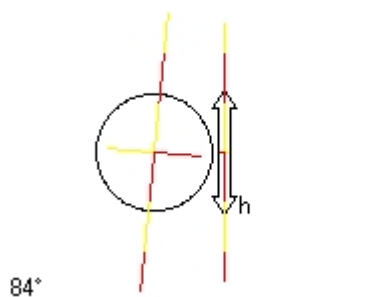
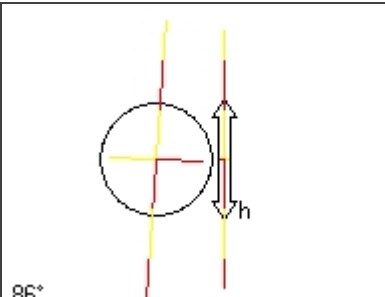
NGS Positions								GPS Derived Positions							
Designation	Northing	Easting	Elev	Ellip Ht	Horiz Order	Vert Order	Ellip Order	Northing	Easting	Elev	Ellip Ht	delta Northing	delta Easting	delta Elev	delta Ellip
BARTOW CORS ARP	1315198.25	403432.31		44.54	CORS	CORS	CORS	1315198.25	403432.31	130.51	44.54	0.00	0.00		0.00
CAPE CANAVERAL 5 CORS ARP	1500303.78	802289.77		-74.38	CORS	CORS	CORS	1500303.78	802289.77	18.39	-74.38	0.00	0.00		0.00
FORT MYERS CORS ARP	821445.66	373762.18		-43.55	CORS	CORS	CORS	821445.66	373762.18	35.66	-43.55	0.00	0.00		0.00
MIAMI 3 CORS ARP	509458.61	932637.26		-47.71	CORS	CORS	CORS	509458.61	932637.26	36.49	-47.71	0.00	0.00		0.00
OKEECHOBEE CORS ARP	1065904.88	703163.25		-45.13	CORS	CORS	CORS	1065904.88	703163.25	42.12	-45.13	0.00	0.00		0.00
WEST PALM CORS ARP	914080.24	910743.56		-50.23	CORS	CORS	CORS	914080.24	910743.56	36.67	-50.23	0.00	0.00		0.00
WAUCHULA CORS ARP	1157103.04	370153.88		35.20	CORS	CORS	CORS	1157103.04	370153.88	117.36	35.20	0.00	0.00		0.00
SEBRINGPORT	1136168.28	545267.96	57.3	-27.72	B	-	5	1136168.26	545267.99	57.17	-27.70	0.02	-0.03	0.13	-0.02
D 518	1029116.65	549407.71	165.58	83.79	1	1	4	1029116.64	549407.81	165.56	83.81	0.01	-0.10	0.02	-0.02
A 518	1044656.67	549248.18	136.20	54.07	A	1	4	1044656.64	549248.20	136.22	54.06	0.03	-0.02	-0.02	0.01
HA01	1076993.02	552844.69		5.48	1	-	4	1076992.99	552844.69	88.60	5.35	0.03	0.00		0.13
HA04	1045193.61	527064.80	140.6	58.96	1	3	4	1045193.60	527064.83	140.61	58.83	0.01	-0.03	-0.01	0.13

Note: Only the monuments with 2nd order or better positions were used for comparison to the GPS derived positions (highlighted).

D. Error Ellipses

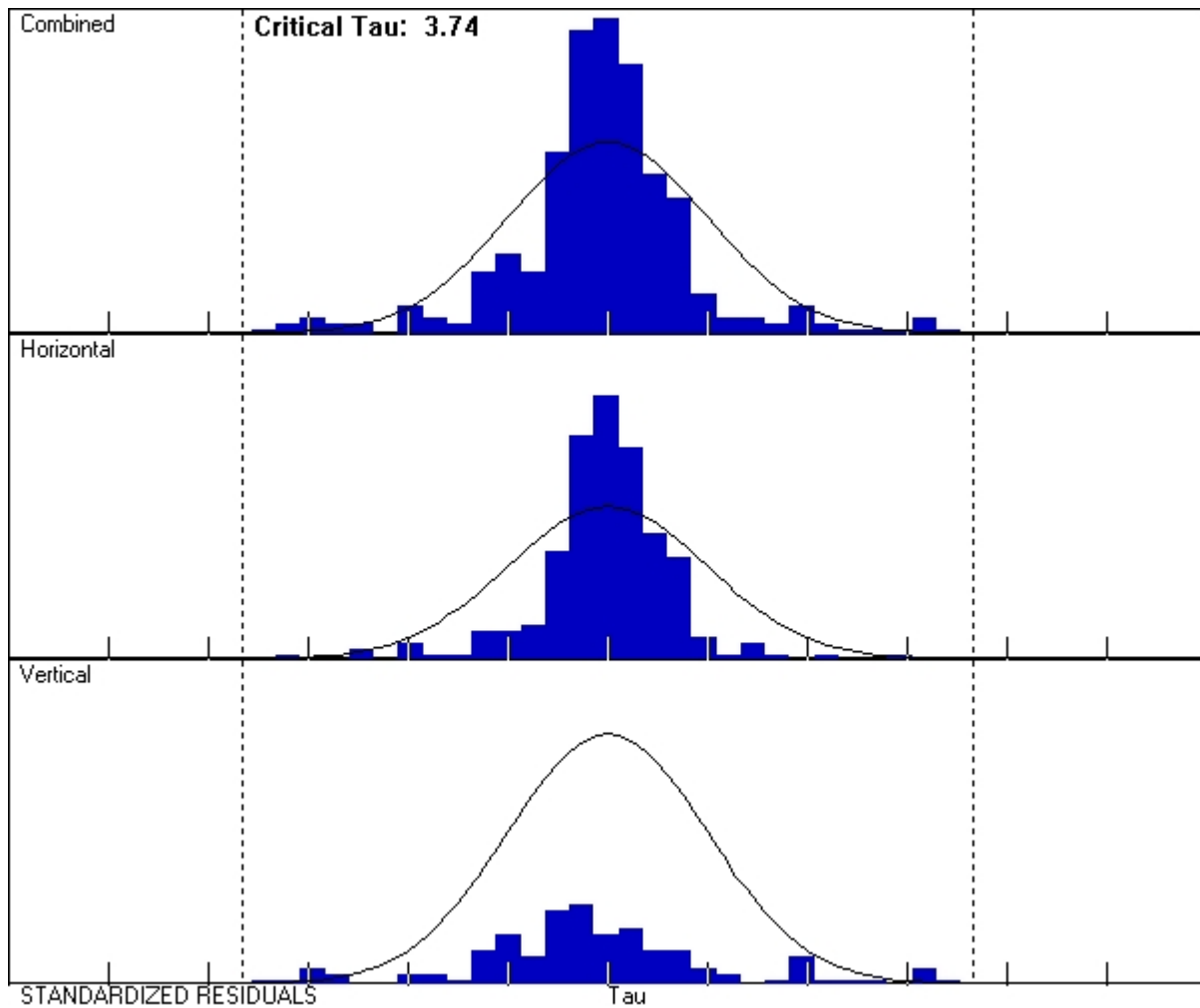
Point Error Ellipses

HA04	003C	001B
 -80°	 -80°	 89°
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
001C	002B	002C
 59°	 -80°	 88°
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
005B	A518	004C
 -82°	 -79°	 -35°
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
005C	007B	D518
 -70°	 75°	 78°
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

006C	007C	SEBR
 42°	 29°	 84°
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
HA01		
 86°		
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

E. Histograms of Standardized Residuals

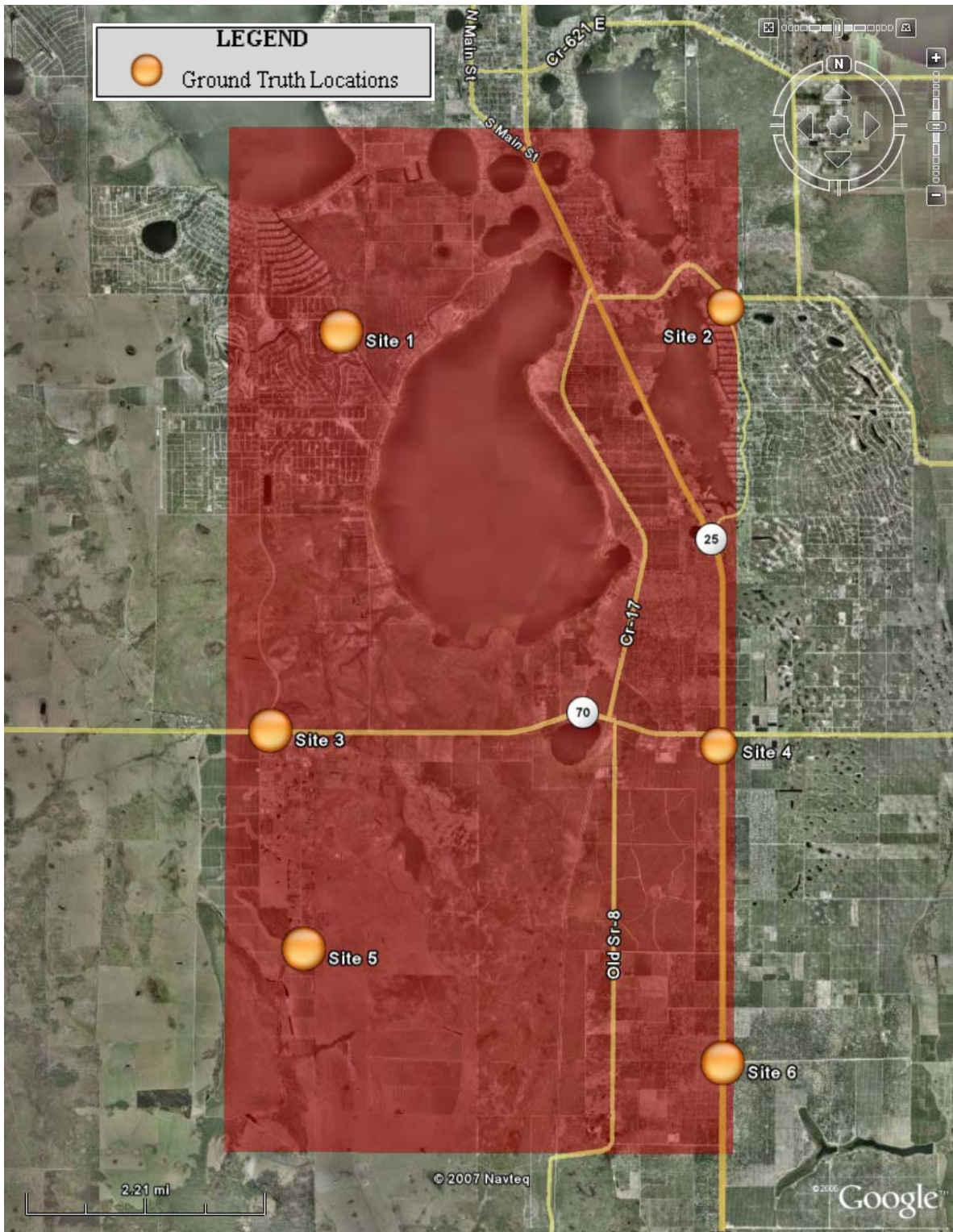
Histograms of Standardized Residuals



GROUND TRUTH SURVEY

A. Map of Ground Truth Locations

Lake Placid Ground Control Areas



The individual check sites can be seen in detail on the following pages.

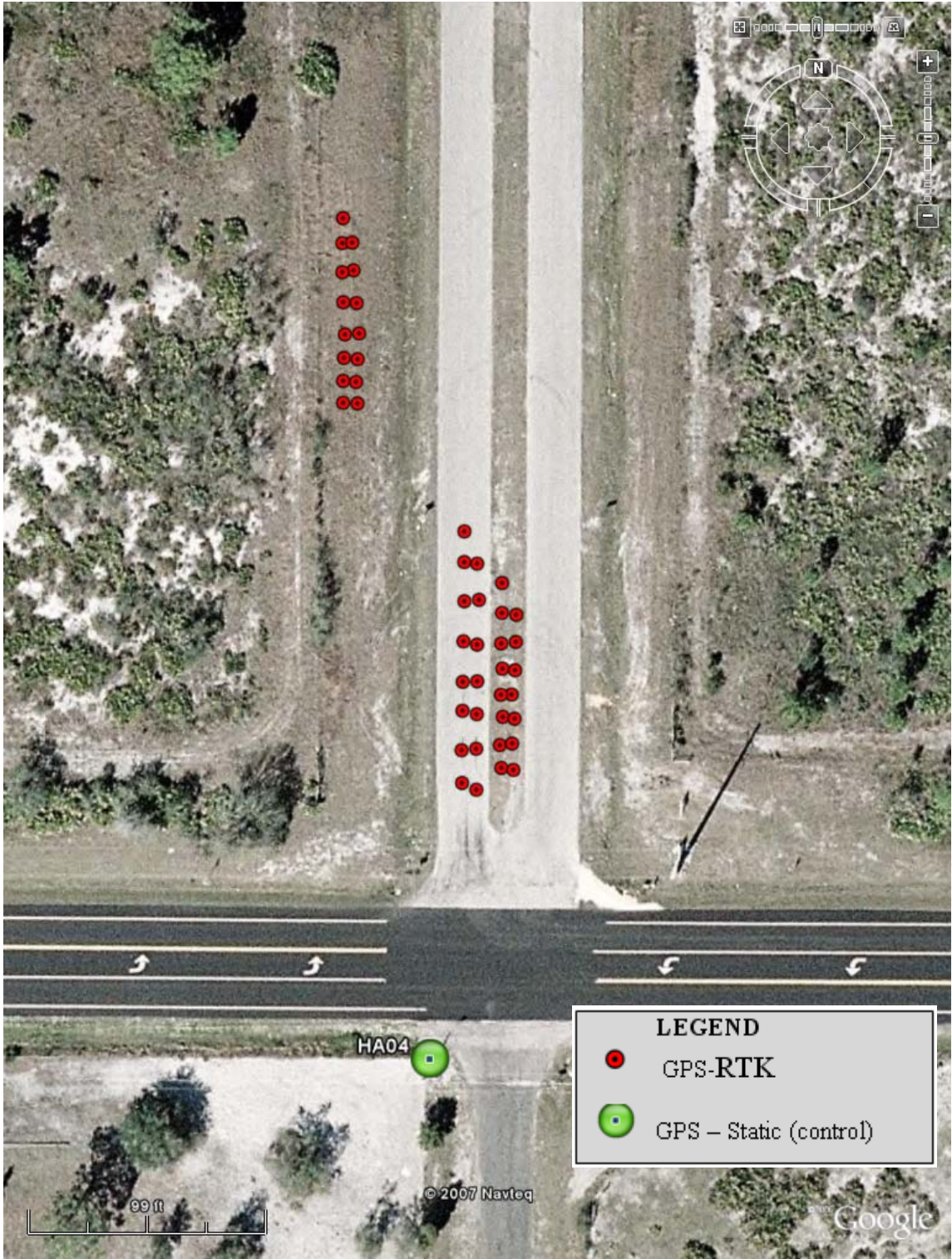
SITE 1 - Ground Truth Points



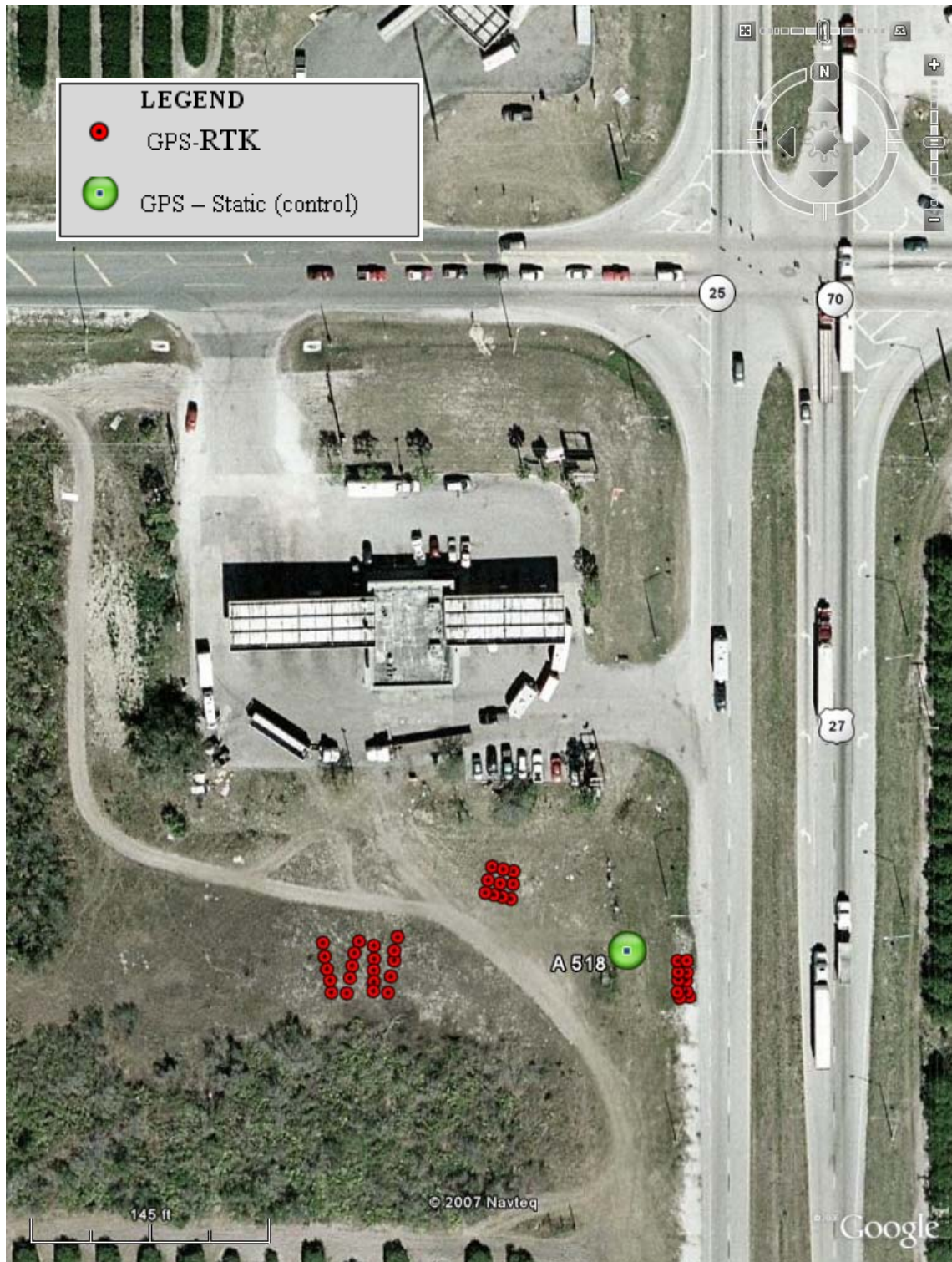
SITE 2 - Ground Truth Points



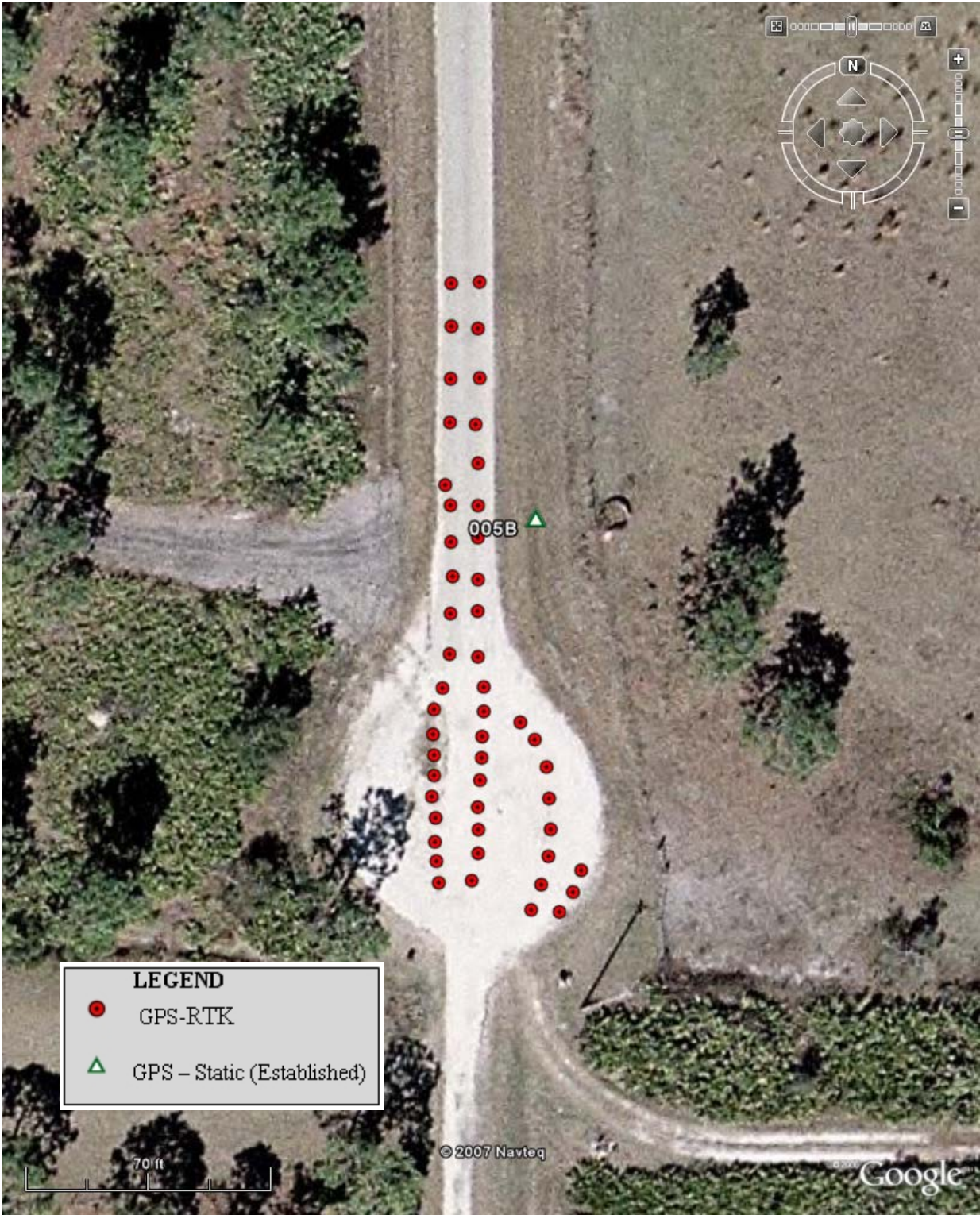
SITE 3 - Ground Truth Points



SITE 4 - Ground Truth Points



SITE 5 - Ground Truth Points



SITE 6 - Ground Truth Points



B. Ground Truth Analysis of LIDAR Points

GROUND TRUTH ANALYSIS **Comparison of LIDAR Points to Ground-Truth Points**

Horizontal units = US Survey Feet [US State Plane, Florida West, NAD83 (1999)]

Vertical units = US Survey feet [NAVD88 – Geoid03]

PointID	Survey X	Survey Y	Survey Z	LIDAR X	LIDAR Y	LIDAR Z	dx	dy	dz	dist	Land Cover
1A1	855145.87	1065398.09	88.16	855145.10	1065398.19	88.26	0.77	-0.10	-0.10	0.78	Short Grass
1A1	855145.87	1065398.09	88.16	855148.13	1065399.30	88.06	-2.26	-1.21	0.10	2.57	Short Grass
1A1	855145.87	1065398.09	88.16	855145.68	1065395.64	88.02	0.19	2.45	0.14	2.46	Short Grass
1A1	855145.87	1065398.09	88.16	855144.06	1065399.75	88.20	1.81	-1.66	-0.04	2.46	Short Grass
1A2	855138.50	1065388.40	87.85	855137.00	1065388.88	87.84	1.50	-0.48	0.01	1.57	Short Grass
1A2	855138.50	1065388.40	87.85	855136.05	1065387.24	87.80	2.45	1.16	0.05	2.71	Short Grass
1A2	855138.50	1065388.40	87.85	855140.67	1065390.25	87.84	-2.17	-1.85	0.01	2.85	Short Grass
1A2	855138.50	1065388.40	87.85	855140.09	1065386.79	87.85	-1.59	1.61	0.00	2.26	Short Grass
1A2	855138.50	1065388.40	87.85	855141.09	1065388.42	87.76	-2.59	-0.02	0.09	2.59	Short Grass
1A3	855128.29	1065392.26	87.76	855128.43	1065391.62	87.80	-0.14	0.64	-0.04	0.66	Short Grass
1A3	855128.29	1065392.26	87.76	855128.93	1065389.77	87.74	-0.64	2.49	0.02	2.57	Short Grass
1A3	855128.29	1065392.26	87.76	855128.21	1065393.11	87.76	0.08	-0.85	0.00	0.85	Short Grass
1A4	855133.27	1065404.45	88.09	855133.03	1065402.63	88.12	0.24	1.82	-0.03	1.84	Short Grass
1A4	855133.27	1065404.45	88.09	855134.45	1065406.41	88.06	-1.18	-1.96	0.03	2.29	Short Grass
1A4	855133.27	1065404.45	88.09	855132.24	1065404.17	88.07	1.03	0.28	0.02	1.07	Short Grass
1A5	855123.14	1065409.86	88.05	855123.46	1065409.76	87.98	-0.32	0.10	0.07	0.34	Short Grass
1A5	855123.14	1065409.86	88.05	855122.29	1065407.77	87.99	0.85	2.09	0.06	2.26	Short Grass
1A5	855123.14	1065409.86	88.05	855122.76	1065412.14	88.01	0.38	-2.28	0.04	2.31	Short Grass
1A6	855115.82	1065398.44	87.74	855117.25	1065398.74	87.47	-1.43	-0.30	0.27	1.49	Short Grass
1A6	855115.82	1065398.44	87.74	855113.22	1065399.19	87.64	2.60	-0.75	0.10	2.71	Short Grass
1A6	855115.82	1065398.44	87.74	855116.53	1065396.67	87.67	-0.71	1.77	0.07	1.91	Short Grass
1A7	855104.09	1065403.22	87.69	855104.65	1065405.80	87.77	-0.56	-2.58	-0.08	2.64	Short Grass
1A7	855104.09	1065403.22	87.69	855104.68	1065402.72	87.73	-0.59	0.50	-0.04	0.77	Short Grass
1A7	855104.09	1065403.22	87.69	855103.63	1065404.20	87.79	0.46	-0.98	-0.10	1.09	Short Grass
1A8	855108.53	1065415.87	88.00	855105.92	1065415.24	87.99	2.61	0.63	0.01	2.68	Short Grass
1A8	855108.53	1065415.87	88.00	855109.83	1065416.43	87.96	-1.30	-0.56	0.04	1.42	Short Grass
1A8	855108.53	1065415.87	88.00	855106.70	1065413.94	87.96	1.83	1.93	0.04	2.66	Short Grass
1A8	855108.53	1065415.87	88.00	855109.94	1065414.80	87.95	-1.41	1.07	0.05	1.77	Short Grass
1A8	855108.53	1065415.87	88.00	855105.86	1065416.88	88.02	2.67	-1.01	-0.02	2.85	Short Grass
1A8	855108.53	1065415.87	88.00	855109.79	1065417.94	87.95	-1.26	-2.07	0.05	2.42	Short Grass
1A9	855096.07	1065423.12	87.98	855094.84	1065422.27	87.96	1.23	0.85	0.02	1.50	Short Grass
1A9	855096.07	1065423.12	87.98	855096.97	1065423.88	87.97	-0.90	-0.76	0.01	1.18	Short Grass
1A10	855088.61	1065408.79	87.65	855087.73	1065405.96	87.70	0.88	2.83	-0.05	2.96	Short Grass
1A10	855088.61	1065408.79	87.65	855088.05	1065409.02	87.66	0.56	-0.23	-0.01	0.61	Short Grass
1A10	855088.61	1065408.79	87.65	855088.65	1065407.59	87.66	-0.04	1.20	-0.01	1.20	Short Grass
1A11	855075.16	1065416.75	87.50	855074.00	1065418.74	87.51	1.16	-1.99	-0.01	2.30	Short Grass
1A11	855075.16	1065416.75	87.50	855075.45	1065415.01	87.40	-0.29	1.74	0.10	1.77	Short Grass
1A11	855075.16	1065416.75	87.50	855074.78	1065417.49	87.51	0.38	-0.74	-0.01	0.83	Short Grass
1A12	855081.59	1065429.71	87.93	855081.69	1065428.81	87.90	-0.10	0.90	0.03	0.91	Short Grass
1A12	855081.59	1065429.71	87.93	855081.08	1065432.42	87.95	0.51	-2.71	-0.02	2.76	Short Grass
1A12	855081.59	1065429.71	87.93	855082.48	1065430.63	87.93	-0.89	-0.92	0.00	1.28	Short Grass

1A12	855081.59	1065429.71	87.93	855082.59	1065427.47	87.95	-1.00	2.24	-0.02	2.45	Short Grass
1A13	855069.07	1065435.31	87.93	855071.67	1065436.17	87.95	-2.60	-0.86	-0.02	2.74	Short Grass
1A13	855069.07	1065435.31	87.93	855069.07	1065437.88	87.98	0.00	-2.57	-0.05	2.57	Short Grass
1A13	855069.07	1065435.31	87.93	855067.75	1065436.60	87.95	1.32	-1.29	-0.02	1.85	Short Grass
1A13	855069.07	1065435.31	87.93	855069.24	1065433.71	87.87	-0.17	1.60	0.06	1.61	Short Grass
1A14	855062.03	1065422.86	87.38	855062.06	1065423.15	87.38	-0.03	-0.29	0.00	0.29	Short Grass
1A14	855062.03	1065422.86	87.38	855062.22	1065421.74	87.42	-0.19	1.12	-0.04	1.14	Short Grass
1A14	855062.03	1065422.86	87.38	855062.20	1065420.03	87.29	-0.17	2.83	0.09	2.84	Short Grass
1A15	855050.27	1065428.23	87.33	855047.56	1065427.55	87.25	2.71	0.68	0.08	2.80	Short Grass
1A15	855050.27	1065428.23	87.33	855051.44	1065427.12	87.35	-1.17	1.11	-0.02	1.61	Short Grass
1A15	855050.27	1065428.23	87.33	855051.00	1065430.96	87.29	-0.73	-2.73	0.04	2.83	Short Grass
1A15	855050.27	1065428.23	87.33	855049.65	1065429.04	87.36	0.62	-0.81	-0.03	1.02	Short Grass
1A16	855054.79	1065441.24	87.91	855055.72	1065440.99	88.01	-0.93	0.25	-0.10	0.97	Short Grass
1A16	855054.79	1065441.24	87.91	855054.70	1065442.22	88.01	0.09	-0.98	-0.10	0.99	Short Grass
1A16	855054.79	1065441.24	87.91	855051.80	1065441.43	87.92	2.99	-0.19	-0.01	3.00	Short Grass
1A16	855054.79	1065441.24	87.91	855053.42	1065439.59	87.91	1.37	1.65	0.00	2.14	Short Grass
1A17	855042.84	1065446.99	87.93	855039.99	1065447.81	87.91	2.85	-0.82	0.02	2.97	Short Grass
1A17	855042.84	1065446.99	87.93	855042.98	1065445.72	87.90	-0.14	1.27	0.03	1.28	Short Grass
1A17	855042.84	1065446.99	87.93	855043.83	1065447.39	87.95	-0.99	-0.40	-0.02	1.07	Short Grass
1A18	855036.51	1065434.31	87.14	855038.67	1065433.50	87.22	-2.16	0.81	-0.08	2.31	Short Grass
1A18	855036.51	1065434.31	87.14	855035.43	1065432.70	87.22	1.08	1.61	-0.08	1.94	Short Grass
1A18	855036.51	1065434.31	87.14	855034.78	1065433.93	87.13	1.73	0.38	0.01	1.77	Short Grass
1A18	855036.51	1065434.31	87.14	855035.34	1065435.86	87.03	1.17	-1.55	0.11	1.95	Short Grass
1A18	855036.51	1065434.31	87.14	855039.23	1065435.43	87.35	-2.72	-1.12	-0.21	2.95	Short Grass
1A19	855022.20	1065440.93	87.18	855025.04	1065441.35	87.26	-2.84	-0.42	-0.08	2.87	Short Grass
1A19	855022.20	1065440.93	87.18	855022.63	1065442.94	87.36	-0.43	-2.01	-0.18	2.06	Short Grass
1A19	855022.20	1065440.93	87.18	855021.25	1065441.77	87.23	0.95	-0.84	-0.05	1.27	Short Grass
1A19	855022.20	1065440.93	87.18	855022.83	1065438.74	87.09	-0.63	2.19	0.09	2.28	Short Grass
1A20	855026.76	1065452.68	87.83	855027.51	1065452.92	87.82	-0.75	-0.24	0.01	0.79	Short Grass
1A21	855121.40	1065454.70	88.51	855123.76	1065454.35	88.35	-2.36	0.35	0.16	2.39	Urban
1A22	855124.31	1065460.28	88.49	855123.14	1065458.39	88.46	1.17	1.89	0.03	2.22	Urban
1A22	855124.31	1065460.28	88.49	855121.82	1065460.29	88.28	2.49	-0.01	0.21	2.50	Urban
1A23	855134.06	1065456.02	88.46	855135.28	1065457.03	88.27	-1.22	-1.01	0.19	1.60	Urban
1A25	855141.56	1065445.00	88.53	855141.90	1065445.65	88.37	-0.34	-0.65	0.16	0.75	Urban
1A25	855141.56	1065445.00	88.53	855143.47	1065443.16	88.48	-1.91	1.84	0.05	2.65	Urban
1A26	855145.16	1065449.95	88.46	855142.87	1065449.57	88.24	2.29	0.38	0.22	2.33	Urban
1A26	855145.16	1065449.95	88.46	855146.95	1065449.12	88.25	-1.79	0.83	0.21	1.98	Urban
1A27	855156.25	1065444.17	88.44	855155.66	1065441.82	88.24	0.59	2.35	0.20	2.43	Urban
1A27	855156.25	1065444.17	88.44	855154.11	1065444.29	88.28	2.14	-0.12	0.16	2.15	Urban
1A28	855153.65	1065438.89	88.54	855153.75	1065440.64	88.36	-0.10	-1.75	0.18	1.76	Urban
1A29	855164.54	1065433.22	88.54	855163.17	1065432.35	88.31	1.37	0.87	0.23	1.64	Urban
1A29	855164.54	1065433.22	88.54	855164.21	1065434.32	88.33	0.33	-1.10	0.21	1.17	Urban
1A30	855167.81	1065439.36	88.39	855166.01	1065439.27	88.17	1.80	0.09	0.22	1.82	Urban
1A30	855167.81	1065439.36	88.39	855167.21	1065437.67	88.21	0.60	1.69	0.18	1.80	Urban
1A31	855177.78	1065433.30	88.40	855176.52	1065432.97	88.17	1.26	0.33	0.23	1.32	Urban
1A31	855177.78	1065433.30	88.40	855178.46	1065435.07	88.26	-0.68	-1.77	0.14	1.90	Urban
1A32	855175.30	1065427.75	88.50	855176.38	1065427.61	88.29	-1.08	0.14	0.21	1.11	Urban
1A33	855186.57	1065421.69	88.42	855186.31	1065420.95	88.38	0.26	0.74	0.04	0.79	Urban

1A33	855186.57	1065421.69	88.42	855184.97	1065423.54	88.22	1.60	-1.85	0.20	2.45	Urban
1A34	855190.97	1065426.78	88.34	855192.86	1065425.78	88.23	-1.89	1.00	0.11	2.14	Urban
1A34	855190.97	1065426.78	88.34	855190.18	1065424.63	88.14	0.79	2.15	0.20	2.30	Urban
1A34	855190.97	1065426.78	88.34	855188.72	1065426.24	88.22	2.25	0.54	0.12	2.32	Urban
1A34	855190.97	1065426.78	88.34	855192.01	1065427.22	88.27	-1.04	-0.44	0.07	1.13	Urban
1A35	855204.88	1065418.16	88.29	855204.76	1065417.01	88.08	0.12	1.15	0.21	1.18	Urban
1A36	855202.00	1065412.82	88.36	855202.97	1065412.26	88.14	-0.97	0.56	0.22	1.14	Urban
1A37	855213.10	1065406.49	88.34	855212.06	1065406.73	88.22	1.04	-0.24	0.12	1.07	Urban
1A38	855216.48	1065411.67	88.28	855215.35	1065410.90	88.05	1.13	0.77	0.23	1.39	Urban
1A39	855228.48	1065403.99	88.29	855228.97	1065401.69	88.08	-0.49	2.30	0.21	2.36	Urban
2A1	874446.55	1066600.41	93.78	874445.27	1066599.07	93.80	1.28	1.34	-0.02	1.85	Urban
2A1	874446.55	1066600.41	93.78	874446.57	1066601.33	93.71	-0.02	-0.92	0.07	0.92	Urban
2A1	874446.55	1066600.41	93.78	874448.80	1066599.46	94.05	-2.25	0.95	-0.27	2.46	Urban
2A2	874443.79	1066591.75	93.78	874443.38	1066592.30	93.92	0.41	-0.55	-0.14	0.70	Urban
2A2	874443.79	1066591.75	93.78	874443.03	1066594.37	93.71	0.76	-2.62	0.07	2.73	Urban
2A3	874433.98	1066591.47	93.87	874436.30	1066591.51	93.88	-2.32	-0.04	-0.01	2.32	Urban
2A3	874433.98	1066591.47	93.87	874432.47	1066589.14	93.84	1.51	2.33	0.03	2.78	Urban
2A3	874433.98	1066591.47	93.87	874435.98	1066593.54	93.87	-2.00	-2.07	0.00	2.88	Urban
2A3	874433.98	1066591.47	93.87	874432.44	1066593.13	93.81	1.54	-1.66	0.06	2.27	Urban
2A3	874433.98	1066591.47	93.87	874432.50	1066593.89	93.68	1.48	-2.42	0.19	2.84	Urban
2A3	874433.98	1066591.47	93.87	874432.86	1066591.12	93.98	1.12	0.35	-0.11	1.18	Urban
2A4	874432.01	1066599.24	93.88	874431.17	1066596.87	93.82	0.84	2.37	0.06	2.52	Urban
2A4	874432.01	1066599.24	93.88	874432.56	1066598.03	93.66	-0.55	1.21	0.22	1.35	Urban
2A4	874432.01	1066599.24	93.88	874433.37	1066601.73	93.88	-1.36	-2.49	0.00	2.84	Urban
2A5	874423.17	1066599.76	93.88	874423.48	1066602.12	94.07	-0.31	-2.36	-0.19	2.39	Urban
2A5	874423.17	1066599.76	93.88	874422.66	1066598.47	93.95	0.51	1.29	-0.07	1.39	Urban
2A6	874422.50	1066591.83	93.90	874422.62	1066589.58	93.97	-0.12	2.25	-0.07	2.25	Urban
2A6	874422.50	1066591.83	93.90	874424.41	1066593.02	93.82	-1.91	-1.19	0.08	2.25	Urban
2A7	874414.06	1066591.24	93.93	874415.95	1066589.87	94.00	-1.89	1.37	-0.07	2.34	Urban
2A7	874414.06	1066591.24	93.93	874414.39	1066593.44	94.02	-0.33	-2.20	-0.09	2.23	Urban
2A7	874414.06	1066591.24	93.93	874412.56	1066590.02	94.01	1.50	1.22	-0.08	1.94	Urban
2A8	874414.40	1066598.97	93.90	874416.07	1066598.74	93.76	-1.67	0.23	0.14	1.69	Urban
2A8	874414.40	1066598.97	93.90	874412.66	1066598.89	93.93	1.74	0.08	-0.03	1.74	Urban
2A9	874401.73	1066599.05	93.91	874404.36	1066597.94	93.80	-2.63	1.11	0.11	2.86	Urban
2A10	874400.85	1066590.94	93.95	874402.36	1066590.47	94.03	-1.51	0.47	-0.08	1.58	Urban
2A10	874400.85	1066590.94	93.95	874401.67	1066588.91	93.75	-0.82	2.03	0.20	2.20	Urban
2A11	874385.92	1066590.92	93.96	874387.67	1066589.49	94.05	-1.75	1.43	-0.09	2.26	Urban
2A11	874385.92	1066590.92	93.96	874384.15	1066589.64	94.04	1.77	1.28	-0.08	2.19	Urban
2A11	874385.92	1066590.92	93.96	874388.53	1066591.08	93.93	-2.61	-0.16	0.03	2.62	Urban
2A11	874385.92	1066590.92	93.96	874385.04	1066591.23	93.97	0.88	-0.31	-0.01	0.93	Urban
2A12	874385.89	1066598.33	93.95	874385.03	1066595.95	93.95	0.86	2.38	0.00	2.53	Urban
2A12	874385.89	1066598.33	93.95	874383.45	1066598.79	94.15	2.44	-0.46	-0.20	2.49	Urban
2A12	874385.89	1066598.33	93.95	874385.19	1066600.07	93.93	0.70	-1.74	0.02	1.88	Urban
2A13	874369.96	1066599.95	93.97	874369.19	1066599.37	94.15	0.77	0.58	-0.18	0.98	Urban
2A13	874369.96	1066599.95	93.97	874367.44	1066600.82	93.78	2.52	-0.87	0.19	2.67	Urban
2A13	874369.96	1066599.95	93.97	874372.80	1066599.22	94.07	-2.84	0.73	-0.10	2.93	Urban
2A13	874369.96	1066599.95	93.97	874371.05	1066600.68	94.02	-1.09	-0.73	-0.05	1.31	Urban
2A14	874369.31	1066591.08	94.03	874367.29	1066592.02	94.02	2.02	-0.94	0.01	2.23	Urban

2A14	874369.31	1066591.08	94.03	874369.87	1066590.22	93.96	-0.56	0.86	0.07	1.03	Urban
2A15	874351.94	1066590.63	94.05	874351.66	1066590.97	94.16	0.28	-0.34	-0.11	0.45	Urban
2A15	874351.94	1066590.63	94.05	874351.22	1066587.94	94.06	0.72	2.69	-0.01	2.78	Urban
2A15	874351.94	1066590.63	94.05	874352.81	1066592.66	94.05	-0.87	-2.03	0.00	2.21	Urban
2A16	874351.51	1066599.72	94.02	874352.86	1066597.35	94.04	-1.35	2.37	-0.02	2.73	Urban
2A16	874351.51	1066599.72	94.02	874351.11	1066600.09	94.15	0.40	-0.37	-0.13	0.56	Urban
2A16	874351.51	1066599.72	94.02	874353.02	1066601.44	93.93	-1.51	-1.72	0.09	2.29	Urban
2A17	874335.76	1066598.43	94.04	874336.16	1066596.62	94.13	-0.40	1.81	-0.09	1.86	Urban
2A17	874335.76	1066598.43	94.04	874334.53	1066598.13	93.92	1.23	0.30	0.12	1.27	Urban
2A17	874335.76	1066598.43	94.04	874338.20	1066597.98	93.96	-2.44	0.45	0.08	2.48	Urban
2A18	874335.47	1066590.98	94.06	874336.86	1066591.58	94.15	-1.39	-0.60	-0.09	1.52	Urban
2A18	874335.47	1066590.98	94.06	874334.43	1066593.46	94.05	1.04	-2.48	0.01	2.69	Urban
2A18	874335.47	1066590.98	94.06	874333.12	1066591.73	94.05	2.35	-0.75	0.01	2.47	Urban
2A19	874324.49	1066591.52	94.07	874325.41	1066589.08	93.97	-0.92	2.44	0.10	2.61	Urban
2A19	874324.49	1066591.52	94.07	874323.22	1066593.96	94.02	1.27	-2.44	0.05	2.75	Urban
2A19	874324.49	1066591.52	94.07	874325.60	1066592.04	94.13	-1.11	-0.52	-0.06	1.23	Urban
2A19	874324.49	1066591.52	94.07	874321.83	1066592.20	94.17	2.66	-0.68	-0.10	2.75	Urban
2A21	874495.17	1066560.85	93.65	874494.44	1066560.07	93.68	0.73	0.78	-0.03	1.07	Short Grass
2A21	874495.17	1066560.85	93.65	874494.60	1066562.06	93.88	0.57	-1.21	-0.23	1.36	Short Grass
2A22	874490.19	1066560.48	93.54	874490.70	1066559.66	93.72	-0.51	0.82	-0.18	0.98	Short Grass
2A23	874489.88	1066551.36	93.37	874488.65	1066552.73	93.33	1.23	-1.37	0.04	1.84	Short Grass
2A25	874494.80	1066541.61	93.56	874491.95	1066540.70	93.49	2.85	0.91	0.07	2.99	Short Grass
2A25	874494.80	1066541.61	93.56	874495.73	1066541.11	93.54	-0.93	0.50	0.02	1.06	Short Grass
2A26	874487.74	1066540.90	93.46	874488.26	1066540.28	93.71	-0.52	0.62	-0.25	0.85	Short Grass
2A27	874486.80	1066532.12	93.49	874485.83	1066533.08	93.68	0.97	-0.96	-0.19	1.38	Short Grass
2A28	874493.24	1066531.10	93.47	874495.07	1066529.90	93.55	-1.83	1.20	-0.08	2.19	Short Grass
2A28	874493.24	1066531.10	93.47	874493.23	1066533.89	93.51	0.01	-2.79	-0.04	2.79	Short Grass
2A28	874493.24	1066531.10	93.47	874491.32	1066529.47	93.75	1.92	1.63	-0.28	2.53	Short Grass
2A29	874493.44	1066523.23	93.49	874492.71	1066524.16	93.72	0.73	-0.93	-0.23	1.20	Short Grass
2A29	874493.44	1066523.23	93.49	874492.45	1066522.12	93.49	0.99	1.11	0.00	1.49	Short Grass
2A29	874493.44	1066523.23	93.49	874496.20	1066522.51	93.75	-2.76	0.72	-0.26	2.86	Short Grass
2A30	874487.58	1066522.58	93.54	874485.21	1066523.33	93.51	2.37	-0.75	0.03	2.49	Short Grass
2A30	874487.58	1066522.58	93.54	874485.06	1066521.32	93.44	2.52	1.26	0.10	2.82	Short Grass
2A30	874487.58	1066522.58	93.54	874488.76	1066521.71	93.73	-1.18	0.87	-0.19	1.48	Short Grass
2A30	874487.58	1066522.58	93.54	874488.95	1066523.75	93.53	-1.37	-1.17	0.01	1.80	Short Grass
2A31	874487.64	1066509.10	93.46	874487.95	1066509.57	93.73	-0.31	-0.47	-0.27	0.62	Short Grass
2A31	874487.64	1066509.10	93.46	874487.78	1066511.48	93.50	-0.14	-2.38	-0.04	2.38	Short Grass
2A32	874493.51	1066508.61	93.47	874491.69	1066509.97	93.65	1.82	-1.36	-0.18	2.28	Short Grass
2A32	874493.51	1066508.61	93.47	874495.37	1066510.38	93.47	-1.86	-1.77	0.00	2.57	Short Grass
2A32	874493.51	1066508.61	93.47	874493.00	1066506.22	93.52	0.51	2.39	-0.05	2.44	Short Grass
2A33	874494.25	1066499.75	93.48	874493.64	1066500.37	93.54	0.61	-0.62	-0.06	0.87	Short Grass
2A33	874494.25	1066499.75	93.48	874492.27	1066498.31	93.68	1.98	1.44	-0.20	2.46	Short Grass
2A33	874494.25	1066499.75	93.48	874496.07	1066498.71	93.66	-1.82	1.04	-0.18	2.10	Short Grass
2A34	874486.61	1066499.18	93.48	874486.21	1066499.55	93.51	0.40	-0.37	-0.03	0.55	Short Grass
2A34	874486.61	1066499.18	93.48	874484.91	1066497.52	93.69	1.70	1.66	-0.21	2.39	Short Grass
2A34	874486.61	1066499.18	93.48	874488.60	1066497.93	93.49	-1.99	1.25	-0.01	2.35	Short Grass
2A35	874486.08	1066492.14	93.54	874488.03	1066492.30	93.67	-1.95	-0.16	-0.13	1.96	Short Grass
2A35	874486.08	1066492.14	93.54	874484.35	1066491.92	93.54	1.73	0.22	0.00	1.74	Short Grass

2A35	874486.08	1066492.14	93.54	874484.70	1066493.89	93.70	1.38	-1.75	-0.16	2.23	Short Grass
2A36	874492.59	1066491.22	93.54	874491.76	1066492.70	93.69	0.83	-1.48	-0.15	1.70	Short Grass
2A36	874492.59	1066491.22	93.54	874493.55	1066488.87	93.60	-0.96	2.35	-0.06	2.54	Short Grass
2A37	874489.99	1066492.79	93.52	874492.16	1066494.70	93.75	-2.17	-1.91	-0.23	2.90	Short Grass
2A37	874489.99	1066492.79	93.52	874488.03	1066492.30	93.67	1.96	0.49	-0.15	2.03	Short Grass
2A37	874489.99	1066492.79	93.52	874491.76	1066492.70	93.69	-1.77	0.09	-0.17	1.78	Short Grass
2A37	874489.99	1066492.79	93.52	874488.42	1066494.31	93.47	1.57	-1.52	0.05	2.19	Short Grass
2A38	874490.30	1066500.00	93.53	874488.60	1066497.93	93.49	1.70	2.07	0.04	2.68	Short Grass
2A38	874490.30	1066500.00	93.53	874492.27	1066498.31	93.68	-1.97	1.69	-0.15	2.60	Short Grass
2A38	874490.30	1066500.00	93.53	874489.89	1066499.95	93.72	0.41	0.05	-0.19	0.45	Short Grass
2A39	874490.61	1066506.33	93.49	874493.00	1066506.22	93.52	-2.39	0.11	-0.03	2.39	Short Grass
2A39	874490.61	1066506.33	93.49	874492.22	1066504.02	93.46	-1.61	2.31	0.03	2.82	Short Grass
2A39	874490.61	1066506.33	93.49	874489.30	1066505.81	93.49	1.31	0.52	0.00	1.41	Short Grass
2A40	874491.29	1066512.49	93.46	874491.53	1066511.89	93.65	-0.24	0.60	-0.19	0.67	Short Grass
2A40	874491.29	1066512.49	93.46	874491.69	1066509.97	93.65	-0.40	2.52	-0.19	2.56	Short Grass
3A1	852103.31	1045571.51	141.28	852103.42	1045573.17	141.23	-0.11	-1.66	0.05	1.66	Urban
3A1	852103.31	1045571.51	141.28	852104.56	1045571.57	141.16	-1.25	-0.06	0.12	1.26	Urban
3A1	852103.31	1045571.51	141.28	852101.15	1045571.86	141.12	2.16	-0.35	0.16	2.19	Urban
3A2	852097.37	1045574.27	141.11	852099.99	1045573.45	141.07	-2.62	0.82	0.04	2.75	Urban
3A2	852097.37	1045574.27	141.11	852097.99	1045575.84	141.01	-0.62	-1.57	0.10	1.69	Urban
3A2	852097.37	1045574.27	141.11	852097.59	1045572.15	141.06	-0.22	2.12	0.05	2.13	Urban
3A2	852097.37	1045574.27	141.11	852099.04	1045576.55	141.14	-1.67	-2.28	-0.03	2.83	Urban
3A3	852097.11	1045587.78	141.13	852097.34	1045589.21	141.01	-0.23	-1.43	0.12	1.45	Urban
3A3	852097.11	1045587.78	141.13	852095.58	1045586.10	140.95	1.53	1.68	0.18	2.28	Urban
3A3	852097.11	1045587.78	141.13	852099.06	1045585.81	141.03	-1.95	1.97	0.10	2.77	Urban
3A3	852097.11	1045587.78	141.13	852097.30	1045590.60	140.94	-0.19	-2.82	0.19	2.83	Urban
3A3	852097.11	1045587.78	141.13	852097.59	1045586.87	141.07	-0.48	0.91	0.06	1.03	Urban
3A4	852103.14	1045588.40	141.28	852104.28	1045590.05	141.30	-1.14	-1.65	-0.02	2.01	Urban
3A4	852103.14	1045588.40	141.28	852104.64	1045586.30	141.20	-1.50	2.10	0.08	2.58	Urban
3A4	852103.14	1045588.40	141.28	852102.55	1045585.52	141.14	0.59	2.88	0.14	2.94	Urban
3A4	852103.14	1045588.40	141.28	852104.30	1045588.63	141.19	-1.16	-0.23	0.09	1.19	Urban
3A4	852103.14	1045588.40	141.28	852100.86	1045588.92	141.16	2.28	-0.52	0.12	2.34	Urban
3A5	852103.34	1045602.67	141.27	852105.17	1045600.87	141.19	-1.83	1.80	0.08	2.57	Urban
3A5	852103.34	1045602.67	141.27	852101.64	1045601.15	141.11	1.70	1.52	0.16	2.29	Urban
3A5	852103.34	1045602.67	141.27	852104.98	1045604.67	141.12	-1.64	-2.00	0.15	2.59	Urban
3A5	852103.34	1045602.67	141.27	852105.41	1045603.64	141.24	-2.07	-0.97	0.03	2.29	Urban
3A5	852103.34	1045602.67	141.27	852101.92	1045603.92	141.07	1.42	-1.25	0.20	1.90	Urban
3A6	852097.42	1045604.05	141.16	852098.14	1045601.43	140.98	-0.72	2.62	0.18	2.72	Urban
3A6	852097.42	1045604.05	141.16	852097.98	1045605.25	141.10	-0.56	-1.20	0.06	1.33	Urban
3A6	852097.42	1045604.05	141.16	852094.99	1045604.50	141.02	2.43	-0.45	0.14	2.48	Urban
3A6	852097.42	1045604.05	141.16	852098.42	1045604.22	140.96	-1.00	-0.17	0.20	1.03	Urban
3A7	852097.48	1045615.96	141.13	852096.29	1045615.45	140.98	1.19	0.51	0.15	1.30	Urban
3A7	852097.48	1045615.96	141.13	852100.27	1045616.13	141.02	-2.79	-0.17	0.11	2.80	Urban
3A7	852097.48	1045615.96	141.13	852099.07	1045618.47	140.98	-1.59	-2.51	0.15	2.98	Urban
3A7	852097.48	1045615.96	141.13	852099.78	1045615.16	141.07	-2.30	0.80	0.06	2.44	Urban
3A8	852103.44	1045616.22	141.23	852103.81	1045615.84	141.02	-0.37	0.38	0.21	0.57	Urban
3A8	852103.44	1045616.22	141.23	852103.23	1045614.87	141.04	0.21	1.35	0.19	1.38	Urban
3A9	852103.33	1045631.36	141.24	852104.93	1045629.83	141.08	-1.60	1.53	0.16	2.22	Urban

3A9	852103.33	1045631.36	141.24	852101.45	1045630.13	141.19	1.88	1.23	0.05	2.25	Urban
3A9	852103.33	1045631.36	141.24	852103.21	1045631.52	141.06	0.12	-0.16	0.18	0.27	Urban
3A10	852097.67	1045632.67	141.13	852099.71	1045631.81	141.20	-2.04	0.86	-0.07	2.21	Urban
3A10	852097.67	1045632.67	141.13	852096.20	1045632.09	140.97	1.47	0.58	0.16	1.59	Urban
3A10	852097.67	1045632.67	141.13	852099.12	1045635.06	141.14	-1.45	-2.39	-0.01	2.80	Urban
3A11	852097.97	1045649.21	141.11	852096.79	1045651.09	140.94	1.18	-1.88	0.17	2.23	Urban
3A11	852097.97	1045649.21	141.11	852100.09	1045647.61	141.12	-2.12	1.60	-0.01	2.66	Urban
3A11	852097.97	1045649.21	141.11	852100.25	1045650.79	140.93	-2.28	-1.58	0.18	2.78	Urban
3A11	852097.97	1045649.21	141.11	852097.76	1045648.93	140.89	0.21	0.28	0.22	0.41	Urban
3A12	852104.04	1045649.83	141.23	852104.62	1045651.63	141.10	-0.58	-1.80	0.13	1.90	Urban
3A12	852104.04	1045649.83	141.23	852103.81	1045650.50	141.16	0.23	-0.67	0.07	0.71	Urban
3A12	852104.04	1045649.83	141.23	852104.81	1045648.35	141.15	-0.77	1.48	0.08	1.67	Urban
3A13	852103.18	1045664.74	141.21	852104.19	1045663.10	141.08	-1.01	1.64	0.13	1.93	Urban
3A13	852103.18	1045664.74	141.21	852104.10	1045664.53	141.01	-0.92	0.21	0.20	0.96	Urban
3A14	852097.84	1045665.37	141.05	852100.55	1045664.82	140.96	-2.71	0.55	0.09	2.77	Urban
3A14	852097.84	1045665.37	141.05	852097.23	1045663.69	140.84	0.61	1.68	0.21	1.80	Urban
3A15	852097.84	1045678.02	141.03	852096.98	1045678.09	140.83	0.86	-0.07	0.20	0.89	Urban
3A15	852097.84	1045678.02	141.03	852100.49	1045677.80	140.85	-2.65	0.22	0.18	2.67	Urban
3A15	852097.84	1045678.02	141.03	852098.87	1045676.22	140.89	-1.03	1.80	0.14	2.08	Urban
3A16	852053.16	1045730.59	141.06	852053.92	1045731.53	141.14	-0.76	-0.94	-0.08	1.21	Brush
3A16	852053.16	1045730.59	141.06	852050.47	1045731.30	141.12	2.69	-0.71	-0.06	2.78	Brush
3A17	852047.22	1045730.84	141.09	852047.57	1045732.93	140.99	-0.35	-2.09	0.10	2.12	Brush
3A17	852047.22	1045730.84	141.09	852046.98	1045731.07	141.17	0.24	-0.23	-0.08	0.34	Brush
3A18	852047.19	1045739.85	140.93	852048.90	1045741.90	140.90	-1.71	-2.05	0.03	2.67	Brush
3A18	852047.19	1045739.85	140.93	852046.84	1045737.99	141.05	0.35	1.86	-0.12	1.90	Brush
3A18	852047.19	1045739.85	140.93	852045.35	1045741.66	140.84	1.84	-1.81	0.09	2.58	Brush
3A19	852052.54	1045739.45	140.94	852050.28	1045738.20	140.94	2.26	1.25	0.00	2.58	Brush
3A19	852052.54	1045739.45	140.94	852053.77	1045738.42	141.06	-1.23	1.03	-0.12	1.61	Brush
3A19	852052.54	1045739.45	140.94	852052.09	1045736.61	141.14	0.45	2.84	-0.20	2.88	Brush
3A19	852052.54	1045739.45	140.94	852052.38	1045742.13	140.92	0.16	-2.68	0.02	2.68	Brush
3A20	852053.14	1045748.84	140.79	852055.81	1045747.88	140.64	-2.67	0.96	0.15	2.84	Brush
3A20	852053.14	1045748.84	140.79	852054.88	1045749.49	140.87	-1.74	-0.65	-0.08	1.86	Brush
3A20	852053.14	1045748.84	140.79	852051.45	1045749.28	140.88	1.69	-0.44	-0.09	1.75	Brush
3A20	852053.14	1045748.84	140.79	852052.29	1045747.65	140.90	0.85	1.19	-0.11	1.47	Brush
3A21	852047.47	1045749.35	140.64	852048.83	1045747.42	140.74	-1.36	1.93	-0.10	2.36	Brush
3A21	852047.47	1045749.35	140.64	852047.97	1045749.06	140.74	-0.50	0.29	-0.10	0.59	Brush
3A22	852047.82	1045759.02	140.54	852048.32	1045759.99	140.70	-0.50	-0.97	-0.16	1.10	Brush
3A22	852047.82	1045759.02	140.54	852047.36	1045758.20	140.34	0.46	0.82	0.20	0.96	Brush
3A23	852053.69	1045759.48	140.93	852051.79	1045760.21	140.88	1.90	-0.73	0.05	2.04	Brush
3A23	852053.69	1045759.48	140.93	852054.27	1045758.65	140.98	-0.58	0.83	-0.05	1.01	Brush
3A23	852053.69	1045759.48	140.93	852055.25	1045760.43	140.79	-1.56	-0.95	0.14	1.83	Brush
3A24	852052.60	1045772.00	140.92	852052.62	1045769.06	141.01	-0.02	2.94	-0.09	2.94	Brush
3A24	852052.60	1045772.00	140.92	852052.99	1045774.73	140.99	-0.39	-2.73	-0.07	2.76	Brush
3A24	852052.60	1045772.00	140.92	852052.86	1045770.91	141.05	-0.26	1.09	-0.13	1.13	Brush
3A25	852047.12	1045772.31	140.59	852049.41	1045770.70	140.71	-2.29	1.61	-0.12	2.80	Brush
3A25	852047.12	1045772.31	140.59	852046.06	1045774.27	140.34	1.06	-1.96	0.25	2.24	Brush
3A25	852047.12	1045772.31	140.59	852045.94	1045770.48	140.47	1.18	1.83	0.12	2.18	Brush
3A26	852046.65	1045784.66	140.65	852046.07	1045786.59	140.52	0.58	-1.93	0.13	2.02	Brush

3A26	852046.65	1045784.66	140.65	852045.24	1045784.60	140.68	1.41	0.06	-0.03	1.41	Brush
3A26	852046.65	1045784.66	140.65	852048.71	1045784.84	140.63	-2.06	-0.18	0.02	2.07	Brush
3A27	852051.29	1045785.52	140.77	852048.71	1045784.84	140.63	2.58	0.68	0.14	2.67	Brush
3A27	852051.29	1045785.52	140.77	852052.98	1045787.04	140.80	-1.69	-1.52	-0.03	2.27	Brush
3A27	852051.29	1045785.52	140.77	852049.53	1045786.81	140.86	1.76	-1.29	-0.09	2.18	Brush
3A27	852051.29	1045785.52	140.77	852052.23	1045785.08	140.90	-0.94	0.44	-0.13	1.05	Brush
3A28	852050.69	1045796.90	140.76	852051.57	1045795.35	140.87	-0.88	1.55	-0.11	1.79	Brush
3A28	852050.69	1045796.90	140.76	852052.25	1045796.98	140.86	-1.56	-0.08	-0.10	1.57	Brush
3A28	852050.69	1045796.90	140.76	852048.75	1045796.75	140.74	1.94	0.15	0.02	1.95	Brush
3A29	852046.54	1045796.66	140.60	852044.60	1045794.87	140.59	1.94	1.79	0.01	2.64	Brush
3A29	852046.54	1045796.66	140.60	852048.09	1045795.12	140.65	-1.55	1.54	-0.05	2.19	Brush
3A29	852046.54	1045796.66	140.60	852048.75	1045796.75	140.74	-2.21	-0.09	-0.14	2.22	Brush
3A29	852046.54	1045796.66	140.60	852045.32	1045796.53	140.28	1.22	0.13	0.32	1.27	Brush
3A30	852046.81	1045807.00	140.45	852047.23	1045807.64	140.55	-0.42	-0.64	-0.10	0.77	Brush
3A30	852046.81	1045807.00	140.45	852044.38	1045805.81	140.46	2.43	1.19	-0.01	2.71	Brush
3A30	852046.81	1045807.00	140.45	852047.88	1045806.06	140.54	-1.07	0.94	-0.09	1.43	Brush
3A31	852118.66	1045579.75	141.42	852119.34	1045582.16	141.37	-0.68	-2.41	0.05	2.50	Short Grass
3A31	852118.66	1045579.75	141.42	852120.21	1045577.92	141.38	-1.55	1.83	0.04	2.40	Short Grass
3A31	852118.66	1045579.75	141.42	852118.70	1045580.91	141.35	-0.04	-1.16	0.07	1.16	Short Grass
3A31	852118.66	1045579.75	141.42	852118.66	1045576.82	141.28	0.00	2.93	0.14	2.93	Short Grass
3A31	852118.66	1045579.75	141.42	852116.63	1045578.21	141.31	2.03	1.54	0.11	2.55	Short Grass
3A32	852113.68	1045580.56	141.42	852115.81	1045582.45	141.35	-2.13	-1.89	0.07	2.85	Short Grass
3A32	852113.68	1045580.56	141.42	852113.10	1045578.50	141.35	0.58	2.06	0.07	2.14	Short Grass
3A32	852113.68	1045580.56	141.42	852111.63	1045581.51	141.40	2.05	-0.95	0.02	2.26	Short Grass
3A33	852112.99	1045589.97	141.38	852114.85	1045587.75	141.39	-1.86	2.22	-0.01	2.90	Short Grass
3A33	852112.99	1045589.97	141.38	852111.52	1045592.27	141.31	1.47	-2.30	0.07	2.73	Short Grass
3A33	852112.99	1045589.97	141.38	852111.33	1045589.47	141.32	1.66	0.50	0.06	1.73	Short Grass
3A33	852112.99	1045589.97	141.38	852114.84	1045589.19	141.27	-1.85	0.78	0.11	2.01	Short Grass
3A33	852112.99	1045589.97	141.38	852111.34	1045588.04	141.32	1.65	1.93	0.06	2.54	Short Grass
3A34	852118.06	1045590.65	141.41	852117.70	1045592.79	141.37	0.36	-2.14	0.04	2.17	Short Grass
3A34	852118.06	1045590.65	141.41	852118.40	1045588.90	141.33	-0.34	1.75	0.08	1.78	Short Grass
3A34	852118.06	1045590.65	141.41	852118.61	1045591.67	141.36	-0.55	-1.02	0.05	1.16	Short Grass
3A35	852119.04	1045600.84	141.36	852119.38	1045599.72	141.34	-0.34	1.12	0.02	1.17	Short Grass
3A35	852119.04	1045600.84	141.36	852119.43	1045602.46	141.37	-0.39	-1.62	-0.01	1.67	Short Grass
3A35	852119.04	1045600.84	141.36	852119.22	1045603.51	141.31	-0.18	-2.67	0.05	2.68	Short Grass
3A35	852119.04	1045600.84	141.36	852119.33	1045598.15	141.37	-0.29	2.69	-0.01	2.71	Short Grass
3A36	852114.17	1045601.63	141.35	852112.40	1045603.05	141.31	1.77	-1.42	0.04	2.27	Short Grass
3A36	852114.17	1045601.63	141.35	852115.83	1045600.00	141.27	-1.66	1.63	0.08	2.33	Short Grass
3A36	852114.17	1045601.63	141.35	852115.94	1045602.75	141.31	-1.77	-1.12	0.04	2.09	Short Grass
3A36	852114.17	1045601.63	141.35	852115.62	1045603.81	141.19	-1.45	-2.18	0.16	2.62	Short Grass
3A37	852113.31	1045610.73	141.36	852114.96	1045611.40	141.20	-1.65	-0.67	0.16	1.79	Short Grass
3A37	852113.31	1045610.73	141.36	852113.17	1045609.96	141.21	0.14	0.77	0.15	0.80	Short Grass
3A37	852113.31	1045610.73	141.36	852111.44	1045611.69	141.48	1.87	-0.96	-0.12	2.11	Short Grass
3A38	852117.78	1045610.84	141.32	852114.96	1045611.40	141.20	2.82	-0.56	0.12	2.88	Short Grass
3A38	852117.78	1045610.84	141.32	852117.35	1045613.69	141.25	0.43	-2.85	0.07	2.88	Short Grass
3A38	852117.78	1045610.84	141.32	852120.26	1045609.37	141.42	-2.48	1.47	-0.10	2.88	Short Grass
3A38	852117.78	1045610.84	141.32	852118.58	1045611.11	141.32	-0.80	-0.27	0.00	0.84	Short Grass
3A38	852117.78	1045610.84	141.32	852116.74	1045609.66	141.39	1.04	1.18	-0.07	1.57	Short Grass

3A39	852119.17	1045620.85	141.34	852116.33	1045621.43	141.25	2.84	-0.58	0.09	2.90	Short Grass
3A39	852119.17	1045620.85	141.34	852119.93	1045621.13	141.34	-0.76	-0.28	0.00	0.81	Short Grass
3A39	852119.17	1045620.85	141.34	852119.79	1045622.53	141.32	-0.62	-1.68	0.02	1.79	Short Grass
3A40	852113.89	1045621.49	141.33	852112.79	1045621.73	141.19	1.10	-0.24	0.14	1.13	Short Grass
3A40	852113.89	1045621.49	141.33	852113.28	1045618.59	141.22	0.61	2.90	0.11	2.97	Short Grass
3A40	852113.89	1045621.49	141.33	852112.68	1045623.11	141.22	1.21	-1.62	0.11	2.02	Short Grass
3A40	852113.89	1045621.49	141.33	852116.33	1045621.43	141.25	-2.44	0.06	0.08	2.44	Short Grass
3A41	852113.36	1045631.90	141.33	852112.00	1045629.24	141.40	1.36	2.66	-0.07	2.99	Short Grass
3A41	852113.36	1045631.90	141.33	852113.87	1045630.65	141.21	-0.51	1.25	0.12	1.36	Short Grass
3A41	852113.36	1045631.90	141.33	852113.15	1045633.87	141.28	0.21	-1.97	0.05	1.98	Short Grass
3A42	852119.40	1045632.57	141.28	852119.05	1045634.61	141.24	0.35	-2.04	0.04	2.07	Short Grass
3A42	852119.40	1045632.57	141.28	852121.03	1045630.07	141.34	-1.63	2.50	-0.06	2.99	Short Grass
3A42	852119.40	1045632.57	141.28	852117.46	1045630.36	141.47	1.94	2.21	-0.19	2.95	Short Grass
3A42	852119.40	1045632.57	141.28	852120.28	1045633.26	141.29	-0.88	-0.69	-0.01	1.12	Short Grass
3A42	852119.40	1045632.57	141.28	852116.72	1045633.57	141.40	2.68	-1.00	-0.12	2.86	Short Grass
3A43	852119.56	1045643.74	141.24	852117.73	1045646.12	141.20	1.83	-2.38	0.04	3.00	Short Grass
3A43	852119.56	1045643.74	141.24	852121.31	1045645.81	141.34	-1.75	-2.07	-0.10	2.71	Short Grass
3A43	852119.56	1045643.74	141.24	852121.21	1045642.65	141.28	-1.65	1.09	-0.04	1.98	Short Grass
3A44	852113.61	1045644.49	141.24	852114.07	1045643.23	141.19	-0.46	1.26	0.05	1.34	Short Grass
3A44	852113.61	1045644.49	141.24	852114.16	1045646.42	141.18	-0.55	-1.93	0.06	2.01	Short Grass
3A45	852113.61	1045656.82	141.24	852114.92	1045658.45	141.01	-1.31	-1.63	0.23	2.10	Short Grass
3A45	852113.61	1045656.82	141.24	852114.32	1045659.72	141.16	-0.71	-2.90	0.08	2.99	Short Grass
3A45	852113.61	1045656.82	141.24	852114.63	1045654.03	141.20	-1.02	2.79	0.04	2.97	Short Grass
3A45	852113.61	1045656.82	141.24	852112.37	1045655.95	141.10	1.24	0.87	0.14	1.52	Short Grass
3A45	852113.61	1045656.82	141.24	852115.94	1045655.66	141.15	-2.33	1.16	0.09	2.60	Short Grass
4A1	874132.84	1045108.06	136.40	874132.77	1045107.42	136.51	0.07	0.64	-0.11	0.65	Forest
4A1	874132.84	1045108.06	136.40	874134.62	1045109.19	136.40	-1.78	-1.13	0.00	2.11	Forest
4A2	874130.88	1045099.78	136.20	874133.29	1045101.49	136.29	-2.41	-1.71	-0.09	2.96	Forest
4A2	874130.88	1045099.78	136.20	874131.37	1045099.29	136.16	-0.49	0.49	0.04	0.69	Forest
4A3	874130.90	1045093.89	136.24	874129.26	1045094.71	136.22	1.64	-0.82	0.02	1.83	Forest
4A3	874130.90	1045093.89	136.24	874133.24	1045094.15	136.33	-2.34	-0.26	-0.09	2.36	Forest
4A3	874130.90	1045093.89	136.24	874131.70	1045091.69	136.57	-0.80	2.20	-0.33	2.36	Forest
4A3	874130.90	1045093.89	136.24	874130.79	1045096.02	136.47	0.11	-2.13	-0.23	2.15	Forest
4A4	874128.86	1045084.36	136.13	874127.41	1045086.88	136.05	1.45	-2.52	0.08	2.91	Forest
4A4	874128.86	1045084.36	136.13	874128.09	1045083.30	136.25	0.77	1.06	-0.12	1.32	Forest
4A4	874128.86	1045084.36	136.13	874127.31	1045085.03	136.06	1.55	-0.67	0.07	1.69	Forest
4A4	874128.86	1045084.36	136.13	874131.24	1045084.47	136.33	-2.38	-0.11	-0.20	2.39	Forest
4A5	874127.21	1045074.49	135.96	874125.87	1045073.67	135.85	1.34	0.82	0.11	1.57	Forest
4A5	874127.21	1045074.49	135.96	874127.89	1045075.43	136.14	-0.68	-0.94	-0.18	1.17	Forest
4A5	874127.21	1045074.49	135.96	874127.18	1045071.70	136.04	0.03	2.79	-0.08	2.79	Forest
4A5	874127.21	1045074.49	135.96	874129.81	1045073.11	136.02	-2.60	1.38	-0.06	2.94	Forest
4A5	874127.21	1045074.49	135.96	874126.10	1045076.89	136.01	1.11	-2.40	-0.05	2.64	Forest
4A6	874118.22	1045075.43	135.98	874119.28	1045072.82	135.96	-1.06	2.61	0.02	2.82	Forest
4A6	874118.22	1045075.43	135.98	874118.26	1045078.01	135.83	-0.04	-2.58	0.15	2.58	Forest
4A6	874118.22	1045075.43	135.98	874119.93	1045076.55	135.85	-1.71	-1.12	0.13	2.05	Forest
4A6	874118.22	1045075.43	135.98	874118.00	1045074.82	136.00	0.22	0.61	-0.02	0.65	Forest
4A6	874118.22	1045075.43	135.98	874115.92	1045077.13	136.00	2.30	-1.70	-0.02	2.86	Forest
4A7	874118.55	1045081.15	135.98	874119.67	1045079.90	136.04	-1.12	1.25	-0.06	1.68	Forest

4A7	874118.55	1045081.15	135.98	874115.66	1045080.47	136.05	2.89	0.68	-0.07	2.97	Forest
4A7	874118.55	1045081.15	135.98	874121.25	1045081.47	135.84	-2.70	-0.32	0.14	2.72	Forest
4A8	874118.43	1045087.95	136.12	874119.42	1045088.04	136.31	-0.99	-0.09	-0.19	1.01	Forest
4A8	874118.43	1045087.95	136.12	874119.46	1045086.17	136.10	-1.03	1.78	0.02	2.06	Forest
4A8	874118.43	1045087.95	136.12	874118.96	1045089.36	136.46	-0.53	-1.41	-0.34	1.54	Forest
4A9	874118.69	1045094.78	136.17	874121.32	1045095.85	136.34	-2.63	-1.07	-0.17	2.84	Forest
4A9	874118.69	1045094.78	136.17	874115.91	1045093.95	136.06	2.78	0.83	0.11	2.90	Forest
4A9	874118.69	1045094.78	136.17	874119.92	1045093.38	136.30	-1.23	1.40	-0.13	1.87	Forest
4A9	874118.69	1045094.78	136.17	874117.32	1045096.41	136.13	1.37	-1.63	0.04	2.13	Forest
4A9	874118.69	1045094.78	136.17	874118.95	1045097.71	136.09	-0.26	-2.93	0.08	2.94	Forest
4A10	874118.42	1045102.72	136.17	874117.36	1045103.75	136.34	1.06	-1.03	-0.17	1.49	Forest
4A10	874118.42	1045102.72	136.17	874121.38	1045103.17	136.15	-2.96	-0.45	0.02	2.99	Forest
4A11	874109.43	1045105.32	136.21	874108.18	1045107.06	136.45	1.25	-1.74	-0.24	2.16	Forest
4A11	874109.43	1045105.32	136.21	874109.39	1045104.88	136.13	0.04	0.44	0.08	0.45	Forest
4A12	874106.60	1045098.19	136.16	874109.30	1045097.56	136.27	-2.70	0.63	-0.11	2.77	Forest
4A13	874105.32	1045090.61	136.04	874103.36	1045090.33	136.25	1.96	0.28	-0.21	1.99	Forest
4A13	874105.32	1045090.61	136.04	874107.39	1045089.74	136.10	-2.07	0.87	-0.06	2.25	Forest
4A13	874105.32	1045090.61	136.04	874105.39	1045093.51	136.34	-0.07	-2.90	-0.30	2.92	Forest
4A13	874105.32	1045090.61	136.04	874103.07	1045091.65	136.33	2.25	-1.04	-0.29	2.50	Forest
4A13	874105.32	1045090.61	136.04	874107.07	1045091.07	136.27	-1.75	-0.46	-0.23	1.82	Forest
4A13	874105.32	1045090.61	136.04	874103.62	1045088.46	136.24	1.70	2.15	-0.20	2.75	Forest
4A14	874104.03	1045083.27	136.01	874101.41	1045084.36	135.97	2.62	-1.09	0.04	2.84	Forest
4A14	874104.03	1045083.27	136.01	874103.65	1045082.17	135.91	0.38	1.10	0.10	1.17	Forest
4A14	874104.03	1045083.27	136.01	874105.36	1045083.80	136.12	-1.33	-0.53	-0.11	1.44	Forest
4A15	874102.09	1045074.00	135.82	874103.22	1045075.11	136.04	-1.13	-1.11	-0.22	1.60	Forest
4A15	874102.09	1045074.00	135.82	874100.83	1045072.82	135.68	1.26	1.18	0.14	1.73	Forest
4A16	874092.71	1045074.44	135.75	874090.80	1045072.53	135.66	1.91	1.91	0.09	2.70	Forest
4A16	874092.71	1045074.44	135.75	874091.15	1045076.82	135.90	1.56	-2.38	-0.15	2.85	Forest
4A16	874092.71	1045074.44	135.75	874092.82	1045074.00	135.91	-0.11	0.44	-0.16	0.48	Forest
4A17	874091.85	1045081.77	135.78	874090.34	1045082.05	135.95	1.51	-0.28	-0.17	1.55	Forest
4A17	874091.85	1045081.77	135.78	874091.79	1045080.58	135.95	0.06	1.19	-0.17	1.20	Forest
4A17	874091.85	1045081.77	135.78	874094.39	1045081.47	136.00	-2.54	0.30	-0.22	2.57	Forest
4A17	874091.85	1045081.77	135.78	874091.52	1045083.89	135.77	0.33	-2.12	0.01	2.15	Forest
4A18	874090.00	1045088.51	135.78	874087.94	1045088.99	135.79	2.06	-0.48	-0.01	2.12	Forest
4A18	874090.00	1045088.51	135.78	874091.94	1045088.42	135.78	-1.94	0.09	0.00	1.94	Forest
4A18	874090.00	1045088.51	135.78	874089.43	1045086.08	135.68	0.57	2.43	0.10	2.50	Forest
4A19	874088.55	1045096.01	135.78	874089.33	1045095.77	135.98	-0.78	0.24	-0.20	0.84	Forest
4A19	874088.55	1045096.01	135.78	874088.11	1045097.98	135.95	0.44	-1.97	-0.17	2.03	Forest
4A19	874088.55	1045096.01	135.78	874087.15	1045093.91	135.73	1.40	2.10	0.05	2.52	Forest
4A20	874087.55	1045104.27	135.79	874087.07	1045102.31	135.77	0.48	1.96	0.02	2.02	Forest
4A20	874087.55	1045104.27	135.79	874087.70	1045105.59	135.89	-0.15	-1.32	-0.10	1.33	Forest
4A21	874201.60	1045131.47	136.72	874203.98	1045132.36	137.00	-2.38	-0.89	-0.28	2.56	Short Grass
4A21	874201.60	1045131.47	136.72	874202.83	1045133.85	137.01	-1.23	-2.38	-0.29	2.69	Short Grass
4A21	874201.60	1045131.47	136.72	874200.19	1045132.90	137.04	1.41	-1.43	-0.32	2.03	Short Grass
4A21	874201.60	1045131.47	136.72	874202.23	1045130.49	136.92	-0.63	0.98	-0.20	1.18	Short Grass
4A21	874201.60	1045131.47	136.72	874203.01	1045128.95	136.98	-1.41	2.52	-0.26	2.90	Short Grass
4A22	874196.34	1045132.67	136.73	874194.73	1045131.57	136.82	1.61	1.10	-0.09	1.95	Short Grass
4A22	874196.34	1045132.67	136.73	874195.49	1045130.01	136.90	0.85	2.66	-0.17	2.80	Short Grass

4A22	874196.34	1045132.67	136.73	874198.44	1045131.04	136.87	-2.10	1.63	-0.14	2.66	Short Grass
4A23	874191.27	1045133.88	136.74	874190.92	1045132.11	136.84	0.35	1.77	-0.10	1.81	Short Grass
4A23	874191.27	1045133.88	136.74	874188.74	1045134.52	136.94	2.53	-0.64	-0.20	2.62	Short Grass
4A24	874185.97	1045135.13	136.66	874188.74	1045134.52	136.94	-2.77	0.61	-0.28	2.85	Short Grass
4A24	874185.97	1045135.13	136.66	874184.90	1045135.06	136.93	1.07	0.07	-0.27	1.11	Short Grass
4A24	874185.97	1045135.13	136.66	874187.13	1045132.65	136.65	-1.16	2.48	0.01	2.74	Short Grass
4A24	874185.97	1045135.13	136.66	874183.89	1045136.57	136.83	2.08	-1.44	-0.17	2.54	Short Grass
4A24	874185.97	1045135.13	136.66	874187.73	1045136.02	136.94	-1.76	-0.89	-0.28	1.99	Short Grass
4A25	874187.59	1045142.67	136.76	874188.55	1045140.63	136.91	-0.96	2.04	-0.15	2.26	Short Grass
4A25	874187.59	1045142.67	136.76	874188.63	1045144.63	136.72	-1.04	-1.96	0.04	2.22	Short Grass
4A25	874187.59	1045142.67	136.76	874188.56	1045143.35	136.79	-0.97	-0.68	-0.03	1.18	Short Grass
4A26	874190.00	1045150.77	136.73	874191.00	1045150.93	136.74	-1.00	-0.16	-0.01	1.01	Short Grass
4A26	874190.00	1045150.77	136.73	874187.19	1045151.48	136.87	2.81	-0.71	-0.14	2.90	Short Grass
4A26	874190.00	1045150.77	136.73	874189.82	1045152.92	136.85	0.18	-2.15	-0.12	2.16	Short Grass
4A27	874196.77	1045149.24	136.78	874198.62	1045149.87	136.82	-1.85	-0.63	-0.04	1.95	Short Grass
4A27	874196.77	1045149.24	136.78	874194.82	1045150.41	136.98	1.95	-1.17	-0.20	2.28	Short Grass
4A27	874196.77	1045149.24	136.78	874195.18	1045147.33	137.01	1.59	1.91	-0.23	2.50	Short Grass
4A27	874196.77	1045149.24	136.78	874197.38	1045151.83	136.82	-0.61	-2.59	-0.04	2.66	Short Grass
4A28	874203.13	1045148.02	137.00	874202.73	1045146.24	136.90	0.40	1.78	0.10	1.83	Short Grass
4A28	874203.13	1045148.02	137.00	874202.43	1045149.34	136.94	0.70	-1.32	0.06	1.50	Short Grass
4A29	874202.82	1045140.45	136.84	874203.82	1045141.21	137.09	-1.00	-0.76	-0.25	1.28	Short Grass
4A29	874202.82	1045140.45	136.84	874203.67	1045138.45	136.79	-0.85	2.00	0.05	2.17	Short Grass
4A29	874202.82	1045140.45	136.84	874203.72	1045142.49	137.08	-0.90	-2.04	-0.24	2.24	Short Grass
4A30	874195.00	1045140.76	136.72	874192.40	1045140.08	136.96	2.60	0.68	-0.24	2.70	Short Grass
4A30	874195.00	1045140.76	136.72	874196.15	1045142.29	137.05	-1.15	-1.53	-0.33	1.94	Short Grass
4A31	874303.06	1045094.56	135.18	874302.48	1045097.44	135.26	0.58	-2.88	-0.08	2.94	Urban
4A31	874303.06	1045094.56	135.18	874304.50	1045093.54	135.28	-1.44	1.02	-0.10	1.77	Urban
4A31	874303.06	1045094.56	135.18	874303.04	1045094.76	135.18	0.02	-0.20	0.00	0.20	Urban
4A31	874303.06	1045094.56	135.18	874301.17	1045094.00	135.11	1.89	0.56	0.07	1.97	Urban
4A32	874308.69	1045094.72	135.10	874309.26	1045096.47	135.11	-0.57	-1.75	-0.01	1.84	Urban
4A32	874308.69	1045094.72	135.10	874309.71	1045093.80	135.31	-1.02	0.92	-0.21	1.39	Urban
4A32	874308.69	1045094.72	135.10	874307.92	1045093.06	135.35	0.77	1.66	-0.25	1.85	Urban
4A32	874308.69	1045094.72	135.10	874306.36	1045094.28	135.20	2.33	0.44	-0.10	2.37	Urban
4A33	874308.78	1045087.72	135.08	874308.58	1045085.53	135.01	0.20	2.19	0.07	2.20	Urban
4A33	874308.78	1045087.72	135.08	874309.08	1045090.10	135.05	-0.30	-2.38	0.03	2.40	Urban
4A33	874308.78	1045087.72	135.08	874308.89	1045088.75	135.06	-0.11	-1.03	0.02	1.04	Urban
4A34	874303.50	1045087.83	135.13	874305.23	1045086.02	135.23	-1.73	1.81	-0.10	2.51	Urban
4A34	874303.50	1045087.83	135.13	874301.84	1045086.52	135.27	1.66	1.31	-0.14	2.12	Urban
4A34	874303.50	1045087.83	135.13	874302.07	1045089.73	135.29	1.43	-1.90	-0.16	2.38	Urban
4A34	874303.50	1045087.83	135.13	874305.49	1045089.24	135.20	-1.99	-1.41	-0.07	2.44	Urban
4A35	874303.45	1045083.17	135.11	874301.74	1045085.34	135.10	1.71	-2.17	0.01	2.76	Urban
4A35	874303.45	1045083.17	135.11	874305.63	1045082.37	135.22	-2.18	0.80	-0.11	2.32	Urban
4A35	874303.45	1045083.17	135.11	874302.26	1045082.85	135.05	1.19	0.32	0.06	1.23	Urban
4A35	874303.45	1045083.17	135.11	874305.12	1045084.86	135.17	-1.67	-1.69	-0.06	2.38	Urban
4A36	874308.35	1045082.89	135.04	874307.23	1045081.06	135.10	1.12	1.83	-0.06	2.15	Urban
4A36	874308.35	1045082.89	135.04	874308.58	1045085.53	135.01	-0.23	-2.64	0.03	2.65	Urban
4A36	874308.35	1045082.89	135.04	874308.99	1045081.87	135.06	-0.64	1.02	-0.02	1.20	Urban
4A36	874308.35	1045082.89	135.04	874308.54	1045084.37	135.01	-0.19	-1.48	0.03	1.49	Urban

4A36	874308.35	1045082.89	135.04	874305.63	1045082.37	135.22	2.72	0.52	-0.18	2.78	Urban
4A37	874308.72	1045076.20	135.04	874308.27	1045077.98	135.10	0.45	-1.78	-0.06	1.84	Urban
4A37	874308.72	1045076.20	135.04	874310.60	1045076.22	134.99	-1.88	-0.02	0.05	1.88	Urban
4A37	874308.72	1045076.20	135.04	874307.28	1045076.71	135.26	1.44	-0.51	-0.22	1.54	Urban
4A37	874308.72	1045076.20	135.04	874307.23	1045073.80	135.10	1.49	2.40	-0.06	2.83	Urban
4A38	874302.98	1045075.76	135.03	874300.53	1045074.76	135.03	2.45	1.00	0.00	2.65	Urban
4A38	874302.98	1045075.76	135.03	874303.90	1045074.27	134.99	-0.92	1.49	0.04	1.75	Urban
4A38	874302.98	1045075.76	135.03	874303.89	1045077.18	135.05	-0.91	-1.42	-0.02	1.69	Urban
4A38	874302.98	1045075.76	135.03	874302.83	1045073.39	134.92	0.15	2.37	0.11	2.38	Urban
4A39	874304.41	1045072.50	135.02	874306.23	1045072.92	135.11	-1.82	-0.42	-0.09	1.87	Urban
4A39	874304.41	1045072.50	135.02	874303.90	1045074.27	134.99	0.51	-1.77	0.03	1.84	Urban
4A39	874304.41	1045072.50	135.02	874302.83	1045073.39	134.92	1.58	-0.89	0.10	1.82	Urban
4A39	874304.41	1045072.50	135.02	874303.73	1045070.92	134.99	0.68	1.58	0.03	1.72	Urban
4A40	874310.37	1045073.03	135.00	874309.56	1045072.45	135.23	0.81	0.58	-0.23	1.02	Urban
4A40	874310.37	1045073.03	135.00	874310.58	1045073.31	135.04	-0.21	-0.28	-0.04	0.35	Urban
5A1	853771.39	1035050.72	141.99	853771.52	1035052.08	142.07	-0.13	-1.36	-0.08	1.37	Urban
5A1	853771.39	1035050.72	141.99	853771.84	1035049.68	142.07	-0.45	1.04	-0.08	1.14	Urban
5A2	853771.43	1035043.74	141.96	853771.22	1035044.49	141.83	0.21	-0.75	0.13	0.79	Urban
5A2	853771.43	1035043.74	141.96	853771.08	1035042.27	142.00	0.35	1.47	-0.04	1.51	Urban
5A3	853771.01	1035036.56	141.98	853770.98	1035035.66	141.92	0.03	0.90	0.06	0.90	Urban
5A3	853771.01	1035036.56	141.98	853770.38	1035038.14	142.04	0.63	-1.58	-0.06	1.70	Urban
5A4	853770.90	1035030.48	141.99	853771.35	1035033.31	142.07	-0.45	-2.83	-0.08	2.87	Urban
5A4	853770.90	1035030.48	141.99	853769.61	1035028.50	141.93	1.29	1.98	0.06	2.36	Urban
5A4	853770.90	1035030.48	141.99	853771.18	1035030.24	141.92	-0.28	0.24	0.07	0.38	Urban
5A5	853770.43	1035024.08	141.99	853769.31	1035022.14	141.81	1.12	1.94	0.18	2.25	Urban
5A5	853770.43	1035024.08	141.99	853769.10	1035024.87	142.05	1.33	-0.79	-0.06	1.55	Urban
5A5	853770.43	1035024.08	141.99	853773.01	1035024.46	141.77	-2.58	-0.38	0.22	2.62	Urban
5A5	853770.43	1035024.08	141.99	853769.25	1035026.40	142.02	1.18	-2.32	-0.03	2.60	Urban
5A6	853769.82	1035016.36	141.96	853772.76	1035016.55	141.86	-2.94	-0.19	0.10	2.95	Urban
5A6	853769.82	1035016.36	141.96	853768.85	1035016.95	142.00	0.97	-0.59	-0.04	1.14	Urban
5A6	853769.82	1035016.36	141.96	853771.17	1035014.96	142.11	-1.35	1.40	-0.15	1.95	Urban
5A6	853769.82	1035016.36	141.96	853767.19	1035015.36	142.03	2.63	1.00	-0.07	2.81	Urban
5A7	853770.04	1035009.94	141.95	853769.96	1035008.64	141.78	0.08	1.30	0.17	1.31	Urban
5A7	853770.04	1035009.94	141.95	853770.86	1035011.33	141.84	-0.82	-1.39	0.11	1.62	Urban
5A8	853770.00	1035003.17	141.96	853770.74	1035002.03	141.80	-0.74	1.14	0.16	1.37	Urban
5A8	853770.00	1035003.17	141.96	853770.48	1035003.85	142.04	-0.48	-0.68	-0.08	0.84	Urban
5A9	853768.18	1034995.38	141.91	853767.65	1034995.36	142.07	0.53	0.02	-0.16	0.55	Urban
5A9	853768.18	1034995.38	141.91	853769.14	1034993.22	141.95	-0.96	2.16	-0.04	2.36	Urban
5A10	853758.72	1034994.71	141.93	853757.38	1034994.45	142.03	1.34	0.26	-0.10	1.37	Urban
5A10	853758.72	1034994.71	141.93	853759.87	1034996.15	142.03	-1.15	-1.44	-0.10	1.85	Urban
5A10	853758.72	1034994.71	141.93	853761.26	1034994.04	142.03	-2.54	0.67	-0.10	2.63	Urban
5A11	853758.02	1035000.87	141.84	853759.03	1035001.05	141.82	-1.01	-0.18	0.02	1.03	Urban
5A11	853758.02	1035000.87	141.84	853757.79	1034999.32	141.77	0.23	1.55	0.07	1.57	Urban
5A12	853757.57	1035006.38	141.81	853754.88	1035005.42	141.55	2.69	0.96	0.26	2.87	Urban
5A13	853757.72	1035013.24	141.93	853757.23	1035014.38	141.80	0.49	-1.14	0.13	1.25	Urban
5A13	853757.72	1035013.24	141.93	853755.26	1035012.95	141.86	2.46	0.29	0.07	2.48	Urban
5A13	853757.72	1035013.24	141.93	853759.10	1035012.55	141.81	-1.38	0.69	0.12	1.55	Urban
5A14	853756.64	1035019.35	141.96	853756.89	1035021.04	141.87	-0.25	-1.69	0.09	1.71	Urban

5A14	853756.64	1035019.35	141.96	853755.57	1035016.57	142.01	1.07	2.78	-0.05	2.98	Urban
5A14	853756.64	1035019.35	141.96	853757.11	1035018.13	141.92	-0.47	1.22	0.04	1.31	Urban
5A15	853757.25	1035025.35	141.96	853757.38	1035026.09	142.07	-0.13	-0.74	-0.11	0.76	Urban
5A15	853757.25	1035025.35	141.96	853757.60	1035023.33	141.83	-0.35	2.02	0.13	2.05	Urban
5A15	853757.25	1035025.35	141.96	853757.51	1035027.59	141.84	-0.26	-2.24	0.12	2.26	Urban
5A16	853757.20	1035031.18	141.92	853759.45	1035031.42	141.75	-2.25	-0.24	0.17	2.27	Urban
5A16	853757.20	1035031.18	141.92	853755.58	1035031.82	141.98	1.62	-0.64	-0.06	1.74	Urban
5A16	853757.20	1035031.18	141.92	853757.95	1035029.70	141.84	-0.75	1.48	0.08	1.66	Urban
5A17	853756.90	1035037.12	141.94	853759.29	1035036.84	141.71	-2.39	0.28	0.23	2.42	Urban
5A17	853756.90	1035037.12	141.94	853758.67	1035039.35	141.95	-1.77	-2.23	-0.01	2.85	Urban
5A17	853756.90	1035037.12	141.94	853755.34	1035037.24	141.82	1.56	-0.12	0.12	1.57	Urban
5A17	853756.90	1035037.12	141.94	853755.72	1035034.94	141.83	1.18	2.18	0.11	2.48	Urban
5A18	853757.13	1035044.24	141.96	853759.34	1035043.48	141.75	-2.21	0.76	0.21	2.35	Urban
5A18	853757.13	1035044.24	141.96	853755.50	1035043.88	141.81	1.63	0.36	0.15	1.68	Urban
5A18	853757.13	1035044.24	141.96	853759.50	1035045.67	141.80	-2.37	-1.43	0.16	2.77	Urban
5A18	853757.13	1035044.24	141.96	853755.61	1035046.07	142.05	1.52	-1.83	-0.09	2.38	Urban
5A19	853759.54	1035050.34	141.96	853758.81	1035048.98	141.82	0.73	1.36	0.14	1.55	Urban
5A19	853759.54	1035050.34	141.96	853759.75	1035053.29	141.83	-0.21	-2.95	0.13	2.96	Urban
5A20	853781.93	1035040.66	141.99	853780.22	1035038.85	142.00	1.71	1.81	-0.01	2.49	Urban
5A20	853781.93	1035040.66	141.99	853782.91	1035041.04	142.05	-0.98	-0.38	-0.06	1.05	Urban
5A20	853781.93	1035040.66	141.99	853783.00	1035043.30	141.82	-1.07	-2.64	0.17	2.85	Urban
5A21	853786.11	1035035.75	141.98	853786.07	1035036.51	141.88	0.04	-0.76	0.10	0.77	Urban
5A21	853786.11	1035035.75	141.98	853788.02	1035038.05	141.89	-1.91	-2.30	0.09	2.99	Urban
5A21	853786.11	1035035.75	141.98	853786.69	1035034.07	141.85	-0.58	1.68	0.13	1.78	Urban
5A22	853789.52	1035027.94	141.98	853789.22	1035026.46	141.87	0.30	1.48	0.11	1.51	Urban
5A22	853789.52	1035027.94	141.98	853790.90	1035028.24	141.87	-1.38	-0.30	0.11	1.42	Urban
5A22	853789.52	1035027.94	141.98	853786.95	1035028.65	142.03	2.57	-0.71	-0.05	2.67	Urban
5A23	853790.30	1035018.95	141.96	853789.00	1035020.16	142.04	1.30	-1.21	-0.08	1.78	Urban
5A23	853790.30	1035018.95	141.96	853788.21	1035017.77	141.84	2.09	1.18	0.12	2.40	Urban
5A23	853790.30	1035018.95	141.96	853792.98	1035019.75	141.77	-2.68	-0.80	0.19	2.80	Urban
5A24	853790.79	1035010.13	141.95	853790.47	1035009.29	141.82	0.32	0.84	0.13	0.91	Urban
5A24	853790.79	1035010.13	141.95	853792.51	1035010.81	142.04	-1.72	-0.68	-0.09	1.85	Urban
5A24	853790.79	1035010.13	141.95	853788.52	1035011.20	141.78	2.27	-1.07	0.17	2.52	Urban
5A25	853790.20	1035002.43	141.99	853790.07	1035001.87	142.01	0.13	0.56	-0.02	0.58	Urban
5A25	853790.20	1035002.43	141.99	853789.16	1035004.42	141.91	1.04	-1.99	0.08	2.25	Urban
5A26	853788.16	1034994.31	141.99	853789.31	1034996.04	141.85	-1.15	-1.73	0.14	2.08	Urban
5A26	853788.16	1034994.31	141.99	853787.33	1034993.37	141.79	0.83	0.94	0.20	1.27	Urban
5A27	853785.30	1034987.09	141.97	853783.26	1034985.34	141.88	2.04	1.75	0.09	2.69	Urban
5A27	853785.30	1034987.09	141.97	853786.00	1034987.43	142.07	-0.70	-0.34	-0.10	0.78	Urban
5A27	853785.30	1034987.09	141.97	853787.16	1034984.95	142.04	-1.86	2.14	-0.07	2.84	Urban
5A28	853793.43	1034986.55	141.98	853795.56	1034988.19	142.04	-2.13	-1.64	-0.06	2.69	Urban
5A28	853793.43	1034986.55	141.98	853791.58	1034988.59	142.01	1.85	-2.04	-0.03	2.75	Urban
5A28	853793.43	1034986.55	141.98	853793.86	1034986.61	141.89	-0.43	-0.06	0.09	0.44	Urban
5A28	853793.43	1034986.55	141.98	853795.10	1034984.14	141.82	-1.67	2.41	0.16	2.94	Urban
5A29	853797.30	1034992.22	141.98	853795.18	1034992.57	141.82	2.12	-0.35	0.16	2.15	Urban
5A29	853797.30	1034992.22	141.98	853799.18	1034992.17	141.89	-1.88	0.05	0.09	1.88	Urban
5A29	853797.30	1034992.22	141.98	853796.77	1034990.35	141.87	0.53	1.87	0.11	1.95	Urban
5A30	853799.62	1034998.47	142.00	853802.35	1034998.77	142.15	-2.73	-0.30	-0.15	2.75	Urban

5A30	853799.62	1034998.47	142.00	853798.41	1034999.17	142.12	1.21	-0.70	-0.12	1.40	Urban
5A30	853799.62	1034998.47	142.00	853798.27	1034997.08	142.06	1.35	1.39	-0.06	1.94	Urban
5A31	853769.69	1035059.33	142.04	853771.75	1035058.84	142.08	-2.06	0.49	-0.04	2.12	Urban
5A31	853769.69	1035059.33	142.04	853767.78	1035059.23	141.90	1.91	0.10	0.14	1.92	Urban
5A32	853761.51	1035060.07	142.01	853759.99	1035060.02	142.00	1.52	0.05	0.01	1.52	Urban
5A32	853761.51	1035060.07	142.01	853759.93	1035057.73	141.80	1.58	2.34	0.21	2.83	Urban
5A32	853761.51	1035060.07	142.01	853763.86	1035059.63	141.94	-2.35	0.44	0.07	2.39	Urban
5A33	853761.74	1035071.66	141.94	853761.60	1035069.40	141.78	0.14	2.26	0.16	2.27	Urban
5A33	853761.74	1035071.66	141.94	853761.44	1035072.46	141.78	0.30	-0.80	0.16	0.87	Urban
5A34	853769.53	1035072.37	142.07	853768.94	1035074.07	141.97	0.59	-1.70	0.10	1.80	Urban
5A34	853769.53	1035072.37	142.07	853769.27	1035071.65	142.13	0.26	0.72	-0.06	0.77	Urban
5A35	853769.61	1035081.40	142.07	853771.92	1035082.84	141.91	-2.31	-1.44	0.16	2.73	Urban
5A35	853769.61	1035081.40	142.07	853769.45	1035078.45	142.14	0.16	2.95	-0.07	2.96	Urban
5A35	853769.61	1035081.40	142.07	853770.39	1035080.86	141.98	-0.78	0.54	0.09	0.95	Urban
5A35	853769.61	1035081.40	142.07	853767.98	1035083.24	141.94	1.63	-1.84	0.13	2.46	Urban
5A36	853762.29	1035082.26	141.92	853762.50	1035081.67	141.81	-0.21	0.59	0.11	0.64	Urban
5A36	853762.29	1035082.26	141.92	853760.08	1035084.03	141.72	2.21	-1.77	0.20	2.84	Urban
5A36	853762.29	1035082.26	141.92	853764.04	1035083.64	142.11	-1.75	-1.38	-0.19	2.24	Urban
5A37	853761.77	1035092.12	141.91	853763.45	1035092.01	142.01	-1.68	0.11	-0.10	1.69	Urban
5A37	853761.77	1035092.12	141.91	853760.76	1035089.61	141.89	1.01	2.51	0.02	2.71	Urban
5A37	853761.77	1035092.12	141.91	853761.10	1035094.03	141.69	0.67	-1.91	0.22	2.04	Urban
5A37	853761.77	1035092.12	141.91	853759.53	1035092.40	141.72	2.24	-0.28	0.19	2.27	Urban
5A38	853769.50	1035093.39	142.08	853767.85	1035095.88	142.10	1.65	-2.49	-0.02	2.99	Urban
5A38	853769.50	1035093.39	142.08	853771.26	1035091.20	141.95	-1.76	2.19	0.13	2.81	Urban
5A38	853769.50	1035093.39	142.08	853767.30	1035091.60	141.88	2.20	1.79	0.20	2.84	Urban
5A38	853769.50	1035093.39	142.08	853768.91	1035093.26	142.13	0.59	0.13	-0.05	0.61	Urban
5A39	853769.52	1035102.53	142.07	853771.67	1035103.39	142.20	-2.15	-0.86	-0.13	2.32	Urban
5A39	853769.52	1035102.53	142.07	853767.97	1035101.47	141.94	1.55	1.06	0.13	1.88	Urban
5A39	853769.52	1035102.53	142.07	853767.75	1035103.78	141.93	1.77	-1.25	0.14	2.17	Urban
5A39	853769.52	1035102.53	142.07	853771.91	1035101.06	142.09	-2.39	1.47	-0.02	2.81	Urban
5A40	853761.59	1035102.58	141.92	853760.00	1035104.56	141.95	1.59	-1.98	-0.03	2.54	Urban
5A40	853761.59	1035102.58	141.92	853763.84	1035104.17	141.88	-2.25	-1.59	0.04	2.76	Urban
5A40	853761.59	1035102.58	141.92	853760.21	1035102.27	141.94	1.38	0.31	-0.02	1.41	Urban
5A40	853761.59	1035102.58	141.92	853764.06	1035101.87	141.82	-2.47	0.71	0.10	2.57	Urban
5A41	853760.03	1035108.37	141.88	853759.84	1035109.01	141.77	0.19	-0.64	0.11	0.68	Urban
5A41	853760.03	1035108.37	141.88	853759.90	1035107.13	141.78	0.13	1.24	0.10	1.25	Urban
5A42	853769.47	1035114.65	142.12	853768.50	1035116.32	141.91	0.97	-1.67	0.21	1.94	Urban
5A42	853769.47	1035114.65	142.12	853767.12	1035113.37	141.92	2.35	1.28	0.20	2.68	Urban
5A42	853769.47	1035114.65	142.12	853770.98	1035113.00	142.19	-1.51	1.65	-0.07	2.24	Urban
5A43	853768.70	1035125.72	142.17	853769.67	1035128.28	142.22	-0.97	-2.56	-0.05	2.74	Urban
5A43	853768.70	1035125.72	142.17	853769.57	1035125.88	142.18	-0.87	-0.16	-0.01	0.88	Urban
5A44	853761.30	1035126.28	142.02	853761.78	1035126.68	141.87	-0.48	-0.40	0.15	0.64	Urban
5A44	853761.30	1035126.28	142.02	853761.87	1035129.06	142.09	-0.57	-2.78	-0.07	2.84	Urban
5A45	853761.46	1035138.73	142.08	853759.70	1035136.46	142.11	1.76	2.27	-0.03	2.87	Urban
5A45	853761.46	1035138.73	142.08	853761.59	1035138.48	142.10	-0.13	0.25	-0.02	0.28	Urban
5A46	853769.79	1035138.98	142.23	853769.42	1035137.69	142.00	0.37	1.29	0.23	1.36	Urban
5A46	853769.79	1035138.98	142.23	853771.51	1035140.75	142.33	-1.72	-1.77	-0.10	2.47	Urban
5A47	853769.23	1035153.12	142.28	853771.90	1035152.55	142.35	-2.67	0.57	-0.07	2.73	Urban

5A47	853769.23	1035153.12	142.28	853767.91	1035152.94	142.25	1.32	0.18	0.03	1.33	Urban
5A47	853769.23	1035153.12	142.28	853768.82	1035150.49	142.15	0.41	2.63	0.13	2.66	Urban
5A48	853761.59	1035153.73	142.15	853764.05	1035153.32	142.00	-2.46	0.41	0.15	2.50	Urban
5A48	853761.59	1035153.73	142.15	853761.05	1035151.29	142.21	0.54	2.44	-0.06	2.50	Urban
5A48	853761.59	1035153.73	142.15	853760.19	1035153.71	142.06	1.40	0.02	0.09	1.40	Urban
5A49	853761.48	1035166.02	142.18	853759.92	1035166.83	142.16	1.56	-0.81	0.02	1.76	Urban
5A49	853761.48	1035166.02	142.18	853763.78	1035166.43	142.10	-2.30	-0.41	0.08	2.34	Urban
5A49	853761.48	1035166.02	142.18	853762.44	1035163.50	142.16	-0.96	2.52	0.02	2.70	Urban
5A50	853769.60	1035166.41	142.33	853767.70	1035166.03	142.14	1.90	0.38	0.19	1.95	Urban
5A50	853769.60	1035166.41	142.33	853771.69	1035165.63	142.43	-2.09	0.78	-0.10	2.23	Urban
5A50	853769.60	1035166.41	142.33	853769.92	1035168.31	142.34	-0.32	-1.90	-0.01	1.93	Urban
6A1	874568.82	1029445.35	167.13	874568.44	1029447.52	167.21	0.38	-2.17	-0.08	2.20	Short Grass
6A1	874568.82	1029445.35	167.13	874567.98	1029442.55	167.15	0.84	2.80	-0.02	2.92	Short Grass
6A1	874568.82	1029445.35	167.13	874569.46	1029444.71	167.22	-0.64	0.64	-0.09	0.91	Short Grass
6A2	874574.00	1029444.96	167.15	874575.74	1029443.18	167.09	-1.74	1.78	0.06	2.49	Short Grass
6A2	874574.00	1029444.96	167.15	874573.37	1029445.04	167.16	0.63	-0.08	-0.01	0.64	Short Grass
6A3	874574.04	1029439.52	167.04	874571.86	1029440.36	167.18	2.18	-0.84	-0.14	2.34	Short Grass
6A3	874574.04	1029439.52	167.04	874575.78	1029440.69	167.08	-1.74	-1.17	-0.04	2.10	Short Grass
6A4	874566.12	1029439.12	167.08	874567.89	1029440.03	167.19	-1.77	-0.91	-0.11	1.99	Short Grass
6A4	874566.12	1029439.12	167.08	874563.98	1029439.70	167.40	2.14	-0.58	-0.32	2.24	Short Grass
6A4	874566.12	1029439.12	167.08	874566.48	1029438.79	167.16	-0.36	0.33	-0.08	0.49	Short Grass
6A5	874565.69	1029433.11	167.06	874565.29	1029431.67	167.12	0.40	1.44	-0.06	1.50	Short Grass
6A5	874565.69	1029433.11	167.06	874565.88	1029434.88	167.15	-0.19	-1.77	-0.09	1.78	Short Grass
6A6	874574.59	1029432.66	167.02	874577.09	1029432.66	167.03	-2.50	0.00	-0.01	2.50	Short Grass
6A6	874574.59	1029432.66	167.02	874573.54	1029430.59	167.05	1.05	2.07	-0.03	2.32	Short Grass
6A6	874574.59	1029432.66	167.02	874573.12	1029432.33	167.07	1.47	0.33	-0.05	1.51	Short Grass
6A7	874573.96	1029424.53	166.89	874574.61	1029425.26	166.97	-0.65	-0.73	-0.08	0.98	Short Grass
6A7	874573.96	1029424.53	166.89	874572.87	1029423.15	166.99	1.09	1.38	-0.10	1.76	Short Grass
6A8	874565.86	1029424.03	166.89	874566.70	1029424.60	166.96	-0.84	-0.57	-0.07	1.02	Short Grass
6A8	874565.86	1029424.03	166.89	874565.29	1029426.87	167.03	0.57	-2.84	-0.14	2.90	Short Grass
6A8	874565.86	1029424.03	166.89	874565.10	1029422.53	166.88	0.76	1.50	0.01	1.68	Short Grass
6A9	874574.73	1029422.63	166.86	874574.61	1029425.26	166.97	0.12	-2.63	-0.11	2.64	Short Grass
6A9	874574.73	1029422.63	166.86	874576.80	1029423.46	166.98	-2.07	-0.83	-0.12	2.23	Short Grass
6A9	874574.73	1029422.63	166.86	874572.87	1029423.15	166.99	1.86	-0.52	-0.13	1.94	Short Grass
6A10	874573.43	1029412.81	166.88	874571.66	1029410.65	166.88	1.77	2.16	0.00	2.79	Short Grass
6A10	874573.43	1029412.81	166.88	874575.52	1029410.95	167.20	-2.09	1.86	-0.32	2.82	Short Grass
6A10	874573.43	1029412.81	166.88	874572.13	1029415.24	166.94	1.30	-2.43	-0.06	2.76	Short Grass
6A10	874573.43	1029412.81	166.88	874573.61	1029412.94	166.95	-0.18	-0.13	-0.07	0.23	Short Grass
6A11	874564.92	1029412.54	166.72	874564.38	1029414.62	166.75	0.54	-2.08	-0.03	2.15	Short Grass
6A11	874564.92	1029412.54	166.72	874563.84	1029410.04	166.58	1.08	2.50	0.14	2.73	Short Grass
6A11	874564.92	1029412.54	166.72	874565.75	1029412.29	166.84	-0.83	0.25	-0.12	0.88	Short Grass
6A12	874564.09	1029403.65	166.73	874566.19	1029405.63	166.89	-2.10	-1.98	-0.16	2.89	Short Grass
6A12	874564.09	1029403.65	166.73	874562.30	1029405.32	166.70	1.79	-1.67	0.03	2.45	Short Grass
6A12	874564.09	1029403.65	166.73	874562.15	1029402.04	166.72	1.94	1.61	0.01	2.52	Short Grass
6A12	874564.09	1029403.65	166.73	874567.08	1029403.78	166.85	-2.99	-0.13	-0.12	3.00	Short Grass
6A12	874564.09	1029403.65	166.73	874563.11	1029403.46	166.71	0.98	0.19	0.02	1.00	Short Grass
6A13	874574.83	1029401.83	166.85	874573.89	1029402.98	166.89	0.94	-1.15	-0.04	1.49	Short Grass
6A13	874574.83	1029401.83	166.85	874574.92	1029404.42	166.97	-0.09	-2.59	-0.12	2.59	Short Grass

6A13	874574.83	1029401.83	166.85	874575.11	1029400.41	166.82	-0.28	1.42	0.03	1.45	Short Grass
6A14	874574.39	1029393.30	166.69	874575.50	1029392.02	166.75	-1.11	1.28	-0.06	1.70	Short Grass
6A14	874574.39	1029393.30	166.69	874575.52	1029395.59	166.69	-1.13	-2.29	0.00	2.55	Short Grass
6A14	874574.39	1029393.30	166.69	874573.27	1029394.04	166.70	1.12	-0.74	-0.01	1.34	Short Grass
6A15	874565.85	1029392.61	166.70	874567.63	1029391.37	166.70	-1.78	1.24	0.00	2.17	Short Grass
6A15	874565.85	1029392.61	166.70	874563.64	1029391.05	166.62	2.21	1.56	0.08	2.71	Short Grass
6A15	874565.85	1029392.61	166.70	874567.64	1029394.94	166.68	-1.79	-2.33	0.02	2.94	Short Grass
6A15	874565.85	1029392.61	166.70	874563.73	1029394.62	166.62	2.12	-2.01	0.08	2.92	Short Grass
6A15	874565.85	1029392.61	166.70	874565.48	1029393.41	166.60	0.37	-0.80	0.10	0.89	Short Grass
6A16	874548.77	1029263.08	168.33	874546.89	1029262.29	168.37	1.88	0.79	-0.04	2.04	Brush
6A16	874548.77	1029263.08	168.33	874550.73	1029262.59	168.48	-1.96	0.49	-0.15	2.03	Brush
6A16	874548.77	1029263.08	168.33	874546.39	1029263.56	168.42	2.38	-0.48	-0.09	2.43	Brush
6A16	874548.77	1029263.08	168.33	874550.23	1029263.87	168.37	-1.46	-0.79	-0.04	1.66	Brush
6A17	874543.62	1029263.92	168.30	874542.19	1029265.40	168.36	1.43	-1.48	-0.06	2.06	Brush
6A17	874543.62	1029263.92	168.30	874546.00	1029265.69	168.43	-2.38	-1.77	-0.13	2.97	Brush
6A17	874543.62	1029263.92	168.30	874543.05	1029262.00	168.32	0.57	1.92	-0.02	2.00	Brush
6A17	874543.62	1029263.92	168.30	874546.39	1029263.56	168.42	-2.77	0.36	-0.12	2.80	Brush
6A17	874543.62	1029263.92	168.30	874542.46	1029263.25	168.36	1.16	0.67	-0.06	1.34	Brush
6A18	874543.88	1029257.82	168.27	874542.24	1029259.36	168.33	1.64	-1.54	-0.06	2.25	Brush
6A18	874543.88	1029257.82	168.27	874546.10	1029259.67	168.31	-2.22	-1.85	-0.04	2.89	Brush
6A18	874543.88	1029257.82	168.27	874543.95	1029257.59	168.29	-0.07	0.23	-0.02	0.24	Brush
6A19	874549.97	1029257.24	168.28	874547.81	1029257.88	168.29	2.16	-0.64	-0.01	2.25	Brush
6A19	874549.97	1029257.24	168.28	874549.98	1029259.97	168.42	-0.01	-2.73	-0.14	2.73	Brush
6A19	874549.97	1029257.24	168.28	874550.60	1029255.03	168.30	-0.63	2.21	-0.02	2.30	Brush
6A20	874549.56	1029249.47	168.26	874551.02	1029250.23	168.31	-1.46	-0.76	-0.05	1.65	Brush
6A20	874549.56	1029249.47	168.26	874547.16	1029249.93	168.28	2.40	-0.46	-0.02	2.44	Brush
6A20	874549.56	1029249.47	168.26	874551.21	1029247.41	168.37	-1.65	2.06	-0.11	2.64	Brush
6A20	874549.56	1029249.47	168.26	874550.96	1029251.65	168.37	-1.40	-2.18	-0.11	2.59	Brush
6A21	874543.43	1029249.46	168.27	874543.45	1029246.80	168.23	-0.02	2.66	0.04	2.66	Brush
6A21	874543.43	1029249.46	168.27	874543.24	1029251.04	168.25	0.19	-1.58	0.02	1.59	Brush
6A22	874544.01	1029244.59	168.23	874544.07	1029244.79	168.21	-0.06	-0.20	0.02	0.21	Brush
6A22	874544.01	1029244.59	168.23	874545.09	1029242.21	168.47	-1.08	2.38	-0.24	2.62	Brush
6A22	874544.01	1029244.59	168.23	874543.45	1029246.80	168.23	0.56	-2.21	0.00	2.28	Brush
6A23	874549.61	1029244.11	168.30	874547.86	1029245.08	168.24	1.75	-0.97	0.06	2.00	Brush
6A23	874549.61	1029244.11	168.30	874551.75	1029245.37	168.62	-2.14	-1.26	-0.32	2.50	Brush
6A23	874549.61	1029244.11	168.30	874549.00	1029242.52	168.33	0.61	1.59	-0.03	1.70	Brush
6A24	874552.31	1029237.59	168.22	874554.74	1029237.90	168.36	-2.43	-0.31	-0.14	2.45	Brush
6A24	874552.31	1029237.59	168.22	874550.85	1029237.60	168.39	1.46	-0.01	-0.17	1.47	Brush
6A25	874545.75	1029237.04	168.08	874544.01	1029238.67	168.24	1.74	-1.63	-0.16	2.39	Brush
6A25	874545.75	1029237.04	168.08	874547.03	1029237.31	168.26	-1.28	-0.27	-0.18	1.32	Brush
6A25	874545.75	1029237.04	168.08	874545.57	1029234.12	168.13	0.18	2.92	-0.05	2.93	Brush
6A25	874545.75	1029237.04	168.08	874543.20	1029237.02	168.15	2.55	0.02	-0.07	2.55	Brush
6A26	874545.98	1029231.92	168.06	874545.57	1029234.12	168.13	0.41	-2.20	-0.07	2.24	Brush
6A26	874545.98	1029231.92	168.06	874543.88	1029232.11	168.14	2.10	-0.19	-0.08	2.11	Brush
6A26	874545.98	1029231.92	168.06	874547.76	1029232.41	168.11	-1.78	-0.49	-0.05	1.85	Brush
6A26	874545.98	1029231.92	168.06	874545.24	1029229.92	168.11	0.74	2.00	-0.05	2.13	Brush
6A27	874553.72	1029231.45	168.06	874553.00	1029230.53	168.11	0.72	0.92	-0.05	1.17	Brush
6A27	874553.72	1029231.45	168.06	874551.61	1029232.70	168.26	2.11	-1.25	-0.20	2.46	Brush

6A27	874553.72	1029231.45	168.06	874555.41	1029233.00	168.12	-1.69	-1.55	-0.06	2.29	Brush
6A27	874553.72	1029231.45	168.06	874552.31	1029229.30	168.17	1.41	2.15	-0.11	2.57	Brush
6A28	874554.38	1029225.41	167.78	874555.95	1029227.40	168.00	-1.57	-1.99	-0.22	2.54	Brush
6A28	874554.38	1029225.41	167.78	874556.76	1029225.69	167.88	-2.38	-0.28	-0.10	2.40	Brush
6A28	874554.38	1029225.41	167.78	874552.05	1029227.08	168.11	2.33	-1.67	-0.33	2.89	Brush
6A29	874546.55	1029224.70	167.93	874549.03	1029225.09	168.08	-2.48	-0.39	-0.15	2.51	Brush
6A29	874546.55	1029224.70	167.93	874545.19	1029224.80	168.01	1.36	-0.10	-0.08	1.37	Brush
6A29	874546.55	1029224.70	167.93	874544.25	1029226.47	168.09	2.30	-1.77	-0.16	2.91	Brush
6A30	874548.70	1029216.81	167.92	874550.82	1029218.12	167.98	-2.12	-1.31	-0.06	2.49	Brush
6A30	874548.70	1029216.81	167.92	874546.27	1029216.67	167.95	2.43	0.14	-0.03	2.43	Brush
6A30	874548.70	1029216.81	167.92	874546.96	1029217.82	168.01	1.74	-1.01	-0.09	2.01	Brush
6A30	874548.70	1029216.81	167.92	874549.18	1029214.49	167.95	-0.48	2.32	-0.03	2.37	Brush
6A30	874548.70	1029216.81	167.92	874550.11	1029216.96	167.96	-1.41	-0.15	-0.04	1.42	Brush
6A31	874614.33	1029500.35	166.98	874615.98	1029499.78	166.92	-1.65	0.57	0.06	1.75	Urban
6A31	874614.33	1029500.35	166.98	874614.77	1029501.02	167.02	-0.44	-0.67	-0.04	0.80	Urban
6A32	874618.30	1029496.23	166.84	874619.57	1029498.13	166.95	-1.27	-1.90	-0.11	2.29	Urban
6A32	874618.30	1029496.23	166.84	874616.92	1029496.29	166.90	1.38	-0.06	-0.06	1.38	Urban
6A32	874618.30	1029496.23	166.84	874619.83	1029493.68	166.76	-1.53	2.55	0.08	2.97	Urban
6A32	874618.30	1029496.23	166.84	874620.98	1029496.63	166.88	-2.68	-0.40	-0.04	2.71	Urban
6A33	874622.52	1029492.42	166.74	874623.88	1029494.02	166.81	-1.36	-1.60	-0.07	2.10	Urban
6A33	874622.52	1029492.42	166.74	874619.83	1029493.68	166.76	2.69	-1.26	-0.02	2.97	Urban
6A33	874622.52	1029492.42	166.74	874623.87	1029491.94	166.68	-1.35	0.48	0.06	1.43	Urban
6A33	874622.52	1029492.42	166.74	874619.88	1029491.61	166.75	2.64	0.81	-0.01	2.76	Urban
6A34	874627.25	1029488.97	166.70	874628.80	1029490.32	166.72	-1.55	-1.35	-0.02	2.06	Urban
6A34	874627.25	1029488.97	166.70	874628.21	1029486.85	166.67	-0.96	2.12	0.03	2.33	Urban
6A34	874627.25	1029488.97	166.70	874624.71	1029489.98	166.69	2.54	-1.01	0.01	2.73	Urban
6A34	874627.25	1029488.97	166.70	874627.60	1029488.94	166.70	-0.35	0.03	0.00	0.35	Urban
6A35	874631.66	1029485.32	166.65	874630.97	1029485.14	166.64	0.69	0.18	0.01	0.71	Urban
6A35	874631.66	1029485.32	166.65	874632.24	1029487.18	166.75	-0.58	-1.86	-0.10	1.95	Urban
6A36	874636.70	1029489.71	166.70	874636.31	1029487.52	166.70	0.39	2.19	0.00	2.22	Urban
6A36	874636.70	1029489.71	166.70	874639.67	1029489.93	166.61	-2.97	-0.22	0.09	2.98	Urban
6A36	874636.70	1029489.71	166.70	874635.64	1029489.60	166.67	1.06	0.11	0.03	1.07	Urban
6A37	874633.42	1029494.76	166.73	874631.96	1029494.69	166.98	1.46	0.07	-0.25	1.48	Urban
6A37	874633.42	1029494.76	166.73	874631.89	1029492.59	166.80	1.53	2.17	-0.07	2.66	Urban
6A37	874633.42	1029494.76	166.73	874633.00	1029497.61	166.77	0.42	-2.85	-0.04	2.88	Urban
6A37	874633.42	1029494.76	166.73	874636.05	1029495.05	166.67	-2.63	-0.29	0.06	2.65	Urban
6A38	874630.43	1029499.77	166.80	874631.78	1029499.16	166.82	-1.35	0.61	-0.02	1.48	Urban
6A38	874630.43	1029499.77	166.80	874630.92	1029502.38	166.79	-0.49	-2.61	0.01	2.66	Urban
6A38	874630.43	1029499.77	166.80	874628.97	1029497.28	166.88	1.46	2.49	-0.08	2.89	Urban
6A38	874630.43	1029499.77	166.80	874627.98	1029500.76	166.84	2.45	-0.99	-0.04	2.64	Urban
6A39	874627.62	1029502.61	166.81	874628.23	1029504.84	166.90	-0.61	-2.23	-0.09	2.31	Urban
6A39	874627.62	1029502.61	166.81	874627.98	1029500.76	166.84	-0.36	1.85	-0.03	1.88	Urban
6A39	874627.62	1029502.61	166.81	874626.87	1029502.04	166.88	0.75	0.57	-0.07	0.94	Urban
6A40	874623.02	1029504.36	166.85	874623.76	1029506.70	166.82	-0.74	-2.34	0.03	2.45	Urban
6A40	874623.02	1029504.36	166.85	874622.82	1029501.70	166.91	0.20	2.66	-0.06	2.67	Urban
6A40	874623.02	1029504.36	166.85	874620.17	1029504.18	166.88	2.85	0.18	-0.03	2.86	Urban
6A40	874623.02	1029504.36	166.85	874624.18	1029504.52	166.75	-1.16	-0.16	0.10	1.18	Urban

CONTROL MARK DATA SHEETS

AF7422 *****

AF7422 CBN - This is a Cooperative Base Network Control Station.

AF7422 PACS - This is a Primary Airport Control Station.

AF7422 DESIGNATION - SEBRINGPORT

AF7422 PID - AF7422

AF7422 STATE/COUNTY- FL/HIGHLANDS

AF7422 USGS QUAD - LORIDA (1972)

AF7422

AF7422 *CURRENT SURVEY CONTROL

AF7422* NAD 83(1999)- 27 27 32.29371(N) 081 20 31.11232(W) ADJUSTED

AF7422* NAVD 88 - 17.48 (meters) 57.3 (feet) GPS OBS

AF7422 X - 852,580.400 (meters) COMP

AF7422 Y - -5,599,068.858 (meters) COMP

AF7422 Z - 2,923,432.822 (meters) COMP

AF7422 LAPLACE CORR- -1.89 (seconds) DEFLEC99

AF7422 ELLIP HEIGHT- -8.45 (meters) (05/31/01) GPS OBS

AF7422 GEOID HEIGHT- -25.87 (meters) GEOID03

AF7422

AF7422 HORZ ORDER - B

AF7422 ELLP ORDER - FIFTH CLASS I

AF7422

AF7422.This mark is at Sebring Airport (SEF)

AF7422

AF7422.The horizontal coordinates were established by GPS observations

AF7422.and adjusted by the National Geodetic Survey in May 2001..

AF7422

AF7422.The orthometric height was determined by GPS observations and a

AF7422.high-resolution geoid model.

AF7422

AF7422.GPS derived orthometric heights for airport stations designated as

AF7422.PACS or SACS are published to 2 decimal places. This maintains

AF7422.centimeter relative accuracy between the PACS and SACS. It does

AF7422.not indicate centimeter accuracy relative to other marks which are

AF7422.part of the NAVD 88 network.

AF7422

AF7422.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AF7422

AF7422.The Laplace correction was computed from DEFLEC99 derived deflections.

AF7422

AF7422.The ellipsoidal height was determined by GPS observations

AF7422.and is referenced to NAD 83.

AF7422

AF7422.The geoid height was determined by GEOID03.

AF7422

AF7422; North East Units Scale Factor Converg.

AF7422;SPC FL E - 346,304.783 166,198.006 MT 0.99995527 -0 09 27.7

AF7422;SPC FL E - 1,136,168.28 545,267.96 sFT 0.99995527 -0 09 27.7

AF7422;UTM 17 - 3,037,318.607 466,209.539 MT 0.99961409 -0 09 27.7

AF7422

AF7422! - Elev Factor x Scale Factor = Combined Factor

AF7422!SPC FL E - 1.00000133 x 0.99995527 = 0.99995660

AF7422!UTM 17 - 1.00000133 x 0.99961409 = 0.99961542

AF7422

AF7422: Primary Azimuth Mark Grid Az

AF7422:SPC FL E - SEBRINGPORT AZ MK 136 17 33.0
 AF7422:UTM 17 - SEBRINGPORT AZ MK 136 17 33.0
 AF7422
 AF7422|-----|
 AF7422| PID Reference Object Distance Geod. Az |
 AF7422| dddmmss.s |
 AF7422| AF7467 SEBRINGPORT AZ MK APPROX. 0.8 KM 1360805.3 |
 AF7422|-----|

AF7422
 AF7422 SUPERSEDED SURVEY CONTROL
 AF7422
 AF7422 NAD 83(1990)- 27 27 32.29247(N) 081 20 31.11175(W) AD() B
 AF7422 ELLIP H (09/13/90) -8.51 (m) GP() 4 1
 AF7422 NAVD 88 (11/23/93) 17.47 (m) 57.3 (f) LEVELING 3
 AF7422 NGVD 29 (09/13/90) 17.8 (m) 58. (f) GPS OBS

AF7422
 AF7422.Superseded values are not recommended for survey control.
 AF7422.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AF7422.See file dsdata.txt to determine how the superseded data were derived.

AF7422
 AF7422 _U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML6621037319(NAD 83)
 AF7422 _MARKER: I = METAL ROD
 AF7422 _SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)
 AF7422 _SP_SET: STAINLESS STEEL ROD IN SLEEVE
 AF7422 _STAMPING: SEBRINGPORT 1989
 AF7422 _MARK LOGO: NGS
 AF7422 _PROJECTION: FLUSH
 AF7422 _MAGNETIC: I = MARKER IS A STEEL ROD
 AF7422 _STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD
 AF7422+STABILITY: POSITION/ELEVATION WELL
 AF7422 _SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 AF7422+SATELLITE: SATELLITE OBSERVATIONS - October 13, 2006
 AF7422 _ROD/PIPE-DEPTH: 15.0 meters
 AF7422 _SLEEVE-DEPTH : 0.91 meters

AF7422
 AF7422 HISTORY - Date Condition Report By
 AF7422 HISTORY - 1989 MONUMENTED NGS
 AF7422 HISTORY - 19920709 GOOD
 AF7422 HISTORY - 19930219 GOOD KEISCH
 AF7422 HISTORY - 19960125 GOOD NGS
 AF7422 HISTORY - 19981128 GOOD DENI
 AF7422 HISTORY - 20061013 GOOD INDIV

AF7422
 AF7422
 AF7422 STATION DESCRIPTION
 AF7422

AF7422'DESCRIBED BY NATIONAL GEODETIC SURVEY 1989
 AF7422'THE STATION IS LOCATED ABOUT 10.86 KM (6.75 MI) SOUTHEAST OF SEBRING,
 AF7422'AT THE SEBRING MUNICIPAL AIRPORT AND INDUSTRIAL PARK, IN THE EAST
 AF7422'ANGLE OF THE INTERSECTION OF RUNWAYS 14-32 AND 18-36, IN SECTION 5, T
 AF7422'35 S, R 30 E. OWNERSHIP--SEBRING AIRPORT AUTHORITY, P.O. BOX 32,
 AF7422'SEBRING FL 33870-0032, ED JORDAN - DIRECTOR, AIRPORT AUTHORITY, PHONE
 AF7422'813-655-1324, LARRY HOWARD, PHONE 655-2222. NOTE--PERMISSION MUST BE
 AF7422'OBTAINED BEFORE ENTERING AIRPORT.
 AF7422'TO REACH THE STATION FROM THE JUNCTION OF U.S. HIGHWAYS 27, 98 AND
 AF7422'STATE ROAD 66, ABOUT 8.05 KM (5.00 MI) SOUTH-SOUTHEAST OF SEBRING, GO
 AF7422'EASTERLY FOR 4.45 KM (2.75 MI) ON HIGHWAY 98 TO A RAILROAD CROSSING.

AF7422'CONTINUE STRAIGHT AHEAD AND GO EASTERLY FOR 0.56 KM (0.35 MI) ON AF7422'HIGHWAY 98 TO A FORK, AIRPORT SIGN ON RIGHT. FOLLOW THE LEFT FORK AND AF7422'GO EASTERLY, THEN NORTHERLY FOR 1.65 KM (1.05 MI) ON THE PAVED ROAD TO AF7422'A PAVED ROAD RIGHT, SOUTH ACCESS RD. CONTINUE STRAIGHT AHEAD AND GO AF7422'NORTHEASTERLY FOR 1.98 KM (1.25 MI) ON THE PAVED ROAD, STAYING TO AF7422'LEFT, TO A CURVE RIGHT. BEAR RIGHT AND GO SOUTHEAST FOR 0.26 KM AF7422'(0.15 MI) ON THE PAVED ROAD TO A FENCE OPENING. PASS THROUGH OPENING, AF7422'CONTINUE STRAIGHT AHEAD AND GO SOUTHEAST, THEN SOUTH FOR 0.49 KM AF7422'(0.30 MI) ON THE PAVED ROAD TO A FENCE OPENING. PASS THROUGH OPENING, AF7422'CONTINUE STRAIGHT AHEAD AND GO SOUTH FOR 0.12 KM (0.05 MI) ON THE AF7422'PAVED ROAD TO A PAVED ROAD LEFT, FIRE DEPARTMENT BUILDING IN THE AF7422'SOUTHEAST ANGLE OF ROAD JUNCTION. TURN LEFT AND GO EASTERLY FOR 0.15 AF7422'KM (0.10 MI) ON THE PAVED ROAD, THE SOUTH SIDE OF PARKING LOT AND ON A AF7422'GRAVELED ROAD TO THE WEST EDGE OF A CONCRETE APRON, TERMINAL BUILDING AF7422'ON LEFT. TURN LEFT AND GO NORTH FOR 0.26 KM (0.15 MI) ALONG THE WEST AF7422'EDGE OF APRON, THEN TURN RIGHT AND GO EAST-NORTHEAST FOR 0.24 KM AF7422'(0.15 MI) ACROSS APRON AND ON TAXIWAY TO THE WEST EDGE OF RUNWAY AF7422'18-36. CONTINUE STRAIGHT AHEAD AND GO NORTHEAST FOR 0.13 KM AF7422'(0.10 MI) ACROSS RUNWAY INTERSECTION AND ON GRASS TO THE STATION. AF7422'THE STATION IS RECESSED 7 CM BELOW GROUND. LOCATED 108.20 M AF7422'(355.0 FT) SOUTH FROM THE APPROXIMATE CENTER OF RUNWAY 18-36, 86.26 M AF7422'(283.0 FT) SOUTH FROM THE SOUTH CORNER OF A 1.37 M (4.5 FT) BY 2.44 M AF7422'(8.0 FT) CONCRETE DRAIN, 75.50 M (247.7 FT) NORTH-NORTHWEST FROM THE AF7422'NORTHWEST CORNER OF A 1.37 M (4.5 FT) BY 2.44 M (8.0 FT) CONCRETE AF7422'DRAIN, 59.59 M (195.5 FT) NORTHEAST FROM THE NORTHEAST EDGE OF RUNWAY AF7422'14-32 (300 FEET WIDE AT THIS DATE) AND 3.35 M (11.0 FT) AF7422'SOUTH-SOUTHEAST FROM THE PROLONGATION OF THE CENTERLINE OF AN AF7422'EAST-NORTHEAST TO WEST-SOUTHWEST TAXIWAY. NOTE--ACCESS TO DATUM POINT AF7422'IS HAD THROUGH A 5-INCH LOGO CAP. AF7422'DESCRIBED BY D.F. CALLAHAN.

AF7422

AF7422 STATION RECOVERY (1992)

AF7422

AF7422'RECOVERED 1992

AF7422'RECOVERED IN GOOD CONDITION.

AF7422

AF7422 STATION RECOVERY (1993)

AF7422

AF7422'RECOVERY NOTE BY KEITH AND SCHNARS - LAKELAND 1993

AF7422'RECOVERED IN GOOD CONDITION.

AF7422

AF7422 STATION RECOVERY (1996)

AF7422

AF7422'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1996 (CFS)

AF7422'THE STATION IS LOCATED ABOUT 6.0 MI (9.7 KM) SOUTHEAST OF SEBRING AT AF7422'THE SEBRING REGIONAL AIRPORT AND INDUSTRIAL PARK, IN THE NORTHEAST

AF7422'ANGLE AT THE INTERSECTION OF RUNWAYS 18-36 AND 14-32. OWNERSHIP --

AF7422'SEBRING AIRPORT AUTHORITY, 128 AUTHORITY LANE, SEBRING, FL 33870.

AF7422'DIRECTOR, AIRPORT AUTHORITY - MIKE WILLINGHAM, TELEPHONE (941)

AF7422'655-6444. FBO MANAGER - BOB PETERS, TELEPHONE (941) 655-6455.

AF7422'PERMISSION NEEDED TO ENTER AIRFIELD. TO REACH THE STATION FROM THE AF7422'JUNCTION OF U.S. HIGHWAYS 27, 98, AND STATE HIGHWAYS 25, 66, AND 700

AF7422'ABOUT 4 MI (6.4 KM) SOUTH OF SEBRING, GO EASTERLY ON U.S. HIGHWAY 98

AF7422'AND STATE HIGHWAY 700 FOR 2.75 MI (4.43 KM) TO A RAILROAD CROSSING,

AF7422'CONTINUE EASTERLY FOR 0.35 MI (0.56 KM) TO A SIDE ROAD LEFT AND

AF7422'ENTRANCE TO SEBRING INDUSTRIAL PARK AND AIRPORT. BEAR LEFT AND GO

AF7422'EAST, NORTH, AND NORTHEAST FOR 1.3 MI (2.1 KM) TO SEBRING
AF7422'INTERNATIONAL RACEWAY PARK ENTRANCE ON THE RIGHT. THIS AREA IS NOW IN
AF7422'CONSTRUCTION ZONE, CONTINUE NORTHEAST FOR 0.35 MI (0.56 KM) TO A SIDE
AF7422'ROAD LEFT (SIGN IN Y FOR SEBRING REGIONAL AIRPORT AND INDUSTRIAL
AF7422'PARK). BEAR LEFT AN

AJ7237 *****

AJ7237 DESIGNATION - D 518

AJ7237 PID - AJ7237

AJ7237 STATE/COUNTY- FL/HIGHLANDS

AJ7237 USGS QUAD - CHILDS (1972)

AJ7237

AJ7237 *CURRENT SURVEY CONTROL

AJ7237

AJ7237* NAD 83(1999)- 27 09 52.27940(N) 081 19 42.03186(W) ADJUSTED

AJ7237* NAVD 88 - 50.468 (meters) 165.58 (feet) ADJUSTED

AJ7237

AJ7237 X - 856,174.348 (meters) COMP

AJ7237 Y - -5,613,695.029 (meters) COMP

AJ7237 Z - 2,894,458.235 (meters) COMP

AJ7237 LAPLACE CORR- -2.53 (seconds) DEFLEC99

AJ7237 ELLIP HEIGHT- 25.54 (meters) (12/12/02) GPS OBS

AJ7237 GEOID HEIGHT- -24.92 (meters) GEOID03

AJ7237 DYNAMIC HT - 50.392 (meters) 165.33 (feet) COMP

AJ7237 MODELED GRAV- 979,135.6 (mgal) NAVD 88

AJ7237

AJ7237 HORZ ORDER - FIRST

AJ7237 VERT ORDER - FIRST CLASS II

AJ7237 ELLP ORDER - FOURTH CLASS I

AJ7237

AJ7237.The horizontal coordinates were established by GPS observations

AJ7237.and adjusted by the National Geodetic Survey in December 2002..

AJ7237

AJ7237.The orthometric height was determined by differential leveling

AJ7237.and adjusted by the National Geodetic Survey in February 2002..

AJ7237

AJ7237.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AJ7237

AJ7237.The Laplace correction was computed from DEFLEC99 derived deflections.

AJ7237

AJ7237.The ellipsoidal height was determined by GPS observations

AJ7237.and is referenced to NAD 83.

AJ7237

AJ7237.The geoid height was determined by GEOID03.

AJ7237

AJ7237.The dynamic height is computed by dividing the NAVD 88

AJ7237.geopotential number by the normal gravity value computed on the

AJ7237.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

AJ7237.degrees latitude (g = 980.6199 gals.).

AJ7237

AJ7237.The modeled gravity was interpolated from observed gravity values.

AJ7237

AJ7237;	North	East	Units	Scale	Factor	Converg.
AJ7237;SPC FL E	- 313,675.383	167,459.804	MT	0.99995424	-0 08 59.7	
AJ7237;SPC FL E	- 1,029,116.65	549,407.71	sFT	0.99995424	-0 08 59.7	
AJ7237;UTM 17	- 3,004,700.340	467,470.906	MT	0.99961306	-0 08 59.7	

AJ7237

AJ7237! - Elev Factor x Scale Factor = Combined Factor

AJ7237!SPC FL E - 0.99999599 x 0.99995424 = 0.99995023

AJ7237!UTM 17 - 0.99999599 x 0.99961306 = 0.99960905

AJ7237

AJ7237 SUPERSEDED SURVEY CONTROL

AJ7237
 AJ7237 NAVD 88 (12/12/02) 50.47 (m) 165.6 (f) LEVELING 3
 AJ7237
 AJ7237.Superseded values are not recommended for survey control.
 AJ7237.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AJ7237.See file dsdata.txt to determine how the superseded data were derived.
 AJ7237
 AJ7237_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML6747104700(NAD 83)
 AJ7237_MARKER: F = FLANGE-ENCASED ROD
 AJ7237_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)

AJ7237_STAMPING: D 518 2001 CERP
AJ7237_MARK LOGO: NONE
AJ7237_PROJECTION: RECESSED 5 CENTIMETERS
AJ7237_MAGNETIC: O = OTHER; SEE DESCRIPTION
AJ7237_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AJ7237_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AJ7237+SATELLITE: SATELLITE OBSERVATIONS - April 13, 2002
AJ7237_ROD/PIPE-DEPTH: 24.4 meters

AJ7237
 AJ7237 HISTORY - Date Condition Report By
 AJ7237 HISTORY - 200105 MONUMENTED FOST
 AJ7237 HISTORY - 20020413 GOOD MAPTEC
 AJ7237
 AJ7237 STATION DESCRIPTION
 AJ7237
 AJ7237'DESCRIBED BY CHARLEY FOSTER AND ASSOCIATES 2001 (JB)
 AJ7237'THE MONUMENT IS LOCATED 2.9 MILES (4.67 KM) SOUTH OF BAIRS DEN, FL.
 AJ7237'AND 15.35 MILES (24.70 KM) NORTH OF
 AJ7237'PALMDALE, FL. IN SECTION 16, TOWNSHIP 38 SOUTH, RANGE 30 EAST.
 AJ7237'
 AJ7237'OWNERSHIP IS THE FLORIDA DEPARTMENT OF TRANSPORTATION.
 AJ7237'
 AJ7237'TO REACH THE MONUMENT FROM THE INTERSECTION OF STATE ROAD 70 AND US
 AJ7237'HIGHWAY 27, IN BAIRS DEN, GO SOUTH ON
 AJ7237'US HIGHWAY 27 2.9 MILES (4.67 KM) SOUTH AND THE MONUMENT IS ON THE
 AJ7237'EAST SIDE (LEFT) OF US HIGHWAY 27
 AJ7237'AT THE INTERSECTION OF US HIGHWAY 27 AND WOMBLE RD, NORTHEAST QUADRANT
 AJ7237'OF THE INTERSECTION
 AJ7237'AT FENCE CORNER. THE MONUMENT IS 16.8 MILES (27.04 KM) NORTH OF THE
 AJ7237'JUNCTION OF STATE ROAD 29 AND
 AJ7237'US HIGHWAY 27.
 AJ7237'
 AJ7237'THE MONUMENT IS 76.5 FEET (23.32 M) EAST OF THE CENTERLINE OF THR
 AJ7237'NORTHBOUND LANE OF US HIGHWAY
 AJ7237'27, 43.7 FEET (13.32 M) NORTH OF THE CENTERLINE OF WOMBLE RD., 3.5
 AJ7237'FEET (1.07 M) NORTHWEST OF FENCE
 AJ7237'CORNER AND TELEPHONE BOX NO. 18654, 3.5 FEET (1.07 M) SOUTHEAST OF A
 AJ7237'METAL SIGNPOST AND 1.0 FEET
 AJ7237'(0.30 M) WEST OF A CARSONITE WITNESS POST. NOTE NOTE ACCESS TO THE
 AJ7237'DATUM POINT (THE TOP OF A
 AJ7237'STAINLESS STEEL ROD) IS HAD THROUGH A 5 INCH LOGO CAP. NOTE A MAGNET
 AJ7237'WAS PLACED INSIDE THE PVC
 AJ7237'PIPE.
 AJ7237
 AJ7237 STATION RECOVERY (2002)
 AJ7237

AJ7237'RECOVERY NOTE BY MAPTECH INCORPORATED 2002 (CDP)
AJ7237'RECOVERED AS DESCRIBED
AJ7237'

AJ7235 *****

AJ7235 DESIGNATION - A 518

AJ7235 PID - AJ7235

AJ7235 STATE/COUNTY- FL/HIGHLANDS

AJ7235 USGS QUAD - CHILDS (1972)

AJ7235

AJ7235 *CURRENT SURVEY CONTROL

AJ7235

AJ7235* NAD 83(1999)- 27 12 26.16974(N) 081 19 44.24947(W) ADJUSTED

AJ7235* NAVD 88 - 41.515 (meters) 136.20 (feet) ADJUSTED

AJ7235

AJ7235 X - 855,786.517 (meters) COMP

AJ7235 Y - -5,611,556.906 (meters) COMP

AJ7235 Z - 2,898,667.522 (meters) COMP

AJ7235 LAPLACE CORR- -2.53 (seconds) DEFLEC99

AJ7235 ELLIP HEIGHT- 16.48 (meters) (12/09/02) GPS OBS

AJ7235 GEOID HEIGHT- -25.04 (meters) GEOID03

AJ7235 DYNAMIC HT - 41.452 (meters) 136.00 (feet) COMP

AJ7235 MODELED GRAV- 979,136.4 (mgal) NAVD 88

AJ7235

AJ7235 HORZ ORDER - A

AJ7235 VERT ORDER - FIRST CLASS II

AJ7235 ELLP ORDER - FOURTH CLASS I

AJ7235

AJ7235.The horizontal coordinates were established by GPS observations

AJ7235.and adjusted by the National Geodetic Survey in December 2002..

AJ7235

AJ7235.The orthometric height was determined by differential leveling

AJ7235.and adjusted by the National Geodetic Survey in February 2002..

AJ7235

AJ7235.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AJ7235

AJ7235.The Laplace correction was computed from DEFLEC99 derived deflections.

AJ7235

AJ7235.The ellipsoidal height was determined by GPS observations

AJ7235.and is referenced to NAD 83.

AJ7235

AJ7235.The geoid height was determined by GEOID03.

AJ7235

AJ7235.The dynamic height is computed by dividing the NAVD 88

AJ7235.geopotential number by the normal gravity value computed on the

AJ7235.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

AJ7235.degrees latitude (g = 980.6199 gals.).

AJ7235

AJ7235.The modeled gravity was interpolated from observed gravity values.

AJ7235

AJ7235; North East Units Scale Factor Converg.

AJ7235;SPC FL E - 318,411.989 167,411.179 MT 0.99995428 -0 09 01.5

AJ7235;SPC FL E - 1,044,656.67 549,248.18 sFT 0.99995428 -0 09 01.5

AJ7235;UTM 17 - 3,009,435.330 467,422.298 MT 0.99961310 -0 09 01.5

AJ7235

AJ7235! - Elev Factor x Scale Factor = Combined Factor

AJ7235!SPC FL E - 0.99999741 x 0.99995428 = 0.99995169

AJ7235!UTM 17 - 0.99999741 x 0.99961310 = 0.99961051

AJ7235

AJ7235 SUPERSEDED SURVEY CONTROL

AJ7235
 AJ7235 NAVD 88 (12/09/02) 41.52 (m) 136.2 (f) LEVELING 3
 AJ7235
 AJ7235.Superseded values are not recommended for survey control.
 AJ7235.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AJ7235.See file dsdata.txt to determine how the superseded data were derived.
 AJ7235
 AJ7235_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML6742209435(NAD 83)
 AJ7235_MARKER: F = FLANGE-ENCASED ROD
 AJ7235_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
 AJ7235_STAMPING: A 518 2001 CERP
 AJ7235_MARK LOGO: NONE
 AJ7235_PROJECTION: RECESSED 3 CENTIMETERS
 AJ7235_MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET
 AJ7235_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
 AJ7235_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 AJ7235+SATELLITE: SATELLITE OBSERVATIONS - April 13, 2002
 AJ7235_ROD/PIPE-DEPTH: 24.7 meters
 AJ7235

AJ7235 HISTORY	- Date	Condition	Report By
AJ7235 HISTORY	- 200105	MONUMENTED	FOST
AJ7235 HISTORY	- 20020212	GOOD	NGS
AJ7235 HISTORY	- 20020413	GOOD	MAPTEC

 AJ7235
 AJ7235 STATION DESCRIPTION
 AJ7235
 AJ7235'DESCRIBED BY CHARLEY FOSTER AND ASSOCIATES 2001 (JB)
 AJ7235'THE MONUMENT IS LOCATED IN BAIRS DEN, FL., 18.25 MILES (29.37 KM)
 AJ7235'NORTH OF PALMDALE, FL. AND 4.0 MILES
 AJ7235'(6.44 KM) SOUTH OF LAKE PLACID, FL. IN SECTION 4, TOWNSHIP 38 SOUTH,
 AJ7235'RANGE 30 EAST.
 AJ7235'
 AJ7235'OWNERSHIP IS THE FLORIDA DEPARTMENT OF TRANSPORTATION.
 AJ7235'
 AJ7235'TO REACH THE MONUMENT FROM THE INTERSECTION OF STATE ROAD 70 AND US
 AJ7235'HIGHWAY 27, IN BAIRS DEN, GO SOUTH ON
 AJ7235'US HIGHWAY 27 0.05 MILES (0.08 KM) AND MONUMENT IS ON THE WEST (RIGHT)
 AJ7235'SIDE OF THE ROAD AND ON THE
 AJ7235'EAST SIDE OF A FENCED IN WELL. THE MONUMENT IS 19.7 MILES (31.70 KM)
 AJ7235'NORTH OF THE JUNCTION OF STATE
 AJ7235'ROAD 29 AND US HIGHWAY 27.
 AJ7235'
 AJ7235'THE MONUMENT IS 61.5 FEET (18.75 M) WEST OF THE CENTERLINE OF THE
 AJ7235'SOUTHBOUND LANE OF US HIGHWAY
 AJ7235'27, 18.2 FEET (5.55 M) NORTHEAST OF THE NORTHEAST CORNER OF WELL
 AJ7235'FENCE, 41.3 FEET (12.59 M)
 AJ7235'SOUTHEAST OF A TELEPHONE JUNCTION BOX, 39.1 FEET (11.92 M) SOUTHWEST
 AJ7235'OF THE THIRD STREET LIGHT
 AJ7235'POLE SOUTH OF THE INTERSECTION OF STATE ROAD 70 AND US 29 AND 13 FEET
 AJ7235'(3.96 M) EAST OF A CARSONITE
 AJ7235'WITNESS POST. NOTE NOTE ACCESS TO THE DATUM POINT (THE TOP OF A
 AJ7235'STAINLESS STEEL ROD) IS HAD
 AJ7235'THROUGH A 5 INCH LOGO CAP. NOTE A MAGNET WAS PLACED INSIDE THE PVC
 AJ7235'PIPE.
 AJ7235
 AJ7235 STATION RECOVERY (2002)

AJ7235
AJ7235'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2002 (RLT)
AJ7235'RECOVER AS DESCRIBED
AJ7235'
AJ7235'
AJ7235'
AJ7235'
AJ7235
AJ7235 STATION RECOVERY (2002)
AJ7235
AJ7235'RECOVERY NOTE BY MAPTECH INCORPORATED 2002 (CDP)
AJ7235'RECOVERED AS DESCRIBED
AJ7235'

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AF7669 *****
AF7669 DESIGNATION - HA01
AF7669 PID - AF7669
AF7669 STATE/COUNTY- FL/HIGHLANDS
AF7669 USGS QUAD - LAKE PLACID (1972)
AF7669
AF7669 *CURRENT SURVEY CONTROL
AF7669
AF7669* NAD 83(1999)- 27 17 46.48947(N) 081 19 05.32499(W) ADJUSTED
AF7669* NAVD 88 - 27.0 (meters) 89. (feet) GPS OBS
AF7669
AF7669 X - 856,162.003 (meters) COMP
AF7669 Y - -5,606,919.388 (meters) COMP
AF7669 Z - 2,907,425.786 (meters) COMP
AF7669 LAPLACE CORR- -2.69 (seconds) DEFLEC99
AF7669 ELLIP HEIGHT- 1.67 (meters) (05/31/01) GPS OBS
AF7669 GEOID HEIGHT- -25.37 (meters) GEOID03
AF7669
AF7669 HORZ ORDER - FIRST
AF7669 ELLP ORDER - FOURTH CLASS I
AF7669
AF7669.The horizontal coordinates were established by GPS observations
AF7669.and adjusted by the National Geodetic Survey in May 2001..
AF7669
AF7669.The orthometric height was determined by GPS observations and a
AF7669.high-resolution geoid model.
AF7669
AF7669.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AF7669
AF7669.The Laplace correction was computed from DEFLEC99 derived deflections.
AF7669
AF7669.The ellipsoidal height was determined by GPS observations
AF7669.and is referenced to NAD 83.
AF7669
AF7669.The geoid height was determined by GEOID03.
AF7669
AF7669; North East Units Scale Factor Converg.
AF7669;SPC FL E - 328,268.128 168,507.398 MT 0.99995341 -0 08 45.2
AF7669;SPC FL E - 1,076,993.02 552,844.69 sFT 0.99995341 -0 08 45.2
AF7669;UTM 17 - 3,019,288.106 468,518.143 MT 0.99961223 -0 08 45.2
AF7669
AF7669! - Elev Factor x Scale Factor = Combined Factor
AF7669!SPC FL E - 0.99999974 x 0.99995341 = 0.99995315
AF7669!UTM 17 - 0.99999974 x 0.99961223 = 0.99961197
AF7669
AF7669 SUPERSEDED SURVEY CONTROL
AF7669
AF7669 NAD 83(1990)- 27 17 46.48874(N) 081 19 05.32439(W) AD( ) 1
AF7669 ELLIP H (11/23/93) 1.59 (m) GP( ) 3 2
AF7669
AF7669.Superseded values are not recommended for survey control.
AF7669.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AF7669.See file dsdata.txt to determine how the superseded data were derived.
AF7669
AF7669_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML6851819288(NAD 83)
AF7669_MARKER: I = METAL ROD

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AF7669_SETTING: 50 = ALUMINUM ALLOY ROD W/O SLEEVE (10 FT.+)

AF7669_SP_SET: ALUMINUM ALLOY ROD

AF7669_STAMPING: HA01 1993

AF7669_MARK LOGO: NGS

AF7669_PROJECTION: FLUSH

AF7669_MAGNETIC: N = NO MAGNETIC MATERIAL

AF7669_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL

AF7669_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AF7669+SATELLITE: SATELLITE OBSERVATIONS - July 13, 1999

AF7669_ROD/PIPE-DEPTH: 14.6 meters

AF7669

AF7669 HISTORY	- Date	Condition	Report By
AF7669 HISTORY	- 1993	MONUMENTED	KEISCH
AF7669 HISTORY	- 19990713	GOOD	BAH

AF7669

AF7669 STATION DESCRIPTION

AF7669

AF7669'DESCRIBED BY KEITH AND SCHNARS - LAKELAND 1993

AF7669'THE STATION IS LOCATED ABOUT 3 MI (4.8 KM) EAST OF LAKE PLACID IN THE

AF7669'SOUTHWEST RIGHT-OF-WAY OF C.R. 619 IN SECTION 4, TOWNSHIP 37 SOUTH,

AF7669'RANGE 30 EAST, HIGHLANDS COUNTY, FLORIDA.

AF7669'TO REACH THE STATION FROM THE INTERSECTION OF U.S. 27 AND C.R. 621, IN

AF7669'LAKE PLACID, GO EAST ON C.R. 621 FOR 2.6 MI (4.2 KM) TO THE

AF7669'INTERSECTION WITH C.R. 619 AND THE STATION ON THE RIGHT. THE STATION

AF7669'LIES IN THE SOUTHWEST QUADRANT OF THE INTERSECTION, 51.5 FT (15.7 M)

AF7669'SOUTHEAST OF A WOOD ANCHOR POLE, 14.5 FT (4.4 M) WEST OF THE WEST EDGE

AF7669'OF PAVEMENT OF C.R. 619, AND 21.7 FT (6.6 M) EAST OF A CARSONITE

AF7669'WITNESS POST.

AF7669'ACCESS TO THE DATUM POINT--THE STATION IS A 5/8 INCH ALUMINUM ROD

AF7669'RECESSED INSIDE A NGS LOGO CAP MOUNTED ON A 5 INCH DIAMETER PVC PIPE

AF7669'SURROUNDED BY CONCRETE SET FLUSH WITH THE GROUND STAMPED HA01 1993.

AF7669'REFERENCES--

AF7669'KEITH AND SCHNARS NAIL AND DISC, SET IN THE NORTHEAST FACE OF A WOOD

AF7669'ANCHOR POLE, MAGNETIC AZIMUTH OF 315 DEGREES AT 51.45 FT (15.68 M) .

AF7669'FOUND RAILROAD SPIKE IN AN ASPHALT CUT-OUT, MAGNETIC AZIMUTH OF 54

AF7669'DEGREES AT 30.69 FT (9.35 M) .

AF7669'KEITH AND SCHNARS NAIL AND DISC, SET IN THE NORTH FACE OF A WOOD POWER

AF7669'POLE, MAGNETIC AZIMUTH OF 118 DEGREES AT 70.53 FT (21.50 M) .

AF7669'KEITH AND SCHNARS NAIL AND DISC, SET AT THE EDGE OF PAVEMENT, MAGNETIC

AF7669'AZIMUTH OF 166 DEGREES AT 50.28 FT (15.33 M) .

AF7669'SET CARSONITE WITNESS POST, WEST AT 21.7 FT.

AF7669

AF7669 STATION RECOVERY (1999)

AF7669

AF7669'RECOVERY NOTE BY BERRYMAN & HENIGAR 1999 (BH)

AF7669'RECOVERED AS DESCRIBED.

AF7672 *****

AF7672 DESIGNATION - HA04

AF7672 PID - AF7672

AF7672 STATE/COUNTY- FL/HIGHLANDS

AF7672 USGS QUAD - VENUS NW (1972)

AF7672

AF7672 *CURRENT SURVEY CONTROL

AF7672* NAD 83(1999)- 27 12 30.85064(N) 081 23 49.97129(W) ADJUSTED

AF7672* NAVD 88 - 42.84 (meters) 140.6 (feet) LEVELING

AF7672

AF7672 X - 849,091.247 (meters) COMP

AF7672 Y - -5,612,508.592 (meters) COMP

AF7672 Z - 2,898,796.338 (meters) COMP

AF7672 LAPLACE CORR- -1.59 (seconds) DEFLEC99

AF7672 ELLIP HEIGHT- 17.97 (meters) (05/31/01) GPS OBS

AF7672 GEOID HEIGHT- -24.93 (meters) GEOID03

AF7672

AF7672 HORZ ORDER - FIRST

AF7672 VERT ORDER - THIRD ?

AF7672 ELLP ORDER - FOURTH CLASS I

AF7672

AF7672.The horizontal coordinates were established by GPS observations

AF7672.and adjusted by the National Geodetic Survey in May 2001..

AF7672

AF7672.The orthometric height was determined by differential leveling.

AF7672.The vertical network tie was performed by a horz. field party for horz.

AF7672.obs reductions. Reset procedures were used to establish the elevation.

AF7672

AF7672.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AF7672

AF7672.The Laplace correction was computed from DEFLEC99 derived deflections.

AF7672

AF7672.The ellipsoidal height was determined by GPS observations

AF7672.and is referenced to NAD 83.

AF7672

AF7672.The geoid height was determined by GEOID03.

AF7672

AF7672;	North	East	Units	Scale	Factor	Converg.
AF7672;SPC FL E	- 318,575.651	160,649.671	MT	0.99996028	-0 10 53.8	
AF7672;SPC FL E	- 1,045,193.61	527,064.80	sFT	0.99996028	-0 10 53.8	
AF7672;UTM 17	- 3,009,598.936	460,663.097	MT	0.99961910	-0 10 53.8	

AF7672

AF7672! - Elev Factor x Scale Factor = Combined Factor

AF7672!SPC FL E - 0.99999718 x 0.99996028 = 0.99995746

AF7672!UTM 17 - 0.99999718 x 0.99961910 = 0.99961628

AF7672

AF7672 SUPERSEDED SURVEY CONTROL

AF7672

AF7672 NAD 83(1990)- 27 12 30.85027(N) 081 23 49.97023(W) AD() 1

AF7672 ELLIP H (11/23/93) 17.92 (m) GP() 3 2

AF7672

AF7672.Superseded values are not recommended for survey control.

AF7672.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AF7672.See file dsdata.txt to determine how the superseded data were derived.

AF7672

AF7672_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML6066309599(NAD 83)
 AF7672_MARKER: I = METAL ROD
 AF7672_SETTING: 50 = ALUMINUM ALLOY ROD W/O SLEEVE (10 FT.+)

AF7672_SP_SET:	ALUMINUM ALLOY ROD
AF7672_STAMPING:	HA04 1993
AF7672_MARK LOGO:	NGS
AF7672_PROJECTION:	FLUSH
AF7672_MAGNETIC:	N = NO MAGNETIC MATERIAL
AF7672_STABILITY:	B = PROBABLY HOLD POSITION/ELEVATION WELL
AF7672_SATELLITE:	THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AF7672+SATELLITE:	SATELLITE OBSERVATIONS - July 13, 1999
AF7672_ROD/PIPE-DEPTH:	9.5 meters

AF7672

AF7672 HISTORY	- Date	Condition	Report By
AF7672 HISTORY	- 1993	MONUMENTED	KEISCH
AF7672 HISTORY	- 19990713	GOOD	BAH

AF7672

AF7672 STATION DESCRIPTION

AF7672

AF7672'DESCRIBED BY KEITH AND SCHNARS - LAKELAND 1993

AF7672'THE STATION IS LOCATED ABOUT 6.5 MI (10.5 KM) SOUTHWEST OF LAKE PLACID

AF7672'IN THE SOUTH RIGHT-OF-WAY OF S.R. 70 IN SECTION 2, TOWNSHIP 38 SOUTH,

AF7672'RANGE 29 EAST, HIGHLANDS COUNTY, FLORIDA.

AF7672'TO REACH THE STATION FROM THE INTERSECTION OF U.S. 27 AND S.R. 70, 6

AF7672'MI (9.7 KM) SOUTH OF LAKE PLACID, GO WEST ON S.R. 70 FOR 4.5 MI

AF7672'(7.2 KM) TO THE INTERSECTION WITH JEFFERSON AVE AND THE STATION ON

AF7672'THE LEFT. THE STATION LIES IN THE SOUTHWEST QUADRANT OF THE

AF7672'INTERSECTION, 15.3 FT (4.7 M) SOUTH OF THE SOUTH EDGE OF PAVEMENT OF

AF7672'S.R. 70, 33.4 FT (10.2 M) WEST OF THE APPROXIMATE CENTERLINE OF

AF7672'JEFFERSON AVE, AND 2.2 FT (0.7 M) EAST OF A FENCE CORNER.

AF7672'ACCESS TO THE DATUM POINT--THE STATION IS A 5/8 INCH ALUMINUM ROD

AF7672'RECESSED INSIDE A NGS LOGO CAP MOUNTED ON A 5 INCH DIAMETER PVC PIPE

AF7672'SURROUNDED BY CONCRETE SET FLUSH WITH THE GROUND STAMPED HA04 1993.

AF7672'REFERENCES--

AF7672'FOUND A 1/2 INCH S.S. ROD RECESSED INSIDE A VERTICAL CONTROL ACCESS

AF7672'COVER SET ON A 5 INCH DIAMETER PVC PIPE SURROUNDED BY CONCRETE

AF7672'STAMPED Y358 1979, MAGNETIC AZIMUTH OF 57 DEGREES AT 127.78 FT

AF7672'(38.95 M) .

AF7672'KEITH AND SCHNARS NAIL AND DISC, SET IN THE NORTH FACE OF A WOOD P.I.

AF7672'POWER POLE, MAGNETIC AZIMUTH OF 115 DEGREES AT 65.20 FT (19.87 M) .

AF7672'KEITH AND SCHNARS NAIL AND DISC, SET IN THE TOP OF A WOOD FENCE POST,

AF7672'MAGNETIC AZIMUTH OF 189 DEGREES AT 24.25 FT (7.39 M) .

AF7672'KEITH AND SCHNARS NAIL AND DISC, SET IN THE TOP OF A WOOD FENCE POST,

AF7672'MAGNETIC AZIMUTH OF 251 DEGREES AT 2.21 FT (0.67 M) .

AF7672'SET CARSONITE WITNESS POST, 2.2 FT (0.7 M) WEST.

AF7672

AF7672 STATION RECOVERY (1999)

AF7672

AF7672'RECOVERY NOTE BY BERRYMAN & HENIGAR 1999 (BH)

AF7672'RECOVERED AS DESCRIBED.

DF7046 *****
 DF7046 CORS - This is a GPS Continuously Operating Reference Station.
 DF7046 DESIGNATION - BARTOW CORS ARP
 DF7046 CORS_ID - BRTW
 DF7046 PID - DF7046
 DF7046 STATE/COUNTY- FL/POLK
 DF7046 USGS QUAD - BARTOW (1987)
 DF7046
 DF7046 *CURRENT SURVEY CONTROL
 DF7046
 DF7046* NAD 83(CORS)- 27 56 58.64223(N) 081 46 58.20127(W) ADJUSTED
 DF7046* NAVD 88 -
 DF7046
 DF7046 EPOCH DATE - 2002.00
 DF7046 X - 805,863.934 (meters) COMP
 DF7046 Y - -5,580,464.273 (meters) COMP
 DF7046 Z - 2,971,581.211 (meters) COMP
 DF7046 ELLIP HEIGHT- 13.57 (meters) (08/??/03) GPS OBS
 DF7046 GEOID HEIGHT- -26.20 (meters) GEOID03
 DF7046
 DF7046 HORZ ORDER - SPECIAL (CORS)
 DF7046 ELLP ORDER - SPECIAL (CORS)
 DF7046
 DF7046. ITRF positions are available for this station.
 DF7046. The coordinates were established by GPS observations
 DF7046. and adjusted by the National Geodetic Survey in August 2003.
 DF7046. The coordinates are valid at the epoch date displayed above.
 DF7046. The epoch date for horizontal control is a decimal equivalence
 DF7046. of Year/Month/Day.
 DF7046
 DF7046
 DF7046. The PID for the CORS L1 Phase Center is DF7047.
 DF7046
 DF7046. The XYZ, and position/ellipsoidal ht. are equivalent.
 DF7046
 DF7046. The ellipsoidal height was determined by GPS observations
 DF7046. and is referenced to NAD 83.
 DF7046
 DF7046. The geoid height was determined by GEOID03.
 DF7046
 DF7046;
 DF7046; North East Units Scale Factor Converg.
 DF7046; SPC FL W - 400,645.547 221,369.582 MT 0.99994681 +0 06 06.4
 DF7046; SPC FL W - 1,314,451.27 726,276.70 sFT 0.99994681 +0 06 06.4
 DF7046
 DF7046! - Elev Factor x Scale Factor = Combined Factor
 DF7046! SPC FL W - 0.99999787 x 0.99994681 = 0.99994468
 DF7046
 DF7046 SUPERSEDED SURVEY CONTROL
 DF7046
 DF7046. No superseded survey control is available for this station.
 DF7046
 DF7046 _U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML2299391868(NAD 83)
 DF7046 _MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
 DF7046
 DF7046 STATION DESCRIPTION
 DF7046

DF7046'DESCRIBED BY NATIONAL GEODETIC SURVEY 2003
DF7046'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
DF7046'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DF7046'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DF7046' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
DF7046' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

DI3562 *****

DI3562 CORS - This is a GPS Continuously Operating Reference Station.

DI3562 DESIGNATION - CAPE CANAVERAL 5 CORS ARP

DI3562 CORS_ID - CCV5

DI3562 PID - DI3562

DI3562 STATE/COUNTY- FL/BREVARD

DI3562 USGS QUAD - CAPE CANAVERAL (1976)

DI3562

DI3562 *CURRENT SURVEY CONTROL

DI3562* NAD 83(CORS)- 28 27 36.79995(N) 080 32 42.81934(W) ADJUSTED

DI3562* NAVD 88 -

DI3562 EPOCH DATE - 2002.00

DI3562 X - 921,807.831 (meters) COMP

DI3562 Y - -5,535,344.771 (meters) COMP

DI3562 Z - 3,021,431.052 (meters) COMP

DI3562 ELLIP HEIGHT- -22.67 (meters) (02/??/07) GPS OBS

DI3562 GEOID HEIGHT- -28.28 (meters) GEOID03

DI3562

DI3562 HORZ ORDER - SPECIAL (CORS)

DI3562 ELLP ORDER - SPECIAL (CORS)

DI3562

DI3562. ITRF positions are available for this station.

DI3562. The coordinates were established by GPS observations

DI3562. and adjusted by the National Geodetic Survey in February 2007.

DI3562. The coordinates are valid at the epoch date displayed above.

DI3562. The epoch date for horizontal control is a decimal equivalence

DI3562. of Year/Month/Day.

DI3562

DI3562

DI3562. The PID for the CORS L1 Phase Center is DI3563.

DI3562

DI3562. The XYZ, and position/ellipsoidal ht. are equivalent.

DI3562

DI3562. The ellipsoidal height was determined by GPS observations

DI3562. and is referenced to NAD 83.

DI3562

DI3562. The geoid height was determined by GEOID03.

DI3562

DI3562;	North	East	Units	Scale	Factor	Converg.
DI3562; SPC FL E	- 457,293.506	244,538.412	MT	0.99996565	+0 13 00.2	
DI3562; SPC FL E	- 1,500,303.78	802,289.77	sFT	0.99996565	+0 13 00.2	

DI3562

DI3562! - Elev Factor x Scale Factor = Combined Factor

DI3562! SPC FL E - 1.00000356 x 0.99996565 = 0.99996921

DI3562

DI3562 SUPERSEDED SURVEY CONTROL

DI3562

DI3562. No superseded survey control is available for this station.

DI3562

DI3562_ U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNM4452348269(NAD 83)

DI3562_ MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DI3562

DI3562 STATION DESCRIPTION

DI3562

DI3562'DESCRIBED BY NATIONAL GEODETIC SURVEY 2007
DI3562'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
DI3562'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DI3562'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DI3562' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
DI3562' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

DG4691 *****
 DG4691 CORS - This is a GPS Continuously Operating Reference Station.
 DG4691 DESIGNATION - FORT MYERS CORS ARP
 DG4691 CORS_ID - FMYR
 DG4691 PID - DG4691
 DG4691 STATE/COUNTY- FL/LEE
 DG4691 USGS QUAD - FORT MYERS SE (1987)
 DG4691
 DG4691 *CURRENT SURVEY CONTROL
 DG4691
 DG4691* NAD 83(CORS)- 26 35 27.50814(N) 081 51 50.97251(W) ADJUSTED
 DG4691* NAVD 88 -
 DG4691
 DG4691 EPOCH DATE - 2002.00
 DG4691 X - 807,700.702 (meters) COMP
 DG4691 Y - -5,649,862.877 (meters) COMP
 DG4691 Z - 2,837,755.986 (meters) COMP
 DG4691 ELLIP HEIGHT- -13.27 (meters) (03/??/04) GPS OBS
 DG4691 GEOID HEIGHT- -24.14 (meters) GEOID03
 DG4691
 DG4691 HORZ ORDER - SPECIAL (CORS)
 DG4691 ELLP ORDER - SPECIAL (CORS)
 DG4691
 DG4691. ITRF positions are available for this station.
 DG4691. The coordinates were established by GPS observations
 DG4691. and adjusted by the National Geodetic Survey in March 2004.
 DG4691. The coordinates are valid at the epoch date displayed above.
 DG4691. The epoch date for horizontal control is a decimal equivalence
 DG4691. of Year/Month/Day.
 DG4691
 DG4691
 DG4691. The PID for the CORS L1 Phase Center is DG4692.
 DG4691
 DG4691. The XYZ, and position/ellipsoidal ht. are equivalent.
 DG4691
 DG4691. The ellipsoidal height was determined by GPS observations
 DG4691. and is referenced to NAD 83.
 DG4691
 DG4691. The geoid height was determined by GEOID03.
 DG4691
 DG4691;
 DG4691; North East Units Scale Factor Converg.
 DG4691; SPC FL W - 250,093.741 213,530.531 MT 0.99994344 +0 03 38.9
 DG4691; SPC FL W - 820,515.88 700,558.08 sFT 0.99994344 +0 03 38.9
 DG4691
 DG4691! - Elev Factor x Scale Factor = Combined Factor
 DG4691! SPC FL W - 1.00000208 x 0.99994344 = 0.99994552
 DG4691
 DG4691 SUPERSEDED SURVEY CONTROL
 DG4691
 DG4691. No superseded survey control is available for this station.
 DG4691
 DG4691 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMK1395241424(NAD 83)
 DG4691 MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
 DG4691
 DG4691 STATION DESCRIPTION
 DG4691

DG4691'DESCRIBED BY NATIONAL GEODETIC SURVEY 2004
DG4691'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
DG4691'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DG4691'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DG4691' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
DG4691' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

AH3723 *****
 AH3723 CORS - This is a GPS Continuously Operating Reference Station.
 AH3723 DESIGNATION - MIAMI 3 CORS ARP
 AH3723 CORS_ID - MIA3
 AH3723 PID - AH3723
 AH3723 STATE/COUNTY- FL/MIAMI-DADE
 AH3723 USGS QUAD - KEY BISCAYNE (1994)
 AH3723
 AH3723 *CURRENT SURVEY CONTROL
 AH3723
 AH3723* NAD 83(CORS)- 25 43 58.09808(N) 080 09 36.60080(W) ADJUSTED
 AH3723* NAVD 88 -
 AH3723
 AH3723 EPOCH DATE - 2002.00
 AH3723 X - 982,510.903 (meters) COMP
 AH3723 Y - -5,664,648.800 (meters) COMP
 AH3723 Z - 2,752,419.866 (meters) COMP
 AH3723 ELLIP HEIGHT- -14.54 (meters) (03/??/02) GPS OBS
 AH3723 GEOID HEIGHT- -25.66 (meters) GEOID03
 AH3723
 AH3723 HORZ ORDER - SPECIAL (CORS)
 AH3723 ELLP ORDER - SPECIAL (CORS)
 AH3723
 AH3723. ITRF positions are available for this station.
 AH3723. The coordinates were established by GPS observations
 AH3723. and adjusted by the National Geodetic Survey in March 2002.
 AH3723. The coordinates are valid at the epoch date displayed above.
 AH3723. The epoch date for horizontal control is a decimal equivalence
 AH3723. of Year/Month/Day.
 AH3723
 AH3723
 AH3723. The PID for the CORS L1 Phase Center is AJ7937.
 AH3723
 AH3723. The XYZ, and position/ellipsoidal ht. are equivalent.
 AH3723
 AH3723. The ellipsoidal height was determined by GPS observations
 AH3723. and is referenced to NAD 83.
 AH3723
 AH3723. The geoid height was determined by GEOID03.
 AH3723
 AH3723;
 AH3723; North East Units Scale Factor Converg.
 AH3723; SPC FL E - 155,283.296 284,268.404 MT 1.00002883 +0 21 52.8
 AH3723; SPC FL E - 509,458.61 932,637.26 sFT 1.00002883 +0 21 52.8
 AH3723
 AH3723! - Elev Factor x Scale Factor = Combined Factor
 AH3723! SPC FL E - 1.00000228 x 1.00002883 = 1.00003111
 AH3723
 AH3723 SUPERSEDED SURVEY CONTROL
 AH3723
 AH3723 NAD 83(CORS)- 25 43 58.09790(N) 080 09 36.60095(W) AD(1997.00) c
 AH3723 ELLIP H (08/??/98) -14.54 (m) GP(1997.00) c c
 AH3723
 AH3723. Superseded values are not recommended for survey control.
 AH3723. NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 AH3723. See file dsdata.txt to determine how the superseded data were derived.
 AH3723

AH3723_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ8424046362(NAD 83)
AH3723_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
AH3723
AH3723 STATION DESCRIPTION
AH3723
AH3723'DESCRIBED BY NATIONAL GEODETIC SURVEY 2002
AH3723'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
AH3723'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
AH3723'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
AH3723' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
AH3723' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

DE9138 *****

DE9138 CORS - This is a GPS Continuously Operating Reference Station.

DE9138 DESIGNATION - OKEECHOBEE CORS ARP

DE9138 CORS_ID - OKCB

DE9138 PID - DE9138

DE9138 STATE/COUNTY- FL/OKEECHOBEE

DE9138 USGS QUAD - TAYLOR CREEK SE (1972)

DE9138

DE9138 *CURRENT SURVEY CONTROL

DE9138* NAD 83(CORS)- 27 15 57.71572(N) 080 51 19.18214(W) ADJUSTED

DE9138* NAVD 88 -

DE9138 EPOCH DATE - 2002.00

DE9138 X - 901,666.240 (meters) COMP

DE9138 Y - -5,601,322.299 (meters) COMP

DE9138 Z - 2,904,443.076 (meters) COMP

DE9138 ELLIP HEIGHT- -13.75 (meters) (12/??/02) GPS OBS

DE9138 GEOID HEIGHT- -26.59 (meters) GEOID03

DE9138

DE9138 HORZ ORDER - SPECIAL (CORS)

DE9138 ELLP ORDER - SPECIAL (CORS)

DE9138

DE9138. ITRF positions are available for this station.

DE9138. The coordinates were established by GPS observations

DE9138. and adjusted by the National Geodetic Survey in December 2002.

DE9138. The coordinates are valid at the epoch date displayed above.

DE9138. The epoch date for horizontal control is a decimal equivalence

DE9138. of Year/Month/Day.

DE9138

DE9138

DE9138. The PID for the CORS L1 Phase Center is DI1672.

DE9138

DE9138. The XYZ, and position/ellipsoidal ht. are equivalent.

DE9138

DE9138. The ellipsoidal height was determined by GPS observations

DE9138. and is referenced to NAD 83.

DE9138

DE9138. The geoid height was determined by GEOID03.

DE9138

DE9138;

	North	East	Units	Scale	Factor	Converg.
DE9138; SPC FL E	- 324,888.459	214,324.588	MT	0.99994371	+0 03 58.6	
DE9138; SPC FL E	- 1,065,904.89	703,163.25	sFT	0.99994371	+0 03 58.6	

DE9138

DE9138! - Elev Factor x Scale Factor = Combined Factor

DE9138! SPC FL E - 1.00000216 x 0.99994371 = 0.99994587

DE9138

DE9138 SUPERSEDED SURVEY CONTROL

DE9138

DE9138. No superseded survey control is available for this station.

DE9138

DE9138 _U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNL1432015910(NAD 83)

DE9138 _MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA

DE9138

DE9138 STATION DESCRIPTION

DE9138

DE9138'DESCRIBED BY NATIONAL GEODETIC SURVEY 2002
DE9138'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
DE9138'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DE9138'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DE9138' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
DE9138' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

DG9798 *****
 DG9798 CORS - This is a GPS Continuously Operating Reference Station.
 DG9798 DESIGNATION - WEST PALM CORS ARP
 DG9798 CORS_ID - PBCH
 DG9798 PID - DG9798
 DG9798 STATE/COUNTY- FL/PALM BEACH
 DG9798 USGS QUAD - DELTA (1983)
 DG9798
 DG9798 *CURRENT SURVEY CONTROL
 DG9798
 DG9798* NAD 83(CORS)- 26 50 46.63829(N) 080 13 09.30061(W) ADJUSTED
 DG9798* NAVD 88 -
 DG9798
 DG9798 EPOCH DATE - 2002.00
 DG9798 X - 967,386.974 (meters) COMP
 DG9798 Y - -5,611,813.849 (meters) COMP
 DG9798 Z - 2,863,023.043 (meters) COMP
 DG9798 ELLIP HEIGHT- -15.31 (meters) (04/??/05) GPS OBS
 DG9798 GEOID HEIGHT- -26.49 (meters) GEOID03
 DG9798
 DG9798 HORZ ORDER - SPECIAL (CORS)
 DG9798 ELLP ORDER - SPECIAL (CORS)
 DG9798
 DG9798. ITRF positions are available for this station.
 DG9798. The coordinates were established by GPS observations
 DG9798. and adjusted by the National Geodetic Survey in April 2005.
 DG9798. The coordinates are valid at the epoch date displayed above.
 DG9798. The epoch date for horizontal control is a decimal equivalence
 DG9798. of Year/Month/Day.
 DG9798
 DG9798
 DG9798. The PID for the CORS L1 Phase Center is DG9799.
 DG9798
 DG9798. The XYZ, and position/ellipsoidal ht. are equivalent.
 DG9798
 DG9798. The ellipsoidal height was determined by GPS observations
 DG9798. and is referenced to NAD 83.
 DG9798
 DG9798. The geoid height was determined by GEOID03.
 DG9798
 DG9798;
 DG9798; SPC FL E - North East Units Scale Factor Converg.
 DG9798; SPC FL E - 278,612.216 277,595.193 MT 1.00001548 +0 21 09.4
 DG9798; SPC FL E - 914,080.25 910,743.56 sFT 1.00001548 +0 21 09.4
 DG9798
 DG9798! - Elev Factor x Scale Factor = Combined Factor
 DG9798! SPC FL E - 1.00000241 x 1.00001548 = 1.00001789
 DG9798
 DG9798 SUPERSEDED SURVEY CONTROL
 DG9798
 DG9798. No superseded survey control is available for this station.
 DG9798
 DG9798_ U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNK7756969649(NAD 83)
 DG9798_ MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
 DG9798
 DG9798 STATION DESCRIPTION
 DG9798

DG9798'DESCRIBED BY NATIONAL GEODETIC SURVEY 2005
DG9798'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
DG9798'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DG9798'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DG9798' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
DG9798' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

DH3757 *****
 DH3757 CORS - This is a GPS Continuously Operating Reference Station.
 DH3757 DESIGNATION - WAUCHULA CORS ARP
 DH3757 CORS_ID - WACH
 DH3757 PID - DH3757
 DH3757 STATE/COUNTY- FL/HARDEE
 DH3757 USGS QUAD - FT GREEN (1987)
 DH3757
 DH3757 *CURRENT SURVEY CONTROL
 DH3757
 DH3757* NAD 83(CORS)- 27 30 51.04277(N) 081 52 56.61649(W) ADJUSTED
 DH3757* NAVD 88 -
 DH3757
 DH3757 EPOCH DATE - 2002.00
 DH3757 X - 799,336.149 (meters) COMP
 DH3757 Y - -5,604,082.861 (meters) COMP
 DH3757 Z - 2,928,868.780 (meters) COMP
 DH3757 ELLIP HEIGHT- 10.73 (meters) (06/??/05) GPS OBS
 DH3757 GEOID HEIGHT- -25.04 (meters) GEOID03
 DH3757
 DH3757 HORZ ORDER - SPECIAL (CORS)
 DH3757 ELLP ORDER - SPECIAL (CORS)
 DH3757
 DH3757. ITRF positions are available for this station.
 DH3757. The coordinates were established by GPS observations
 DH3757. and adjusted by the National Geodetic Survey in June 2005.
 DH3757. The coordinates are valid at the epoch date displayed above.
 DH3757. The epoch date for horizontal control is a decimal equivalence
 DH3757. of Year/Month/Day.
 DH3757
 DH3757
 DH3757. The PID for the CORS L1 Phase Center is DH3758.
 DH3757
 DH3757. The XYZ, and position/ellipsoidal ht. are equivalent.
 DH3757
 DH3757. The ellipsoidal height was determined by GPS observations
 DH3757. and is referenced to NAD 83.
 DH3757
 DH3757. The geoid height was determined by GEOID03.
 DH3757
 DH3757;
 DH3757; SPC FL W - North East Units Scale Factor Converg.
 DH3757; SPC FL W - 352,381.091 211,618.784 MT 0.99994284 +0 03 15.6
 DH3757; SPC FL W - 1,156,103.63 694,285.96 sFT 0.99994284 +0 03 15.6
 DH3757
 DH3757! - Elev Factor x Scale Factor = Combined Factor
 DH3757! SPC FL W - 0.99999831 x 0.99994284 = 0.99994115
 DH3757
 DH3757 SUPERSEDED SURVEY CONTROL
 DH3757
 DH3757. No superseded survey control is available for this station.
 DH3757
 DH3757_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML1285343697(NAD 83)
 DH3757_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
 DH3757
 DH3757 STATION DESCRIPTION
 DH3757

DH3757'DESCRIBED BY NATIONAL GEODETIC SURVEY 2005
DH3757'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
DH3757'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DH3757'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DH3757' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
DH3757' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

SURVEY INFORMATION

A. Field Personnel

The following field personnel worked on this GPS network, and related survey collection:

Party Chief: M. Havard
Instrument Man: V. McNeal
Instrument Man: C. LaPrarie

The point of contact for survey related questions is:

Josh Hardy
Operations Supervisor
(985) 661-3001

B. GPS Logsheets

501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

1

JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

1B

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 15 46.93N

HGT. MTS

LONGITUDE

081 23 11.48W

RECEIVER MODEL

TRIMBLE 4000 SE

RECEIVER S/N

4927

SESSION

001B-106-1

DATE:

04/16/07

DAY OF YEAR

106

START TIME

11:35

X

U.T.C.

END TIME

12:54

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10015

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 1B IS A SPIKE NAIL SET FLUSH W/GRD IN THE S/E CORNER OF THE T-JUNCTION OF WASHINGTON BLVD N/E AND HUMPHREY AVE. POINT IS 40FT N/E OF THE C/L OF WASHINGTON BLVD N/E-- 44FT N/E OF THE C/L OF HUMPHREY AVE-- 47FT N/W OF A POWER/LIGHT POLE.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

X BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

1

JOB REFERENCE

SWFWM-LAKE PLACID, FLA.

POINT ID:

1B

Proj. No.:

07154.01.001.551

STATE	FLORIDA	COUNTY	HIGHLANDS	QUAD:	
-------	---------	--------	-----------	-------	--

OPERATOR	V. MCNEAL	APPROXIMATE POSITION (C/A/CODE)			
----------	-----------	---------------------------------	--	--	--

RECEIVER MODEL	TRIMBLE 4000 SE	LATITUDE	27 15 46.93N	HGT. MTS	
----------------	-----------------	----------	--------------	----------	--

RECEIVER S/N	4927	LONGITUDE	081 23 11.48W		
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SESSION	DATE:	04/16/07	START TIME	11:30	X	U.T.C.
001B-107-1	DAY OF YEAR	107	END TIME	13:03		LOCAL

ANTENNA HEIGHT (SLANT)				ANTENNA INFO			
MTRS/FT				RADIUS (M)			
	MEASURED		FIXED HGT.	S/N NUMBER	10015		
				ANTENNA TYPE	TRIMBLE COMPAC L1/L2 W/GROUND PLANE		

ANTENNA HEIGHT (VERTICAL)				TOP OF MONUMENT IS:			
MTRS/FT	2.000M (UNCORRECTED)			X	FLUSH		
	MEASURED	X	FIXED HGT.	METERS/FEET		ABOVE GROUND	
				METERS/FEET		BELOW GROUND	

3001 DESCRIPTION: 1B IS A SPIKE NAIL SET FLUSH W/GRD IN THE S/E CORNER OF THE T-JUNCTION OF WASHINGTON BLVD N/E AND HUMPHREY AVE. POINT IS 40FT N/E OF THE C/L OF WASHINGTON BLVD N/E-- 44FT N/E OF THE C/L OF HUMPHREY AVE-- 47FT N/W OF A POWER/LIGHT POLE.

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK	X	NEW CONTROL
	PUB. CONTROL		BASE STATION

PHOTO: SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

1

JOB REFERENCE

SWFWM-LAKE PLACID, FLA.

POINT ID:

1B

Proj. No.:

07154.01.001.551

STATE	FLORIDA	COUNTY	HIGHLANDS	QUAD:	
-------	---------	--------	-----------	-------	--

OPERATOR	V. MCNEAL	APPROXIMATE POSITION (C/A/CODE)			
----------	-----------	---------------------------------	--	--	--

RECEIVER MODEL	TRIMBLE 4000 SE	LATITUDE	27 15 46.93N	HGT. MTS	
----------------	-----------------	----------	--------------	----------	--

RECEIVER S/N	4927	LONGITUDE	081 23 11.48W		
--------------	------	-----------	---------------	--	--

SESSION	DATE:	04/16/07	START TIME	13:08	X	U.T.C.
001B-107-2	DAY OF YEAR	107	END TIME	14:39		LOCAL

ANTENNA HEIGHT (SLANT)				ANTENNA INFO			
MTRS/FT				RADIUS (M)			
	MEASURED		FIXED HGT.	S/N NUMBER	10015		
				ANTENNA TYPE	TRIMBLE COMPAC L1/L2 W/GROUND PLANE		

ANTENNA HEIGHT (VERTICAL)				TOP OF MONUMENT IS:			
MTRS/FT	2.000M (UNCORRECTED)			X	FLUSH		
	MEASURED	X	FIXED HGT.	METERS/FEET		ABOVE GROUND	
				METERS/FEET		BELOW GROUND	

3001 DESCRIPTION: 1B IS A SPIKE NAIL SET FLUSH W/GRD IN THE S/E CORNER OF THE T-JUNCTION OF WASHINGTON BLVD N/E AND HUMPHREY AVE. POINT IS 40FT N/E OF THE C/L OF WASHINGTON BLVD N/E-- 44FT N/E OF THE C/L OF HUMPHREY AVE-- 47FT N/W OF A POWER/LIGHT POLE.

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK	X	NEW CONTROL
	PUB. CONTROL		BASE STATION

PHOTO: SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

1

JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

1C

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 15 50.68N

HGT. MTS

LONGITUDE

081 23 12.18W

RECEIVER MODEL

TRIMBLE 4000 SSI

RECEIVER S/N

3158

SESSION

001C-106-1

DATE:

04/16/07

DAY OF YEAR

106

START TIME

11:43

X

U.T.C.

END TIME

12:14

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT.

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10018

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 1C IS A SPIKE NAIL SET FLUSH W/GRD IN THE S/W CORNER OF THE THE T-JUNCTION OF HUMPHREY AVE AND FARRELL DR N/E. POINT IS 19.7FT W OF THE C/L OF HUMPHREY AVE-- 28FT S OF THE C/L OF FARRELL DR N/E-- 16.3FT S/E OF A STOP SIGN.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

1C

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 15 50.68N

HGT. MTS

LONGITUDE

081 23 12.18W

RECEIVER MODEL

TRIMBLE 4000 SSI

RECEIVER S/N

3158

SESSION

001C-106-2

DATE:

04/16/07

DAY OF YEAR

106

START TIME

12:19

X

U.T.C.

END TIME

12:50

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT.

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10018

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 1C IS A SPIKE NAIL SET FLUSH W/GRD IN THE S/W CORNER OF THE THE T-JUNCTION OF HUMPHREY AVE AND FARRELL DR N/E. POINT IS 19.7FT W OF THE C/L OF HUMPHREY AVE-- 28FT S OF THE C/L OF FARRELL DR N/E-- 16.3FT S/E OF A STOP SIGN.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

BASE STATION

PHOTO:

SKETCH:



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SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

2B

Proj. No.:

07154.01.001.551

STATE	FLORIDA	COUNTY	HIGHLANDS	QUAD:	
-------	---------	--------	-----------	-------	--

OPERATOR	V. MCNEAL	APPROXIMATE POSITION (C/A/CODE)			
----------	-----------	---------------------------------	--	--	--

RECEIVER MODEL	TRIMBLE 4000 SE	LATITUDE	27 15 58.89N	HGT. MTS	
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RECEIVER S/N	4927	LONGITUDE	081 19 40.51W		
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SESSION	002B-106-1	DATE:	04/16/07	START TIME	13:11	X	U.T.C.
		DAY OF YEAR	106	END TIME	14:28		LOCAL

ANTENNA HEIGHT (SLANT)				ANTENNA INFO			
MTRS/FT				RADIUS (M)			
	MEASURED		FIXED HGT.	S/N NUMBER	10015		
				ANTENNA TYPE	TRIMBLE COMPAC L1/L2 W/GROUND PLANE		

ANTENNA HEIGHT (VERTICAL)				TOP OF MONUMENT IS:			
MTRS/FT					X	FLUSH	
	MEASURED		FIXED HGT.	METERS/FEET		ABOVE GROUND	
		X		METERS/FEET		BELOW GROUND	

3001 DESCRIPTION: 2B IS A PK NAIL SET FLUSH W/ASPHALT IN THE S/E CORNER AND THE ASPHALT OF THE ENTRANCE TO THE COMMUNITY CHURCH OF GOD ENTRANCE. POINT IS 22.7FT E OF THE C/L OF S SUN 'N LAKES BLVD-- 16FT S OF THE C/L OF THE CHURCH ENTRANCE-- 6.8FT W OF THE W EDGE OF A SIDEWALK.

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK	X	NEW CONTROL
	PUB. CONTROL	X	BASE STATION

PHOTO: SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

2B

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

M. HAVARD

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 15 58.89N

HGT. MTS

LONGITUDE

081 19 40.51W

RECEIVER MODEL

TRIMBLE 4700

RECEIVER S/N

3112

SESSION

002B-107-1

DATE:

04/17/07

DAY OF YEAR

107

START TIME

11:31

X

U.T.C.

END TIME

13:03

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

59010

ANTENNA TYPE

TRIMBLE MICRO-CENTERED L1/L2 W/GRD.PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 2B IS A PK NAIL SET FLUSH W/ASPHALT IN THE S/E CORNER AND THE ASPHALT OF THE ENTRANCE TO THE COMMUNITY CHURCH OF GOD ENTRANCE. POINT IS 22.7FT E OF THE C/L OF S SUN 'N LAKES BLVD-- 16FT S OF THE C/L OF THE CHURCH ENTRANCE-- 6.8FT W OF THE W EDGE OF A SIDEWALK.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

X BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

2B

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

M. HAVARD

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 15 58.89N

HGT. MTS

LONGITUDE

081 19 40.51W

RECEIVER MODEL

TRIMBLE 4700

RECEIVER S/N

3112

SESSION

002B-107-2

DATE:

04/17/07

DAY OF YEAR

107

START TIME

13:08

X

U.T.C.

END TIME

14:39

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

59010

ANTENNA TYPE

TRIMBLE MICRO-CENTERED L1/L2 W/GRD.PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 2B IS A PK NAIL SET FLUSH W/ASPHALT IN THE S/E CORNER AND THE ASPHALT OF THE ENTRANCE TO THE COMMUNITY CHURCH OF GOD ENTRANCE. POINT IS 22.7FT E OF THE C/L OF S SUN 'N LAKES BLVD-- 16FT S OF THE C/L OF THE CHURCH ENTRANCE-- 6.8FT W OF THE W EDGE OF A SIDEWALK.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

X BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

2C

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 15 57.10N

HGT. MTS

LONGITUDE

081 19 34.12W

RECEIVER MODEL

TRIMBLE 4000 SSI

RECEIVER S/N

3158

SESSION

002C-106-1

DATE:

04/16/07

DAY OF YEAR

106

START TIME

13:17

X

U.T.C.

END TIME

13:48

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10018

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 2C IS A SPIKE NAIL SET FLUSH W/GRD IN THE S/W CORNER OF THE T-JUNCTION OF CONCERT DR AND FAIRFIELD AVE. POINT IS 40.2FT W OF THE C/L OF CONCERT DR-- 12.3FT W C/L OF FAIRFIELD AVE-- 65.7FT N OF A 30 MPH SIGN.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

2C

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 15 57.10N

HGT. MTS

LONGITUDE

081 19 34.12W

RECEIVER MODEL

TRIMBLE 4000 SSI

RECEIVER S/N

3158

SESSION

002C-106-2

DATE:

04/16/07

DAY OF YEAR

106

START TIME

13:53

X

U.T.C.

END TIME

14:24

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10018

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 2C IS A SPIKE NAIL SET FLUSH W/GRD IN THE S/W CORNER OF THE T-JUNCTION OF CONCERT DR AND FAIRFIELD AVE. POINT IS 40.2FT W OF THE C/L OF CONCERT DR-- 12.3FT W C/L OF FAIRFIELD AVE-- 65.7FT N OF A 30 MPH SIGN.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

1

JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

3C

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 12 37.01N

HGT. MTS

LONGITUDE

081 23 49.58W

RECEIVER MODEL

TRIMBLE 4000 SSI

RECEIVER S/N

3158

SESSION

003C-106-1

DATE:

04/16/07

DAY OF YEAR

106

START TIME

16:49

X

U.T.C.

END TIME

17:23

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10018

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 3C IS A SPIKE NAIL SET FLUSH W/GRD-GRASS IN THE MEDIAN OF JEFFERSON AVE N/S LANES. POINT IS 18.0FT E OF THE C/L OF JEFFERSON AVE S-- 10.7FT S OF A STOP SIGN AHEAD SIGN-- 19.7FT W OF JEFFERSON AVE N.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

3C

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 12 37.01N

HGT. MTS

LONGITUDE

081 23 49.58W

RECEIVER MODEL

TRIMBLE 4000 SSI

RECEIVER S/N

3158

SESSION

003C-106-2

DATE:

04/16/07

DAY OF YEAR

106

START TIME

17:28

X

U.T.C.

END TIME

17:59

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10018

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 3C IS A SPIKE NAIL SET FLUSH W/GRD-GRASS IN THE MEDIAN OF JEFFERSON AVE N/S LANES. POINT IS 18.0FT E OF THE C/L OF JEFFERSON AVE S-- 10.7FT S OF A STOP SIGN AHEAD SIGN-- 19.7FT W OF JEFFERSON AVE N.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE
SWFWM-LAKE PLACID

POINT ID: 5B
Proj. No.: 07154.01.001.551

STATE: FL PARISH: HIGHLANDS QUAD:

OPERATOR: M. HAVARD APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL	TRIMBLE 4700	LATITUDE	27 10 48.22N	HGT. MTS
RECEIVER S/N	8613	LONGITUDE	81 23 31.68W	

SESSION	DATE:	04/16/07	START TIME	13:54	X	U.T.C.
005B-106-1	DAY OF YEAR	106	END TIME	15:20		LOCAL

ANTENNA HEIGHT (SLANT)			
MTRS/FT			
	MEASURED		FIXED HGT.

ANTENNA HEIGHT (VERTICAL)			
MTRS/FT	2.000M (UNCORRECTED)		
	MEASURED	X	FIXED HGT.

3001 DESCRIPTION: 5B IS A SPIKE NAIL SET FLUSH W/GRD., 14' WEST OF A 8" FENCELINE POST, 12' EAST OF THE EAST EDGE OF PARK LAND DR.

ANTENNA INFO			
RADIUS (M)			
S/N NUMBER	76678		
ANTENNA TYPE	TRIMBLE MICRO-CENTERED L1/L2 W/GRD.PLANE		

TOP OF MONUMENT IS:	X	FLUSH
METERS/FEET		ABOVE GROUND
METERS/FEET		BELOW GROUND

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	X	BASE STATION

PHOTO: SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE
SWFWM-LAKE PLACID

POINT ID: 5B
Proj. No.: 07154.01.001.551

STATE FL PARISH HIGHLANDS QUAD:

OPERATOR C. LAPRARIE APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL	TRIMBLE 4000	LATITUDE	27 10 48.22N	HGT. MTS
RECEIVER S/N	4302	LONGITUDE	81 23 31.68W	

SESSION	DATE:	04/17/07	START TIME	11:32	X	U.T.C.
005B-107-1	DAY OF YEAR	107	END TIME	13:03		LOCAL

ANTENNA HEIGHT (SLANT)			
MTRS/FT			
	MEASURED		FIXED HGT.

ANTENNA HEIGHT (VERTICAL)			
MTRS/FT	2.000M (UNCORRECTED)		
	MEASURED	X	FIXED HGT

3001 DESCRIPTION: 5B IS A SPIKE NAIL SET FLUSH W/GRD., 14' WEST OF A 8" FENCELINE POST, 12' EAST OF THE EAST EDGE OF PARK LAND DR.

ANTENNA INFO			
RADIUS (M)			
S/N NUMBER	10019		
ANTENNA TYPE	TRIMBLE COMP. L1/L2 W/GRD.PLANE		

TOP OF MONUMENT IS:	X	FLUSH
METERS/FEET		ABOVE GROUND
METERS/FEET		BELOW GROUND

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	X	BASE STATION

PHOTO: SKETCH:



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SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE
SWFWM-LAKE PLACID

POINT ID: 5B
Proj. No.: 07154.01.001.551

STATE FL

PARISH HIGHLANDS

QUAD:

OPERATOR C. LAPRARIE

APPROXIMATE POSITION (C/A/CODE)

LATITUDE 27 10 48.22N

HGT. MTS

LONGITUDE 81 23 31.68W

RECEIVER MODEL TRIMBLE 4000

RECEIVER S/N 4302

SESSION

DATE: 04/17/07

START TIME 13:08

X

U.T.C.

005B-107-2

DAY OF YEAR 107

END TIME 14:39

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10019

ANTENNA TYPE

TRIMBLE COMP. L1/L2 W/GRD.PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 5B IS A SPIKE NAIL SET FLUSH W/GRD., 14' WEST OF A 8" FENCELINE POST, 12' EAST OF THE EAST EDGE OF PARK LAND DR.

AERIAL TARGET

PHOTO I.D.

PUB. BENCH MARK

NEW CONTROL

PUB. CONTROL

X

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

1

JOB REFERENCE
SWFWM-LAKE PLACID

POINT ID: 5C
Proj. No.: 07154.01.001.551

STATE: FL PARISH: HIGHLANDS QUAD:

OPERATOR: M. HAVARD

APPROXIMATE POSITION (C/A/CODE)

LATITUDE: 27 10 51.40N HGT. MTS
LONGITUDE: 81 23 31.68W

RECEIVER MODEL: TRIMBLE 4700

RECEIVER S/N: 3112

SESSION

DATE: 04/16/07

START TIME: 14:05

X

U.T.C.

005C-106-1

DAY OF YEAR: 106

END TIME: 14:36

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER: 59010

ANTENNA TYPE: TRIMBLE MICRO-CENTERED L1/L2 W/GRD.PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 5C IS A SPIKE NAIL SET FLUSH W/GRD., 15' WEST OF A 8" FENCELINE POST, 12' EAST OF THE EAST EDGE OF PARK LAND DR.

AERIAL TARGET

PHOTO I.D.

PUB. BENCH MARK

X

NEW CONTROL

PUB. CONTROL

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

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JOB REFERENCE
SWFWM-LAKE PLACID

POINT ID: 5C
Proj. No.: 07154.01.001.551

STATE: FL PARISH: HIGHLANDS QUAD:

OPERATOR: M. HAVARD APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL: TRIMBLE 4700 LATITUDE: 27 10 51.40N HGT. MTS

RECEIVER S/N: 3112 LONGITUDE: 81 23 31.68W

SESSION: 005C-106-2 DATE: 04/16/07 START TIME: 14:41 X U.T.C.
DAY OF YEAR: 106 END TIME: 15:12 LOCAL

ANTENNA HEIGHT (SLANT) MTRS/FT MEASURED FIXED HGT. ANTENNA INFO RADIUS (M) S/N NUMBER: 59010 ANTENNA TYPE: TRIMBLE MICRO-CENTERED L1/L2 W/GRD.PLANE

ANTENNA HEIGHT (VERTICAL) MTRS/FT 2.000M (UNCORRECTED) MEASURED X FIXED HGT. TOP OF MONUMENT IS: X FLUSH METERS/FEET ABOVE GROUND METERS/FEET BELOW GROUND

3001 DESCRIPTION: 5C IS A SPIKE NAIL SET FLUSH W/GRD., 15' WEST OF A 8" FENCELINE POST, 12' EAST OF THE EAST EDGE OF PARK LAND DR.

AERIAL TARGET PHOTO I.D. PUB. BENCH MARK X NEW CONTROL PUB. CONTROL BASE STATION

PHOTO: SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

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JOB REFERENCE
SWFWM-LAKE PLACID

POINT ID: 6C
Proj. No.: 07154.01.001.551

STATE: FL PARISH: HIGHLANDS QUAD:

OPERATOR: M. HAVARD

APPROXIMATE POSITION (C/A/CODE)

LATITUDE: 27 09 45.58N HGT. MTS
LONGITUDE: 81 19 43.42W

RECEIVER MODEL: TRIMBLE 4700

RECEIVER S/N: 3112

SESSION

006C-106-1

DATE:

04/16/07

DAY OF YEAR

106

START TIME

18:24

X

U.T.C.

END TIME

18:55

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

59010

ANTENNA TYPE

TRIMBLE MICRO-CENTERED L1/L2 W/GRD.PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 6C IS A SPIKE NAIL SET FLUSH W/GRD. IN THE MEDIAN OF HWY.27 AT A DOT RD. STA. 1782 SIGN.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE
SWFWM-LAKE PLACID

POINT ID: 6C
Proj. No.: 07154.01.001.551

STATE: FL PARISH: HIGHLANDS QUAD:

OPERATOR: M. HAVARD

APPROXIMATE POSITION (C/A/CODE)

LATITUDE: 27 09 45.58N HGT. MTS
LONGITUDE: 81 19 43.42W

RECEIVER MODEL: TRIMBLE 4700

RECEIVER S/N: 3112

SESSION

006C-106-2

DATE:

04/16/07

DAY OF YEAR

106

START TIME

19:00

X

U.T.C.

END TIME

19:31

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

59010

ANTENNA TYPE

TRIMBLE MICRO-CENTERED L1/L2 W/GRD.PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 6C IS A SPIKE NAIL SET FLUSH W/GRD. IN THE MEDIAN OF HWY.27 AT A DOT RD. STA. 1782 SIGN.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

7B

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 15 05.86N

HGT. MTS

LONGITUDE

081 19 09.29W

RECEIVER MODEL

TRIMBLE 4000 SE

RECEIVER S/N

4927

SESSION

007B-106-1

DATE:

04/16/07

DAY OF YEAR

106

START TIME

14:39

X

U.T.C.

END TIME

15:56

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10015

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 7B IS A SPIKE NAIL SET FLUSH W/GRD ON THE SOUTH SIDE OF JACK WEISER BLVD AND THE EAST SIDE OF A SAND FIELD ROAD. POINT IS 16FT S OF THE C/L OF JACK WEISER BLVD-- 14FT E OF THE C/L OF THE SAND FIELD ENTRANCE RD-- 125FT W OF A MAILBOX.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

X BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

SWFWM-LAKE PLACID, FLA.

POINT ID:

7B

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 15 05.86N

HGT. MTS

LONGITUDE

081 19 09.29W

RECEIVER MODEL

TRIMBLE 4000 SE

RECEIVER S/N

4927

SESSION

007B-106-3

DATE:

04/16/07

DAY OF YEAR

106

START TIME

15:00

X

U.T.C.

END TIME

16:31

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT.

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10015

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 7B IS A SPIKE NAIL SET FLUSH W/GRD ON THE SOUTH SIDE OF JACK WEISER BLVD AND THE EAST SIDE OF A SAND FIELD ROAD. POINT IS 16FT S OF THE C/L OF JACK WEISER BLVD-- 14FT E OF THE C/L OF THE SAND FIELD ENTRANCE RD-- 125FT W OF A MAILBOX.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

NEW CONTROL

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

SWFWM-LAKE PLACID, FLA.

POINT ID:

7B

Proj. No.:

07154.01.001.551

STATE	FLORIDA	COUNTY	HIGHLANDS	QUAD:	
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OPERATOR	V. MCNEAL	APPROXIMATE POSITION (C/A/CODE)			
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RECEIVER MODEL	TRIMBLE 4000 SE	LATITUDE	27 15 05.86N	HGT. MTS	
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RECEIVER S/N	4927	LONGITUDE	081 19 09.29W		
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SESSION	DATE:	04/16/07	START TIME	16:36	X	U.T.C.
007B-106-4	DAY OF YEAR	106	END TIME	18:07		LOCAL

ANTENNA HEIGHT (SLANT)				ANTENNA INFO			
MTRS/FT				RADIUS (M)			
	MEASURED		FIXED HGT.	S/N NUMBER	10015		
				ANTENNA TYPE	TRIMBLE COMPAC L1/L2 W/GROUND PLANE		

ANTENNA HEIGHT (VERTICAL)				TOP OF MONUMENT IS:			
MTRS/FT	2.000M (UNCORRECTED)			X	FLUSH		
	MEASURED	X	FIXED HGT.	METERS/FEET		ABOVE GROUND	
				METERS/FEET		BELOW GROUND	

3001 DESCRIPTION: 7B IS A SPIKE NAIL SET FLUSH W/GRD ON THE SOUTH SIDE OF JACK WEISER BLVD AND THE EAST SIDE OF A SAND FIELD ROAD. POINT IS 16FT S OF THE C/L OF JACK WEISER BLVD-- 14FT E OF THE C/L OF THE SAND FIELD ENTRANCE RD-- 125FT W OF A MAILBOX.

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK	X	NEW CONTROL
	PUB. CONTROL		BASE STATION

PHOTO: SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

7C

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 15 05.87N

HGT. MTS

LONGITUDE

081 19 17.03W

RECEIVER MODEL

TRIMBLE 4000 SSI

RECEIVER S/N

3158

SESSION

007C-106-1

DATE:

04/16/07

DAY OF YEAR

106

START TIME

14:45

X

U.T.C.

END TIME

15:16

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10018

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 7C IS A SPIKE NAIL SET FLUSH W/GRD ON THE SOUTH SIDE OF JACK WEISER BLVD. POINT IS 16FT S OF THE C/L OF JACK WEISER BLVD-- 21FT N/W OF A 8IN PINE TREE.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

7C

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 15 05.87N

HGT. MTS

LONGITUDE

081 19 17.03W

RECEIVER MODEL

TRIMBLE 4000 SSI

RECEIVER S/N

3158

SESSION

007C-106-2

DATE:

04/16/07

DAY OF YEAR

106

START TIME

15:21

X

U.T.C.

END TIME

15:52

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10018

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

X

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

BELOW GROUND

3001 DESCRIPTION: 7C IS A SPIKE NAIL SET FLUSH W/GRD ON THE SOUTH SIDE OF JACK WEISER BLVD. POINT IS 16FT S OF THE C/L OF JACK WEISER BLVD-- 21FT N/W OF A 8IN PINE TREE.

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

A 518 (AJ7235)=4B

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

CHILDS (1972)

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 12 26.16974(N)

HGT. MTS

LONGITUDE

081 19 44.24947(W)

41.515

RECEIVER MODEL

TRIMBLE 4000 SE

RECEIVER S/N

4927

SESSION

A518-106-1

DATE:

04/16/07

DAY OF YEAR

106

START TIME

18:15

X

U.T.C.

END TIME

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10015

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

0.4FT

BELOW GROUND

3001 DESCRIPTION: FOR RECOVERY OF A 518(PID=AJ7235)=4B SEE NGS DATA SHEET # AJ7235. POINT IS A STEEL ROD.

AERIAL TARGET

PUB. BENCH MARK

X

PUB. CONTROL

PHOTO I.D.

NEW CONTROL

X

BASE STATION

PHOTO:



SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

A 518 (AJ7235)=4B

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

CHILDS (1972)

OPERATOR

M. HAVARD

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 12 26.16974(N)

HGT. MTS

LONGITUDE

081 19 44.24947(W)

41.515

RECEIVER MODEL

TRIMBLE 4700

RECEIVER S/N

8613

SESSION

A518-107-1

DATE:

04/17/07

DAY OF YEAR

107

START TIME

10:45

X

U.T.C.

END TIME

18:07

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

76678

ANTENNA TYPE

TRIMBLE MICRO-CENTERED L1/L2 W/GRD.PLANE

TOP OF MONUMENT IS:

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

0.4FT

BELOW GROUND

3001 DESCRIPTION: REF. NGS DATASHEET (PID=AJ7235)

AERIAL TARGET

PUB. BENCH MARK

X

PUB. CONTROL

PHOTO I.D.

NEW CONTROL

X

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE
SWFWM-LAKE PLACID

POINT ID: D 518 (AJ7237)=6B
Proj. No.: 07154.01.001.551

STATE: FL PARISH: HIGHLANDS QUAD: CHILDS (1972)

OPERATOR: M. HAVARD APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL: TRIMBLE 4700 LATITUDE: 27 09 52.27940N HGT. MTS: 50.468M
RECEIVER S/N: 8613 LONGITUDE: 81 19 42.03186W

SESSION: D518-106-1 DATE: 04/16/07 START TIME: 18:17 X U.T.C.
DAY OF YEAR: 106 END TIME: 19:34 LOCAL

ANTENNA HEIGHT (SLANT) MTRS/FT: MEASURED FIXED HGT. ANTENNA INFO: RADIUS (M): S/N NUMBER: 76678 ANTENNA TYPE: TRIMBLE MICRO-CENTERED L1/L2 W/GRD.PLANE

ANTENNA HEIGHT (VERTICAL) MTRS/FT: 2.000M (UNCORRECTED) MEASURED X FIXED HGT. TOP OF MONUMENT IS: X FLUSH
METERS/FEET: ABOVE GROUND
METERS/FEET: BELOW GROUND

3001 DESCRIPTION: REF. NGS DATASHEET (AJ7237)

AERIAL TARGET PHOTO I.D.
PUB. BENCH MARK NEW CONTROL
X PUB. CONTROL X BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE
SWFWM-LAKE PLACID

POINT ID: D 518 (AJ7237)=6B
Proj. No.: 07154.01.001.551

STATE: FL PARISH: HIGHLANDS QUAD: CHILDS (1972)

OPERATOR: M. HAVARD APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL: TRIMBLE 4000 SSI LATITUDE: 27 09 52.27940N HGT. MTS: 50.468M

RECEIVER S/N: 4570 LONGITUDE: 81 19 42.03186W

SESSION: D518-107-1 DATE: 04/17/07 START TIME: 10:59 X U.T.C.
DAY OF YEAR: 107 END TIME: 18:15 LOCAL

ANTENNA HEIGHT (SLANT) MTRS/FT: MEASURED FIXED HGT. ANTENNA INFO: RADIUS (M): S/N NUMBER: 50907 ANTENNA TYPE: TRIMBLE COMP.L1/L2 W/GRD.PLANE

ANTENNA HEIGHT (VERTICAL) MTRS/FT: 2.000M (UNCORRECTED) MEASURED X FIXED HGT. TOP OF MONUMENT IS: X FLUSH METERS/FEET ABOVE GROUND METERS/FEET BELOW GROUND

3001 DESCRIPTION: REF. NGS DATASHEET (AJ7237)

AERIAL TARGET PHOTO I.D.
PUB. BENCH MARK NEW CONTROL
X PUB. CONTROL X BASE STATION

PHOTO: SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

LIDAR-LAKE PLACID, FLA.

POINT ID:

HA01(PID=AF7669)

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

LAKE PLACID (1972)

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 17 46.48947(N)

HGT. MTS

LONGITUDE

081 19 05.32499(W)

42.84

RECEIVER MODEL

TRIMBLE 4700

RECEIVER S/N

SESSION

HA01-107-1

DATE:

04/17/07

DAY OF YEAR

107

START TIME

10:37

X

U.T.C.

END TIME

18:19

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

ANTENNA TYPE

TRIMBLE MICRO-CENTERED

TOP OF MONUMENT IS:

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

.6FT

BELOW GROUND

3001 DESCRIPTION: FOR RECOVERY OF HA01(PID=AF7669) SEE NGS DATA SHEET #AF7669. POINT IS A STEEL ROD RECESSED.

AERIAL TARGET

PUB. BENCH MARK

X

PUB. CONTROL

PHOTO I.D.

NEW CONTROL

X

BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

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JOB REFERENCE

SWFWM-LAKE PLACID

POINT ID:

HA04(PID=AF7672)=3B

Proj. No.:

07154.01.001.551

STATE

FLORIDA

COUNTY

HIGHLANDS

QUAD:

VENUS NW (1972)

OPERATOR

V. MCNEAL

APPROXIMATE POSITION (C/A/CODE)

LATITUDE

27 12 30.85064(N)

HGT. MTS

LONGITUDE

081 23 49.97129(W)

42.84

RECEIVER MODEL

TRIMBLE 4000 SE

RECEIVER S/N

4927

SESSION

HA04-106-1

DATE:

04/16/07

DAY OF YEAR

106

START TIME

16:43

X

U.T.C.

END TIME

18:02

LOCAL

ANTENNA HEIGHT (SLANT)

MTRS/FT

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

MTRS/FT

2.000M (UNCORRECTED)

MEASURED

X

FIXED HGT

ANTENNA INFO

RADIUS (M)

S/N NUMBER

10015

ANTENNA TYPE

TRIMBLE COMPAC L1/L2 W/GROUND PLANE

TOP OF MONUMENT IS:

FLUSH

METERS/FEET

ABOVE GROUND

METERS/FEET

.6FT

BELOW GROUND

3001 DESCRIPTION: FOR RECOVERY OF HA04(PID=AF7672)=3B SEE NGS DATA SHEET #AF7672. POINT IS A STEEL ROD RECESSED.

AERIAL TARGET

PUB. BENCH MARK

X

PUB. CONTROL

PHOTO I.D.

X NEW CONTROL

X BASE STATION

PHOTO:

SKETCH:



501 ROBERT BLVD. 2nd. FLOOR
SLIDELL, LA. 70458
703-574-2336 voice 985-649-5082 fax

GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE

LIDAR-LAKE PLACID, FLA.

POINT ID:

HA04(PID=AF7672)=3B

Proj. No.:

07154.01.001.551

STATE	FLORIDA	COUNTY	HIGHLANDS	QUAD:	VENUS NW (1972)
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OPERATOR	V. MCNEAL	APPROXIMATE POSITION (C/A/CODE)			
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RECEIVER MODEL	TRIMBLE 4000 SE	LATITUDE	27 12 30.85064(N)	HGT. MTS	
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RECEIVER S/N	4927	LONGITUDE	081 23 49.97129(W)		42.84
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SESSION	HA04-107-1	DATE:	04/17/07	START TIME	11:04	X	U.T.C.
		DAY OF YEAR	107	END TIME	18:48		LOCAL

ANTENNA HEIGHT (SLANT)				ANTENNA INFO			
MTRS/FT		RADIUS (M)		S/N NUMBER	10015		
	MEASURED		FIXED HGT.	ANTENNA TYPE	TRIMBLE COMPAC L1/L2 W/GROUND PLANE		

ANTENNA HEIGHT (VERTICAL)				TOP OF MONUMENT IS:			
MTRS/FT		2.000M (UNCORRECTED)		METERS/FEET		FLUSH	
	MEASURED	X	FIXED HGT.	METERS/FEET	.6FT	ABOVE GROUND	
						BELOW GROUND	

3001 DESCRIPTION: FOR RECOVERY OF HA04(PID=AF7672)=3B SEE NGS DATA SHEET #AF7672. POINT IS A STEEL ROD RECESSED.

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
X	PUB. CONTROL	X	BASE STATION

PHOTO: SKETCH:



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SLIDELL, LA. 70458
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GPS CONTROL SURVEY FIELD DATA SHEET

PAGE:

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JOB REFERENCE
SWFWM-LAKE PLACID

POINT ID: SEBRINGPORT (AF7422)
Proj. No.: 07154.01.001.551

(FLIGHT POINT)

STATE	FL	PARISH	HIGHLANDS	QUAD:	LORIDA (1972)
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OPERATOR	C. LAPRARIE	APPROXIMATE POSITION (C/A/CODE)			
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RECEIVER MODEL	TRIMBLE 4000	LATITUDE	27 27 32.29371N	HGT. MTS	
RECEIVER S/N	4305	LONGITUDE	81 20 31.11232W		17.48M

SESSION	DATE:	04/17/07	START TIME	10:44	X	U.T.C.
SEBR-107-1	DAY OF YEAR	107	END TIME			LOCAL

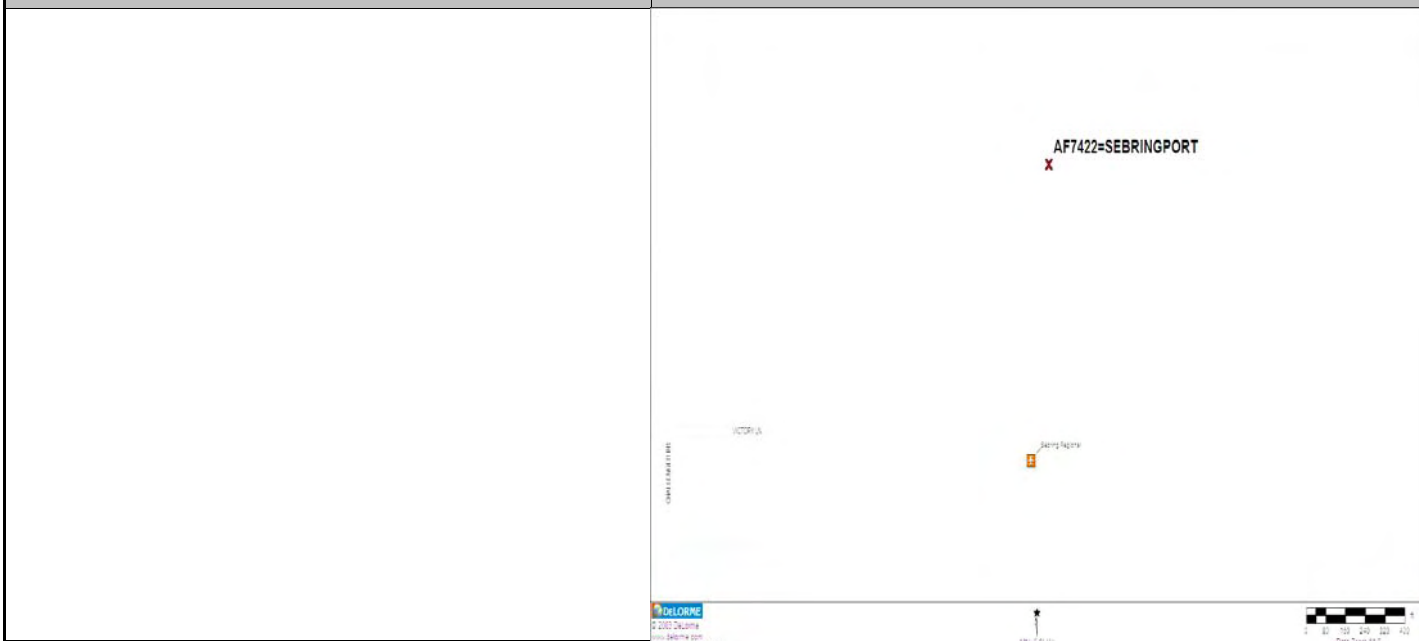
ANTENNA HEIGHT (SLANT)				ANTENNA INFO			
MTRS/FT				RADIUS (M)			
	MEASURED		FIXED HGT.	S/N NUMBER	24415		
				ANTENNA TYPE	TRIMBLE COMP.L1/L2 W/GRD.PLANE		

ANTENNA HEIGHT (VERTICAL)				TOP OF MONUMENT IS:			
MTRS/FT	2.000M (UNCORRECTED)				X	FLUSH	
	MEASURED		FIXED HGT	METERS/FEET		ABOVE GROUND	
		X		METERS/FEET		BELOW GROUND	

3001 DESCRIPTION: REF. NGS DATASHEET (AF7422)

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
X	PUB. CONTROL	X	BASE STATION

PHOTO: SKETCH:



TOPO Log

Project Name: SWFWM-LAKE PLACID
Project No: 07154.01.001.551
Project Location: LAKE PLACID

Date	Site	Ref. Station	Ant. Hgt	Ant. Type	Start Point	End Point	Ant. Hgt	Ant. Type	Point Code
04/16/07	5	5B	2.063M	TRIMBLE COMP.L1/L2 W/ GP	5C CHK		2.063M	TRIMBLE MICRO-CENTERED L1/L2	SPIKE NAIL-RTK
04/16/07	5	5B	1.571M	SOKKIA SET 3B INSTR.	5C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL
04/16/07	5	5B	1.571M	SOKKIA SET 3B INSTR.	5A1	5A30	1.86M	FIBER ROD W/PRISMS	C111
04/16/07	5	5B	1.571M	SOKKIA SET 3B INSTR.	5A31	5A50	1.86M	FIBER ROD W/PRISMS	3111
04/16/07	5	5B	1.571M	SOKKIA SET 3B INSTR.	5C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL-CHK
04/17/07	1	1B	2.063M	TRIMBLE COMP.L1/L2 W/ GP	1C CHK		2.063M	TRIMBLE MICRO-CENTERED L1/L2	SPIKE NAIL-RTK
04/17/07	1	1B	1.637M	SOKKIA SET 3B INSTR.	1C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL
04/17/07	1	1B	1.637M	SOKKIA SET 3B INSTR.	1A1	1A20	1.86M	FIBER ROD W/PRISMS	6111
04/17/07	1	1B	1.637M	SOKKIA SET 3B INSTR.	1A21	1A40	1.86M	FIBER ROD W/PRISMS	3111
04/17/07	1	1B	1.637M	SOKKIA SET 3B INSTR.	1A41	1A51	0.00M	FIBER ROD W/PRISMS	BLDG ROOF CORNERS-HORZ
04/17/07	1	1B	1.637M	SOKKIA SET 3B INSTR.	1C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL-CHK
04/17/07	3	HA04=3B	2.063M	TRIMBLE COMP.L1/L2 W/ GP	3C CHK		2.063M	TRIMBLE MICRO-CENTERED L1/L2	SPIKE NAIL-RTK
04/17/07	3	HA04=3B	1.725M	SOKKIA SET 3B INSTR.	3C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL
04/17/07	3	HA04=3B	1.725M	SOKKIA SET 3B INSTR.	3A1	3A15	1.86M	FIBER ROD W/PRISMS	3111
04/17/07	3	HA04=3B	1.725M	SOKKIA SET 3B INSTR.	3A16	3A30	1.86M	FIBER ROD W/PRISMS	A111
04/17/07	3	HA04=3B	1.725M	SOKKIA SET 3B INSTR.	3A31	3A45	1.86M	FIBER ROD W/PRISMS	6111
04/17/07	3	HA04=3B	1.725M	SOKKIA SET 3B INSTR.	3C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL-CHK
04/18/07	7	7B	2.063M	TRIMBLE COMP.L1/L2 W/ GP	7C CHK		2.063M	TRIMBLE MICRO-CENTERED L1/L2	SPIKE NAIL-RTK
04/18/07	7	7B	1.564M	SOKKIA SET 3B INSTR.	7C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL
04/18/07	7	7B	1.564M	SOKKIA SET 3B INSTR.	7A1	7A10	1.86M	FIBER ROD W/PRISMS	3111
04/18/07	7	7B	1.564M	SOKKIA SET 3B INSTR.	7A11	7A20	1.86M	FIBER ROD W/PRISMS	C111
04/18/07	7	7B	1.564M	SOKKIA SET 3B INSTR.	7A21	7A50	1.86M	FIBER ROD W/PRISMS	8111
04/18/07	7	7B	1.564M	SOKKIA SET 3B INSTR.	7A51	7A55	0.00M	FIBER ROD W/PRISMS	BLDG ROOF CORNERS-HORZ
04/18/07	7	7B	1.564M	SOKKIA SET 3B INSTR.	7C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL-CHK
04/18/07	2	2B	2.063M	TRIMBLE COMP.L1/L2 W/ GP	2C CHK		2.063M	TRIMBLE MICRO-CENTERED L1/L2	SPIKE NAIL-RTK
04/18/07	2	2B	1.606M	SOKKIA SET 3B INSTR.	2C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL
04/18/07	2	2B	1.606M	SOKKIA SET 3B INSTR.	2A1	2A20	1.86M	FIBER ROD W/PRISMS	3111
04/18/07	2	2B	1.606M	SOKKIA SET 3B INSTR.	2A21	2A40	1.86M	FIBER ROD W/PRISMS	6111
04/18/07	2	2B	1.606M	SOKKIA SET 3B INSTR.	2A41	2A49	1.86M	FIBER ROD W/PRISMS	CONC SIDEWALK-HORZ
04/18/07	2	2B	1.606M	SOKKIA SET 3B INSTR.	2C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL-CHK
04/18/07	4	A518=4B	2.063M	TRIMBLE COMP.L1/L2 W/ GP	4C CHK		2.063M	TRIMBLE MICRO-CENTERED L1/L2	SPIKE NAIL-RTK
04/18/07	4	A518=4B	1.644M	SOKKIA SET 3B INSTR.	4C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL
04/18/07	4	A518=4B	1.644M	SOKKIA SET 3B INSTR.	4A1	4A20	1.86M	FIBER ROD W/PRISMS	8111
04/18/07	4	A518=4B	1.644M	SOKKIA SET 3B INSTR.	4A21	4A30	1.86M	FIBER ROD W/PRISMS	6111
04/18/07	4	A518=4B	1.644M	SOKKIA SET 3B INSTR.	4A31	4A40	1.86M	FIBER ROD W/PRISMS	C111
04/18/07	4	A518=4B	1.644M	SOKKIA SET 3B INSTR.	4C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL-CHK
04/18/07	6	D518=6B	2.063M	TRIMBLE COMP.L1/L2 W/ GP	6C CHK		2.063M	TRIMBLE MICRO-CENTERED L1/L2	SPIKE NAIL-RTK
04/18/07	6	D518=6B	1.674M	SOKKIA SET 3B INSTR.	6C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL
04/18/07	6	D518=6B	1.674M	SOKKIA SET 3B INSTR.	6A1	6A15	1.86M	FIBER ROD W/PRISMS	6111
04/18/07	6	D518=6B	1.674M	SOKKIA SET 3B INSTR.	6A16	6A30	1.86M	FIBER ROD W/PRISMS	A111
04/18/07	6	D518=6B	1.674M	SOKKIA SET 3B INSTR.	6A31	6A40	1.86M	FIBER ROD W/PRISMS	C111
04/18/07	6	D518=6B	1.674M	SOKKIA SET 3B INSTR.	6C CHK		2.063M	SECO FIXED HGT TRIPOD W/PRISMS	SPIKE NAIL-CHK

Ground Check-Point Descriptive Codes

Surface Type		Sky Visibility		Surface Slope		Confidence	
1	Dirt	1	Open	1	Flat	1	Good
2	Sand	2	Part open	2	Slight Slope	2	Fair
3	Asphalt	3	Covered	3	Slope	3	Bad
4	Concrete						
5	Tall Grass						
6	Mowed Grass						
7	Trees and Brush						
8	Weeds and short grass						
9	Thick brush						
A	Thick cut grass						
B	Cultivated field - unplowed						
C	Limestone						
D	Trees and grass						
E	Gravel						
F	Brush and grass						