Surveyor's Report

Vertical Control Survey of Kissimmee River Restoration Project Monitoring Wells

NMI Project No. 1078.028 Report Date: July 6th, 2007 Submittal: Final

Prepared for:

South Florida Water Management District



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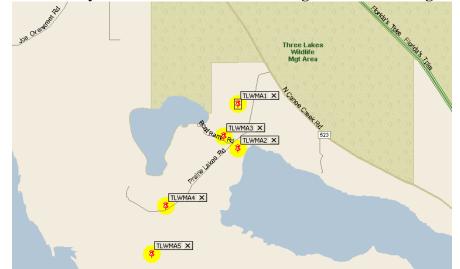
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OVERVIEW OF THE PROJECT

PURPOSE

The purpose of the Kissimmee River Restoration Project is to establish a vertical control mark near proposed water level monitoring wells located in Osceola and Okeechobee Counties. This project requires NGS third order elevations be established on either a poured-in-place concrete monument or a stainless-steel rod driven to refusal, depending on the conditions at each site. Each mark will also be observed with static GPS methods, in coordination with the NGS CORS (Continuously Operating Reference Stations) to establish horizontal coordinates.

Following are vicinity maps showing the locations of the nine monitoring wells.



Osceola County – Three Lakes Wildlife Management Monitoring Wells

Okeechobee County - Kissimmee Prairie Preserve Monitoring Wells



ITEMS DELIVERED TO THE CLIENT

The following items are delivered to the client with this report. Neither the report nor the items listed below are complete without the other. A CD containing the following:

- 1. Survey Report in Microsoft Word format
- 2. Digital photos
- 3. Scanned copies of field notes
- 4. CORPSMET file for each well site
- 5. South Florida Water Management District Benchmark Description Sheet for all set marks.

VERTICAL DATUM FOR THE PROJECT

The vertical datum for the project is the North American Vertical Datum of 1988. For correlation with older data sets, the elevations of the benchmarks are also shown in the National Geodetic Vertical Datum (NGVD) of 1929. The NGVD 29 elevations were derived using data provided by the South Florida Water Management District in a file named "NGVD29.ABS" when applicable, otherwise NGS superseded values were used. The linear unit for all elevations is the US Survey Foot unless otherwise stated.

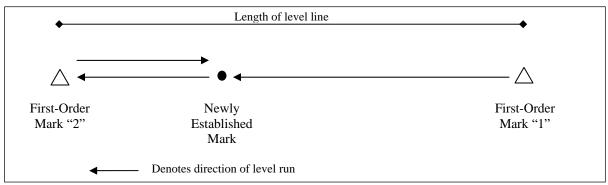
Leveling Methods

CONFIGURATION OF LEVEL RUNS

The leveling for the project was performed in accordance with the Federal Geodetic Control Subcommittee standard for Third-Order geodetic leveling. A brief description of the procedures used follows.

For each level line, two existing First or Second Order vertical marks were used. The run was started at one of the First or Second Order marks and continued through the newly established mark near the structure and closed on the second First or Second Order vertical mark. The run was then looped back from the second First or Second Order mark to the newly established mark (see Figure 1 below).





The FGCS maximum allowable misclosure for this type of run is twelve millimeters multiplied by the square root of the length of the line in kilometers.

EQUIPMENT USED

All leveling during the project was performed with a Leica DNA03 digital level and Leica three-section, fiberglass bar-code level rods. Information and technical specification for the Leica DNA03 digital level are available at http://www.leica-geosystems.com.

PROJECT RESULTS

The following table lists the elevations established for the new mark, ground elevation, the level run misclosure, "to-reach" description for the mark and a photo of the mark. All elevations and state plane coordinates are in US Survey Feet.

NOTE: There were no monitoring wells present at each well site, only a stake with flagging to mark the proposed position of a monitoring well to be constructed in the future.

KPPGW1	Elev	ation:	68.26 ft	(NAVD 88)	69.48 ft	(NGVD 29)
Bench Mark 1:	P 617		68.05 ft	(NAVD 88)	N/A ft	(NGVD 29)
Bench Mark 2:	R 617		67.01 ft	(NAVD 88)	N/A ft	(NGVD 29)
Monitoring Well:	KPPGW1		NOT CONSTRU		NOTE ON PAG	
Ground Elevation:	KPPGW1		68.35 ft	(NAVD 88)	69.58 ft	(NGVD 29)
Northing: 1,169,481.5 ft	Easting: 65	4,165.4 ft	To Reach Desc	ription (KPP	GW1):	
Length of Run:	0.90 mile	Э				
Max Allowable Misclosure:		0.046 ft	FROM THE INTER			
Actual Misclosure:		0.003 ft	NORTH ON CR 700 700A AND CR 724.			
Looking at Benchr	mark Facing	East	FOR 1.0 MILE TO I RIGHT AND HEAL MILES TO KISSIM CONTINUE NORT. ROAD ON RIGHT. ROAD FOR 1.05 M ROUND CONCRET BELOW GROUND CENTERLINE OF I KPPGW1 MONITO NAIL AND DISK L DIAMETER PALM DISK LB 4318 ON J TREE AND 3.0 FEF POST. MAGNET SI	D NORTH ON N EE PRAIRIE PI H ON GRADE I MAKE RIGHT ILE TO MARK TE MONUMEN LEVEL. LOCA DIRT ROAD, 18 RING WELL S B 4318 ON SOU TREE, 33.5 FE EAST SIDE OF T SOUTH OF A	W 192 ND AVENU RESERVE ENTRA ROAD FOR 0.7 M AND HEAD EAS ON LEFT, SET IN T RECESSED 0.3 .TED 24.2 FEET N 3.0 FEET WEST FI ITE, 63.1 FEET EA UTH SIDE OF 0.9 ET SOUTH OF PK 1.0 FOOT DIAMI A CARSONITE W RTH OF BENCHN	E FOR 5.1 ANCE. ILE TO DIRT T ON DIRT V TOP OF A FOOT ORTH OF ROM AST OF PK FOOT C NAIL AND ETER PALM ITNESS
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Nick Miller, Inc. Date of Photo: June 5, 2007 View: Looking at the proposed well site stake and benchmark facing east



Nick Miller, Inc. Date of Photo: June 5, 2007 View: Looking at benchmark facing north



Nick Miller, Inc. Date of Photo: June 5, 2007 View: A top view of the benchmark

KPPGW2	Ele	vation:	68.79 ft	(NAVD 88)	70.02 ft	(NGVD 29)
Bench Mark 1:	P 617		68.05 ft	(NAVD 88)	N/A ft	(NGVD 29)
Bench Mark 2:	R 617		67.01 ft	(NAVD 88)	N/A ft	(NGVD 29)
Monitoring Well:	KPPGW2		NOT CONSTRU	JCTED - SEE	NOTE ON PAG	GE 4
Ground Elevation:	KPPGW2		68.96 ft	(NAVD 88)	70.19 ft	(NGVD 29)
Northing: 1,170,214.0 ft	Easting: 65	58,341.3 ft	To Reach Desc	ription (KPP	GW2):	
Length of Run:	0.90 mi	le				
Max Allowable Misclosure:		0.046 ft	FROM THE INTER			
Actual Misclosure:		0.003 ft	 NORTH ON CR 70 700A AND CR 724 			
Looking at Benchmark facing North			FOR 1.0 MILE TO	PEAVINE TRAI	L (NW 192 nd AVE	NUE). MAKE

Looking at Benchmark facing North
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FROM THE INTERSECTION OF US 98 AND CR 700A. HEAD
NORTH ON CR 700A FOR 5.7 MILES TO INTERSECTION OF CR
700A AND CR 724. MAKE LEFT ON CR 724 AND HEAD WEST
FOR 1.0 MILE TO PEAVINE TRAIL (NW 192 nd AVENUE). MAKE
RIGHT AND HEAD NORTH ON NW 192 ND AVENUE FOR 5.1
MILES TO KISSIMEE PRAIRIE PRESERVE ENTRANCE.
CONTINUE NORTH ON GRADE ROAD FOR 0.7 MILE TO DIRT
ROAD ON RIGHT. MAKE RIGHT AND HEAD EAST ON DIRT
ROAD FOR 1.8 MILES TO MARK ON LEFT, SET IN TOP OF A
ROUND CONCRETE MONUMENT RECESSED 0.3 FOOT
BELOW GROUND LEVEL. LOCATED 26.1 FEET NORTH OF
CENTERLINE OF DIRT ROAD, 14.5 FEET NORTH FROM
KPPGW2 MONITORING WELL SITE, 85.1 FEET SOUTHEAST
OF PK NAIL AND DISK LB 4318 ON SOUTH SIDE OF 1.2 FOOT
DIAMETER PALM TREE AND 3.0 FEET SOUTH OF A
CARSONITE WITNESS POST. MAGNET SET 1 FOOT NORTH
OF BENCHMARK.

Top View of Benchmark





Nick Miller, Inc. Date of Photo: June 5, 2007 View: Looking at the proposed well site stake and benchmark facing north



Nick Miller, Inc. Date of Photo: June 5, 2007 View: Looking at benchmark facing east





Nick Miller, Inc. Date of Photo: June 5, 2007 View: A top view of the benchmark

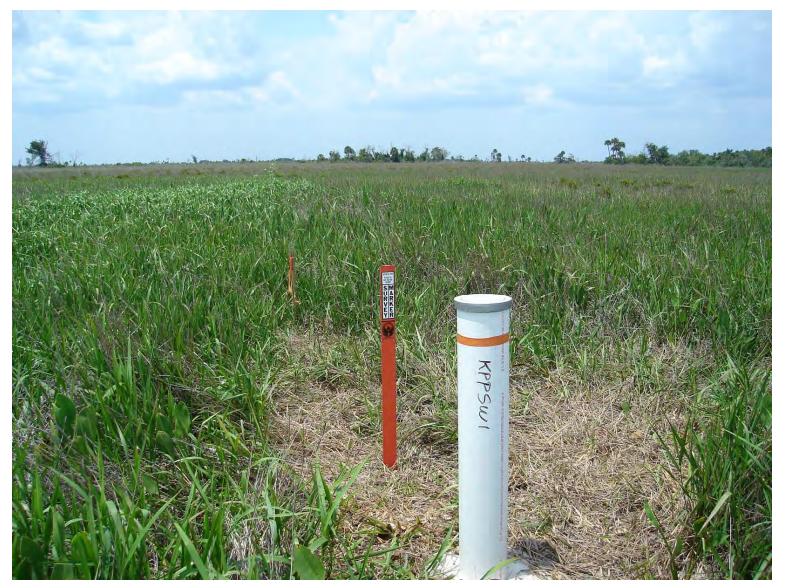
KPPSW1		Elevation:		69.36 ft	(NAVD 88)	70.58 ft	(NGVD 29)	
Bench Mark 1:	P 617			68.05 ft	(NAVD 88)	N/A ft	(NGVD 29)	
Bench Mark 2:	R 617			67.01 ft	(NAVD 88)	N/A ft	(NGVD 29)	
Monitoring Well:	KPPS\	N1		NOT CONSTRU	JCTED - SEE	NOTE ON PA	GE 4	
Well Ground Elevation:	KPPS\	N1		66.40 ft	(NAVD 88)	67.62 ft	(NGVD 29)	
Road Elevation:	KPPS\	N1		68.01 ft	(NAVD 88)	69.23 ft	(NGVD 29)	
Northing: 1,169,936.9 ft	Easting	g: 659,553.2	2 ft	To Reach Description (KPPSW1):				
Length of Run:	0.90	0 mile						
Max Allowable Misclosure:		0.0)46 ft	FROM THE INTER				
Actual Misclosure:		0.0)03 ft	NORTH ON CR 70				
Looking at Bench	Looking at Benchmark facing North 700A AND CR 724. MAKE LEFT ON CR 724 AND HEAD FOR 1.0 MILE TO PEAVINE TRAIL (NW 192 nd AVENUE) RIGHT AND HEAD NORTH ON NW 192 ND AVENUE FOR		ENUE). MAKE IE FOR 5.1					



FROM THE INTERSECTION OF US 98 AND CR 700A. HEAD NORTH ON CR 700A FOR 5.7 MILES TO INTERSECTION OF CR 700A AND CR 724. MAKE LEFT ON CR 724 AND HEAD WEST FOR 1.0 MILE TO PEAVINE TRAIL (NW 192nd AVENUE). MAKE RIGHT AND HEAD NORTH ON NW 192ND AVENUE FOR 5.1 MILES TO KISSIMEE PRAIRIE PRESERVE ENTRANCE. CONTINUE NORTH ON GRADE ROAD FOR 0.7 MILE TO DIRT ROAD ON RIGHT. MAKE RIGHT AND HEAD EAST ON DIRT ROAD FOR 0.8 MILE TO MARK ON LEFT, A STAINLESS STEEL ROD DRIVEN TO REFUSAL INSIDE A 6 INCH PVC CASING WITH AN ALUMINUM ACCESS COVER. LOCATED +/- 360 FEET NORTH OF CENTERLINE OF DIRT ROAD, 13.0 FEET SOUTH FROM KPPSW1 MONITORING WELL SITE AND 3.0 FEET SOUTH OF A CARSONITE WITNESS POST. MAGNET PLACED INSIDE 6 INCH PVC CASING. STAINLESS STEEL ROD DEPTH IS 47.8 FEET.

Top View of Benchmark





Nick Miller, Inc. Date of Photo: June 19, 2007 View: Looking at the proposed well site stake and benchmark facing north



Nick Miller, Inc. Date of Photo: June 19, 2007 View: Looking at benchmark facing north





Nick Miller, Inc. Date of Photo: June 19, 2007 View: A top view of the benchmark

KPPSW2	Elev	/ation:	70.42 ft	(NAVD 88)	71.64 ft	(NGVD 29)	
Bench Mark 1:	P 617		68.05 ft	(NAVD 88)	N/A ft	(NGVD 29)	
Bench Mark 2:	R 617		67.01 ft	(NAVD 88)	N/A ft	(NGVD 29)	
Monitoring Well:	KPPSW2		NOT CONSTRU	ICTED - SEE	EE NOTE ON PAGE 4		
Well Ground Elevation:	KPPSW2		67.12 ft	(NAVD 88)	68.35 ft	(NGVD 29)	
Road Elevation:	KPPSW2		69.40 ft	(NAVD 88)	70.62 ft	(NGVD 29)	
Northing: 1,169,735.5 ft	Easting: 652,928.7 ft		To Reach Desc	ription (KPP	'SW2):		
Length of Run:	0.90 mil	е					
Max Allowable Misclosure:	sure: 0.046 ft		FROM THE INTERSECTION OF US 98 AND CR 700A. HEAD NORTH ON CR 700A FOR 5.7 MILES TO INTERSECTION OF C				
Actual Misclosure:		0.003 ft	700A AND CR 724				
Looking at Bench	mark facing	South	FOR 1.0 MILE TO MAKE RIGHT AN 5.1 MILES TO KIS	PEAVINE TRA D HEAD NORT	IL (NW 192 ND AV TH ON NW 192 ND	ENUE). AVENUE FOR	
			CONTINUE NORT ROAD ON RIGHT, ROAD FOR 2.1 MI STEEL ROD DRIV CASING WITH AN	MAKE RIGHT LES TO MARK EN TO REFUS	AND HEAD EAS ON RIGHT, A ST AL INSIDE A 6 IN	ST ON DIRT TAINLESS ICH PVC	



+/- 260 FEET SOUTH OF CENTERLINE OF DIRT ROAD, 19.6 FEET SOUTH FROM KPPSW2 MONITORING WELL SITE, 53.3 FEET WEST OF BARBED WIRE FENCE, 43.1 FEET SOUTH OF PK NAIL AND DISK LB 4318 ON EAST SIDE OF 0.8 FOOT DIAMETER OAK TREE AND 3.0 FEET NORTH OF A CARSONITE WITNESS POST. MAGNET PLACED INSIDE 6 INCH PVC CASING. STAINLESS STEEL ROD DEPTH IS 52.1 FEET.

Top View of Benchmark





Nick Miller, Inc. Date of Photo: June 7, 2007 View: Looking at the proposed well site stake and benchmark facing south



Nick Miller, Inc. Date of Photo: June 7, 2007 View: Looking at the proposed well site stake and benchmark from dirt road facing southeast



Nick Miller, Inc. Date of Photo: June 7, 2007 View: Looking at benchmark facing south





Nick Miller, Inc. Date of Photo: June 7, 2007 View: A top view of the benchmark

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SET CARSOWITE WITNESS POST 3' NORTH O	OF BAY			RESERVE		
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ON AS SOUTH SIZE 10.9' PALM TREE .	↓					
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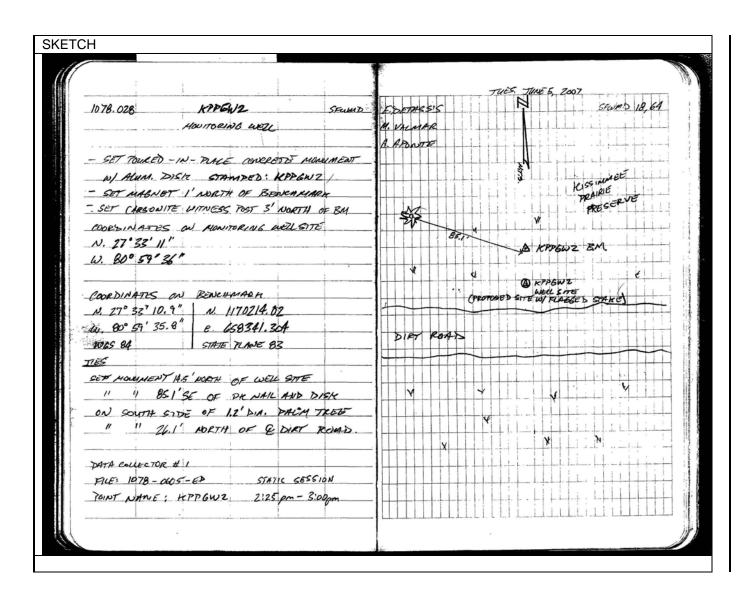


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COUNTY OKEECHOBEE	PROJECT KISSIMMEE RIVER RESTORATION PROJECT		DESIGN	ATION KPPGW2
SECTION 35	TOWNSHIP 3	3 SOUTH	RANGE	33 EAST
GEOGRAPHIC INDEX OF QUAD				
Established by <u>Nick Miller Inc.</u>		NAME OF QUADRA	NGLE	
Recovered by		FORT DRUM SW		
SURVEYOR <u>Stephen M. Gordon</u> D	ATE <u>7/03/2007</u>	FIELD BOOK	18	PAGE64
HORIZONTAL DATUM: 1927	983 Other_	(circle	e one)	ZONE Dor W
STATE PLANE COORDINATES		E 658,341.3 f	ťt	N 1,170,214.0 ft
LATITUDE: N 27.55303°		LONGITUDE: W 80	.99328°	
VERTICAL DATUM: MSL 1929	1988 Other	(circle	e one)	EL. 68.79 ft
VERTICAL DATUM: MSL 1929	1988 Other	(circle	e one)	EL. 70.02 ft
CONTROL ACCURACY: HORIZO	NTAL 1 2 3	SUB-METER (cir	cle one)	VERTICAL 1 2 3
	DES	CRIPTION		
To Reach:				
FROM THE INTERSECTION OF US	98 AND CR 700A	. HEAD NORTH ON C	R 700A F	OR 5.7 MILES TO
INTERSECTION OF CR 700A AND C				
PEAVINE TRAIL (NW 192 nd AVENUE MILES TO KISSIMEE PRAIRIE PRES				
MILE TO DIRT ROAD ON RIGHT. MA	-		-	
MARK ON LEFT, SET IN TOP OF A F GROUND LEVEL. LOCATED 26.1 FE				
FROM KPPGW2 MONITORING WEL	L SITE, 85.1 FEE	T SOUTHEAST OF P	K NAIL Á	ND DISK LB 4318 ON
SOUTH SIDE OF 1.2 FOOT DIAMET POST. MAGNET SET 1 FOOT NORT			H OF A CA	ARSONITE WITNESS
Benchmarks Used: P 617, R 617				
Notable Land marks:				

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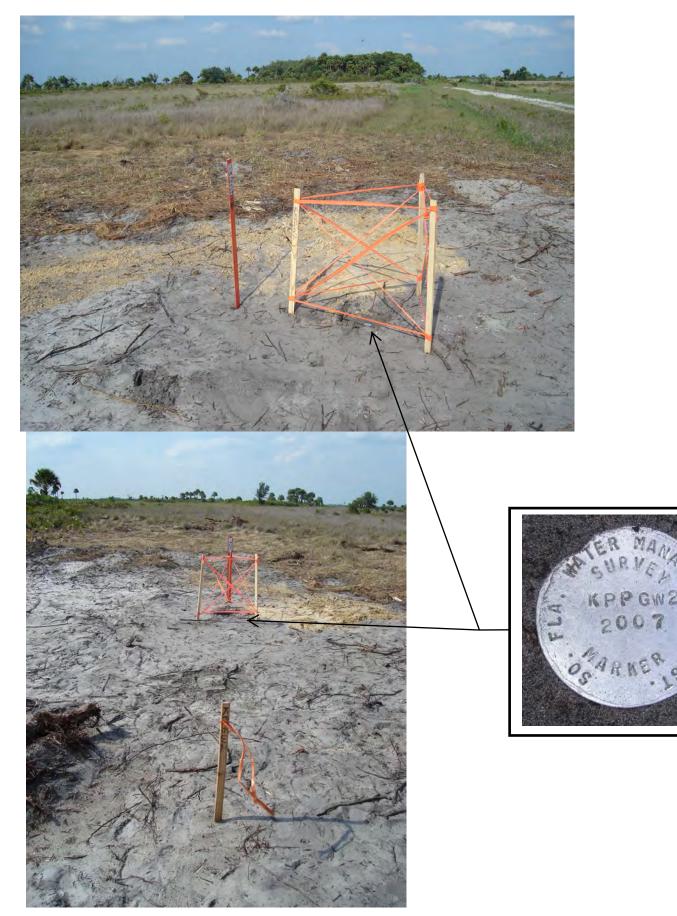
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TOWNSHIP 3	4 SOUTH	RANGE	33 EAST
ATE <u>7/03/2007</u>	FIELD BOOK	18	PAGE1
983 Other_	(circle	e one)	ZONE Or W
	E 659,553.2 1	ft	N 1,169,936.9 ft
	LONGITUDE: W 80).98955°	
1988 Other	(circle	e one)	EL. 69.36 ft
1988 Other	(circle	e one)	EL. 70.58 ft
NTAL 1 2 3	SUB-METER (cir	rcle one)	VERTICAL 1 2 3
DESC			
R 724. MAKE LE). MAKE RIGHT A ERVE ENTRANC AKE RIGHT AND D DRIVEN TO RE TED +/- 360 FEE ITORING WELL S	FT ON CR 724 AND F AND HEAD NORTH O CE. CONTINUE NORT HEAD EAST ON DIR FUSAL INSIDE A 6 IN T NORTH OF CENTE SITE AND 3.0 FEET S	HEAD WES N NW 192 TH ON GR T ROAD FU NCH PVC RLINE OF OUTH OF	ST FOR 1.0 MILE TO AVENUE FOR 5.1 ADE ROAD FOR 0.7 OR 0.8 MILE TO MARK CASING WITH AN DIRT ROAD, 13.0 A CARSONITE
	RESTORATION TOWNSHIP 3 ATE_7/03/2007 983 Other_ 983 Other_ 983 Other_ 1988 Other 1988 Ot	NAME OF QUADRA FORT KISSIMMEE ATE 7/03/2007 FIELD BOOK 983 Other (circla E 659,553.2 f LONGITUDE: W 80 1988 Other (circla 0 0 0 0 0 0 0 <t< td=""><td>RESTORATION PROJECT RANGE TOWNSHIP 34 SOUTH RANGE NAME OF QUADRANGLE FORT KISSIMMEE SE FORT KISSIMMEE SE ATE 7/03/2007 FIELD BOOK 18 983 Other (circle one) E 659,553.2 ft LONGITUDE: W 80.98955° 1988 Other (circle one) 1988 Other (circle one) NAME SUB-METER (circle one)</td></t<>	RESTORATION PROJECT RANGE TOWNSHIP 34 SOUTH RANGE NAME OF QUADRANGLE FORT KISSIMMEE SE FORT KISSIMMEE SE ATE 7/03/2007 FIELD BOOK 18 983 Other (circle one) E 659,553.2 ft LONGITUDE: W 80.98955° 1988 Other (circle one) 1988 Other (circle one) NAME SUB-METER (circle one)

Notable Land marks: MARK SET 1' HIGHER THAN CENTERLINE OF ROAD



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	i i	A. VALMER	· · ·	
- SET STANKESS STEEL ROD TO REFUSAL				
DEPTH: 47.8'		Life allow any	Na	
- PLACED MAGNET INSIDE 6" PUC CASING		Liver A . Li.	£5.	RISSIMMEE
- ALUM ARCESS COVER STANDED:		And in the	1	PRAIRIE
SOUTH FLORIDA WATER MANAGEMENT DI	STRICT	Alifutica		PRAIRIE
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- SET CARSONITE WITNESS POST 3'NOR	TH OF BM		*	· · .· .
COORDINATES ON WELL SITE				
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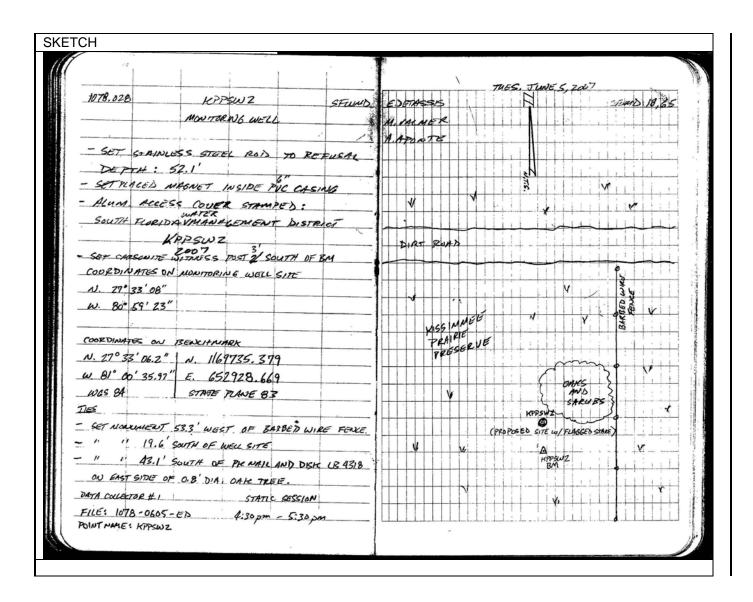


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COUNTY OKEECHOBEE	PROJECT KISSIMMEE RIVER RESTORATION PROJECT		DESIGNATION KPPSW2	
SECTION 1	TOWNSHIP 34 SOUTH		RANGE 33 EAST	
GEOGRAPHIC INDEX OF QUAD				
Established by <u>Nick Miller Inc.</u> Recovered by		NAME OF QUADRANGLE FORT DRUM SW		
SURVEYOR Stephen M. Gordon DATE 7/03/2007		FIELD BOOK	18	PAGE <u>65</u>
HORIZONTAL DATUM: 1927 1983 Other (circle one) ZONE Or W				
STATE PLANE COORDINATES		E 652,928.7 ft		N 1,169,735.5 ft
LATITUDE: N 27.55172° LONGITUDE: W 81.00999°				
VERTICAL DATUM: MSL 1929 (1988) Other		(circle one)		EL. 70.42 ft
VERTICAL DATUM: MSL 1929	(circle	EL. 71.64 ft		
CONTROL ACCURACY: HORIZONTAL 1 2 3 SUB-METER (circle one) VERTICAL 1 2 3				
DESCRIPTION				
To Reach:				
FROM THE INTERSECTION OF US 98 AND CR 700A. HEAD NORTH ON CR 700A FOR 5.7 MILES TO INTERSECTION OF CR 700A AND CR 724. MAKE LEFT ON CR 724 AND HEAD WEST FOR 1.0 MILE TO PEAVINE TRAIL (NW 192 ND AVENUE). MAKE RIGHT AND HEAD NORTH ON NW 192 ND AVENUE FOR 5.1 MILES TO KISSIMEE PRAIRIE PRESERVE ENTRANCE. CONTINUE NORTH ON GRADE ROAD FOR 0.7 MILE TO DIRT ROAD ON RIGHT. MAKE RIGHT AND HEAD EAST ON DIRT ROAD FOR 2.1 MILES TO MARK ON RIGHT, A STAINLESS STEEL ROD DRIVEN TO REFUSAL INSIDE A 6 INCH PVC CASING WITH AN ALUMINUM ACCESS COVER. LOCATED +/- 260 FEET SOUTH OF CENTERLINE OF DIRT ROAD, 19.6 FEET SOUTH FROM KPPSW2 MONITORING WELL SITE, 53.3 FEET WEST OF BARBED WIRE FENCE, 43.1 FEET SOUTH OF PK NAIL AND DISK LB 4318 ON EAST SIDE OF 0.8 FOOT DIAMETER OAK TREE AND 3.0 FEET NORTH OF A CARSONITE WITNESS POST. MAGNET PLACED INSIDE 6 INCH PVC CASING. STAINLESS STEEL ROD DEPTH IS 52.1 FEET.				
Benchmarks Used: P 617, R 617				

Notable Land marks: MARK SET 1' HIGHER THAN CENTERLINE OF DIRT ROAD



Rev. 4/01





Rev. 4/01







The NGS Data Sheet

See file dsdata.txt for more information about the datasheet.

```
PROGRAM = datasheet95, VERSION = 8.8
1
       National Geodetic Survey, Retrieval Date = DECEMBER 12, 2015
AF7109 DESIGNATION - OSC 6 FLDNR
AF7109 PID
              - AF7109
AF7109 STATE/COUNTY- FL/OSCEOLA
AF7109 COUNTRY - US
AF7109 USGS QUAD - LAKE MARIAN NE (1972)
AF7109
AF7109
                              *CURRENT SURVEY CONTROL
AF7109
AF7109* NAD 83(1986) POSITION- 27 55 40.35 (N) 081 07 22.32
                                                              (W)
                                                                    HD HELD1
AF7109* NAVD 88 ORTHO HEIGHT - 21.074 (meters)
                                                      69.14 (feet) ADJUSTED
AF7109
AF7109 GEOID HEIGHT
                                -27.403 (meters)
                                                                    GEOID12B
AF7109 DYNAMIC HEIGHT -
                                 21.042 (meters)
                                                      69.04 (feet) COMP
AF7109 MODELED GRAVITY -
                            979,145.8 (mgal)
                                                                   NAVD 88
AF7109
AF7109 VERT ORDER
                     - SECOND
                                  CLASS II
AF7109
AF7109. The horizontal coordinates were determined by differentially corrected
AF7109.hand held GPS observations or other comparable positioning techniques
AF7109.and have an estimated accuracy of +/-3 meters.
AF7109.
AF7109. The orthometric height was determined by differential leveling and
AF7109.adjusted by the NATIONAL GEODETIC SURVEY
AF7109.in June 1991.
AF7109
AF7109.Significant digits in the geoid height do not necessarily reflect accuracy.
AF7109.GEOID12B height accuracy estimate available here.
AF7109
AF7109.Photographs are available for this station.
AF7109
AF7109. The dynamic height is computed by dividing the NAVD 88
AF7109.geopotential number by the normal gravity value computed on the
AF7109.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AF7109.degrees latitude (g = 980.6199 \text{ gals.}).
AF7109
AF7109. The modeled gravity was interpolated from observed gravity values.
AF7109
AF7109;
                          North
                                        East
                                               Units Estimated Accuracy
AF7109; SPC FL E - 398, 222.7
                                     187,907.3 MT (+/- 3 meters HH1 GPS)
AF7109
AF7109
                               SUPERSEDED SURVEY CONTROL
AF7109
AF7109
       NGVD 29 (09/01/92)
                            21.442
                                    (m)
                                                 70.35
                                                         (f) ADJUSTED
                                                                        2 2
AF7109
AF7109.Superseded values are not recommended for survey control.
AF7109
AF7109.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AF7109.See file dsdata.txt to determine how the superseded data were derived.
AF7109
AF7109 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML8791189218(NAD 83)
AF7109
AF7109 MARKER: DD = SURVEY DISK
AF7109 SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AF7109 STAMPING: OSC 6 1983 BSM
```

DATASHEETS

AF7109 MARK LOGO: FLDNR

AF7109 PROJECTION: FLUSH AF7109 STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO AF7109+STABILITY: SURFACE MOTION AF7109 SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR AF7109+SATELLITE: SATELLITE OBSERVATIONS - April 30, 2005 AF7109 AF7109HISTORY- DateConditionAF7109HISTORY- 1983MONUMENTEDAF7109HISTORY- 20050430GOOD Report By FLDNR GEOCAC AF7109 STATION DESCRIPTION AF7109 AF7109 AF7109'DESCRIBED BY FL DEPT OF NAT RES 1983 AF7109'9.2 MI WNW FROM KENANSVILLE. AF7109'BEGIN AT THE INTERSECTION OF U.S. HIGHWAY 441 AND STATE ROAD 523 AF7109' (CANOE CREEK ROAD) IN KENANSVILLE, GO 9.2 MILES NORTH AND WEST AF7109'ALONG STATE ROAD 523 TO THE MARK. AF7109'THE MARK IS SET AT THE ENTRANCE FOR PRAIRIE LAKES STATE PRESERVE. AF7109'THE MARK BEARS 34.6 FEET SOUTH-SOUTHEAST OF THE CENTERLINE OF THE AF7109'ENTRANCE ROAD FOR THE PARK, 48.0 FEET WEST-SOUTHWEST OF THE AF7109'CENTERLINE OF STATE ROAD 523, AND 1.1 FEET NORTHEAST OF THE CORNER AF7109'OF THE FENCE. AF7109'THE MARK IS ABOVE LEVEL WITH GROUND. AF7109 AF7109 STATION RECOVERY (2005) AF7109 AF7109'RECOVERY NOTE BY GEOCACHING 2005 (MAG) AF7109'RECOVERED IN GOOD CONDITION. *** retrieval complete. Elapsed Time = 00:00:02

http://www.ngs.noaa.gov/cgi-bin/ds desig.prl

```
PROGRAM = datasheet95, VERSION = 8.8
1
       National Geodetic Survey, Retrieval Date = DECEMBER 12, 2015
AF7110 DESIGNATION - OSC 7 FLDNR
AF7110 PID
               - AF7110
AF7110 STATE/COUNTY- FL/OSCEOLA
AF7110 COUNTRY - US
AF7110 USGS QUAD - LAKE MARIAN NW (1972)
AF7110
AF7110
                              *CURRENT SURVEY CONTROL
AF7110
AF7110* NAD 83(1986) POSITION- 27 54 41.
                                            (N) 081 07 44.
                                                              (W)
                                                                    SCALED
AF7110* NAVD 88 ORTHO HEIGHT - 20.472 (meters)
                                                      67.17
                                                             (feet) ADJUSTED
AF7110
AF7110 GEOID HEIGHT
                                -27.339 (meters)
                                                                    GEOID12B
AF7110 DYNAMIC HEIGHT -
                                 20.441 (meters)
                                                      67.06
                                                             (feet) COMP
AF7110 MODELED GRAVITY -
                            979,147.9 (mgal)
                                                                    NAVD 88
AF7110
AF7110 VERT ORDER
                      - SECOND
                                   CLASS II
AF7110
AF7110. The horizontal coordinates were scaled from a topographic map and have
AF7110.an estimated accuracy of +/- 6 seconds.
AF7110.
AF7110. The orthometric height was determined by differential leveling and
AF7110.adjusted by the NATIONAL GEODETIC SURVEY
AF7110.in June 1991.
AF7110
AF7110.Significant digits in the geoid height do not necessarily reflect accuracy.
AF7110.GEOID12B height accuracy estimate available here.
AF7110
AF7110. The dynamic height is computed by dividing the NAVD 88
AF7110.geopotential number by the normal gravity value computed on the
AF7110.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AF7110.degrees latitude (g = 980.6199 \text{ gals.}).
AF7110
AF7110. The modeled gravity was interpolated from observed gravity values.
AF7110
AF7110;
                                               Units Estimated Accuracy
                          North
                                        East
AF7110;SPC FL E
                      396,400.
                                     187,310.
                                                MT (+/- 180 meters Scaled)
                   _
AF7110
AF7110
                               SUPERSEDED SURVEY CONTROL
AF7110
                          20.839 (m)
AF7110 NGVD 29 (09/01/92)
                                                68.37
                                                         (f) ADJUSTED
                                                                         2 2
AF7110
AF7110.Superseded values are not recommended for survey control.
AF7110
AF7110.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AF7110.See file dsdata.txt to determine how the superseded data were derived.
AF7110
AF7110 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML873873(NAD 83)
AF7110
AF7110 MARKER: DB = BENCH MARK DISK
AF7110 SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AF7110_STAMPING: OSC 7 1983 BSM
AF7110 MARK LOGO: FLDNR
AF7110 PROJECTION: FLUSH
AF7110 STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

```
AF7110+STABILITY: SURFACE MOTION
AF7110
AF7110HISTORY- DateConditionAF7110HISTORY- 1983MONUMENTEDAF7110HISTORY- 20070131GOOD
                               Condition
                                                 Report By
                                                 FLDNR
                                                 INDIV
AF7110
AF7110
                                 STATION DESCRIPTION
AF7110
AF7110'DESCRIBED BY FL DEPT OF NAT RES 1983
AF7110'10 MI WNW FROM KENANSVILLE.
AF7110'BEGIN AT THE INTERSECTION OF U.S. HIGHWAY 441 AND STATE ROAD 523
AF7110'(CANOE CREEK ROAD) IN KENANSVILLE, GO 9.2 MILES NORTH AND WEST
AF7110'ALONG STATE ROAD 523 TO THE ENTRANCE FOR PRAIRIE LAKES STATE
AF7110'PRESERVE, GO 1.25 MILES SOUTHWEST ON THE MAIN PARK ROAD TO THE
AF7110'MARK. THE MARK IS 34.8 FEET EAST-SOUTHEAST OF THE CENTERLINE OF
AF7110'THE MAIN DRIVE FOR THE PARK, 23.8 FEET SOUTH-SOUTHWEST OF THE
AF7110'CENTERLINE OF A ROAD LEADING TO THE PRESERVE OFFICE AND RANGERS
AF7110'HOMES, 3.4 FEET NORTHWEST OF A 12-INCH DIAMETER PINE, AND 77.7
AF7110'FEET SOUTH-SOUTHEAST OF A SIGN READING PRESERVE OFFICE.
AF7110'THE MARK IS 0.2 FT BELOW GROUND.
AF7110
AF7110
                                 STATION RECOVERY (2007)
AF7110
AF7110'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2007 (DF)
AF7110'RECOVERED IN GOOD CONDITION.
```

*** retrieval complete. Elapsed Time = 00:00:01

See file dsdata.txt for more information about the datasheet.

```
PROGRAM = datasheet95, VERSION = 8.8
1
       National Geodetic Survey, Retrieval Date = DECEMBER 12, 2015
AF7112 DESIGNATION - OSC 9 FLDNR
AF7112 PID
              - AF7112
AF7112 STATE/COUNTY- FL/OSCEOLA
AF7112 COUNTRY - US
AF7112 USGS QUAD - LAKE MARIAN NW (1972)
AF7112
AF7112
                              *CURRENT SURVEY CONTROL
AF7112
AF7112* NAD 83(1986) POSITION- 27 53 26.
                                          (N) 081 09 17.
                                                              (W)
                                                                    SCALED
AF7112* NAVD 88 ORTHO HEIGHT -
                                18.207 (meters)
                                                      59.73 (feet) ADJUSTED
AF7112
AF7112 GEOID HEIGHT
                                -27.249 (meters)
                                                                   GEOID12B
                       _
AF7112 DYNAMIC HEIGHT -
                                18.180 (meters)
                                                      59.65 (feet) COMP
AF7112 MODELED GRAVITY -
                           979,149.3 (mgal)
                                                                   NAVD 88
AF7112
                                  CLASS II
AF7112 VERT ORDER
                     - SECOND
AF7112
AF7112. The horizontal coordinates were scaled from a topographic map and have
AF7112.an estimated accuracy of +/- 6 seconds.
AF7112.
AF7112. The orthometric height was determined by differential leveling and
AF7112.adjusted by the NATIONAL GEODETIC SURVEY
AF7112.in June 1991.
AF7112
AF7112.Significant digits in the geoid height do not necessarily reflect accuracy.
AF7112.GEOID12B height accuracy estimate available here.
AF7112
AF7112. The dynamic height is computed by dividing the NAVD 88
AF7112.geopotential number by the normal gravity value computed on the
AF7112.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AF7112.degrees latitude (g = 980.6199 \text{ gals.}).
AF7112
AF7112. The modeled gravity was interpolated from observed gravity values.
AF7112
AF7112;
                                               Units Estimated Accuracy
                          North
                                        East
AF7112;SPC FL E
                      394,090.
                                     184,770.
                                                MT (+/- 180 meters Scaled)
                  _
AF7112
AF7112
                               SUPERSEDED SURVEY CONTROL
AF7112
AF7112 NGVD 29 (09/01/92)
                            18.574 (m)
                                                60.94
                                                                        2 2
                                                         (f) ADJUSTED
AF7112
AF7112.Superseded values are not recommended for survey control.
AF7112
AF7112.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AF7112.See file dsdata.txt to determine how the superseded data were derived.
AF7112
AF7112 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML847850(NAD 83)
AF7112
AF7112 MARKER: DB = BENCH MARK DISK
AF7112 SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AF7112_STAMPING: OSC 9 1983 BSM
AF7112 MARK LOGO: FLDNR
AF7112 PROJECTION: FLUSH
AF7112 STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
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http://www.ngs.noaa.gov/cgi-bin/ds desig.prl

AF7112+STABILITY: SURFACE MOTION AF7112 AF7112HISTORY- DateConditionAF7112HISTORY- 1983MONUMENTEDAF7112HISTORY- 20030305GOODAF7112HISTORY- 20070131GOOD Report By FLDNR USPSQD INDIV AF7112 STATION DESCRIPTION AF7112 AF7112 AF7112'DESCRIBED BY FL DEPT OF NAT RES 1983 AF7112'12.5 MI WNW FROM KENANSVILLE. AF7112'BEGIN AT THE INTERSECTION OF U.S. HIGHWAY 441 AND STATE ROAD 523 AF7112'(CANOE CREEK ROAD) IN KENANSVILLE, GO 9.2 MILES NORTH AND WEST ALONG AF7112'STATE ROAD 523 TO THE ENTRANCE FOR PRAIRIE LAKES STATE PRESERVE, GO AF7112'3.3 MILES SOUTHWEST ALONG THE PARK ROAD (ALSO CALLED ROAD NUMBER 4) AF7112'TO THE MARK. THE MARK BEARS 29.5 FEET SOUTH-SOUTHEAST OF THE AF7112'CENTERLINE OF THE ROAD, 41.2 FEET NORTHEAST OF THE CENTER OF A AF7112'6-FOOT DIAMETER DRAINAGE PIPE UNDERNEATH THE ROAD, AND 15.7 AF7112'FEET EAST OF A 4-INCH BY 4-INCH POST WITH A WITNESS SIGN NAILED AF7112'TO IT. AF7112'THE MARK IS ABOVE LEVEL WITH GROUND. AF7112 AF7112 STATION RECOVERY (2003) AF7112 AF7112'RECOVERY NOTE BY US POWER SQUADRON 2003 (AFA) AF7112'RECOVERED IN GOOD CONDITION. AF7112 STATION RECOVERY (2007) AF7112 AF7112 AF7112'RECOVERY NOTE BY INDIVIDUAL CONTRIBUTORS 2007 (DF) AF7112'RECOVERED IN GOOD CONDITION. *** retrieval complete.

Elapsed Time = 00:00:02

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PROGRAM = datasheet95, VERSION = 8.8
1
       National Geodetic Survey, Retrieval Date = DECEMBER 12, 2015
AF7115 DESIGNATION - OS/27 6 SFLWMD
AF7115 PID
              - AF7115
AF7115 STATE/COUNTY- FL/OSCEOLA
AF7115 COUNTRY - US
AF7115 USGS QUAD - LAKE MARIAN SW (1972)
AF7115
AF7115
                              *CURRENT SURVEY CONTROL
AF7115
AF7115* NAD 83(1986) POSITION- 27 52 10.
                                          (N) 081 10 13.
                                                              (W)
                                                                   SCALED
AF7115* NAVD 88 ORTHO HEIGHT -
                                16.630 (meters)
                                                      54.56 (feet) ADJUSTED
AF7115
AF7115 GEOID HEIGHT
                                -27.162 (meters)
                                                                   GEOID12B
AF7115 DYNAMIC HEIGHT -
                                16.605 (meters)
                                                      54.48 (feet) COMP
AF7115 MODELED GRAVITY -
                           979,150.4 (mgal)
                                                                   NAVD 88
AF7115
AF7115 VERT ORDER
                     - SECOND
                                  CLASS II
AF7115
AF7115. The horizontal coordinates were scaled from a topographic map and have
AF7115.an estimated accuracy of +/- 6 seconds.
AF7115.
AF7115. The orthometric height was determined by differential leveling and
AF7115.adjusted by the NATIONAL GEODETIC SURVEY
AF7115.in June 1991.
AF7115
AF7115.Significant digits in the geoid height do not necessarily reflect accuracy.
AF7115.GEOID12B height accuracy estimate available here.
AF7115
AF7115. The dynamic height is computed by dividing the NAVD 88
AF7115.geopotential number by the normal gravity value computed on the
AF7115.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AF7115.degrees latitude (g = 980.6199 \text{ gals.}).
AF7115
AF7115. The modeled gravity was interpolated from observed gravity values.
AF7115
AF7115;
                                               Units Estimated Accuracy
                          North
                                        East
AF7115;SPC FL E
                      391,750.
                                     183,230.
                                                MT (+/- 180 meters Scaled)
                  _
AF7115
AF7115
                               SUPERSEDED SURVEY CONTROL
AF7115
AF7115 NGVD 29 (09/01/92) 16.995 (m)
                                               55.76
                                                        (f) ADJUSTED
                                                                        2 2
AF7115
AF7115.Superseded values are not recommended for survey control.
AF7115
AF7115.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AF7115.See file dsdata.txt to determine how the superseded data were derived.
AF7115
AF7115 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML832827 (NAD 83)
AF7115
AF7115 MARKER: DB = BENCH MARK DISK
AF7115 SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AF7115 STAMPING: OS./27-6 1982
AF7115 MARK LOGO: SFLWMD
AF7115 PROJECTION: FLUSH
AF7115 STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

AF7115+STABILITY: SURFACE MOTION AF7115 AF7115HISTORY- DateConditionReport ByAF7115HISTORY- 1982MONUMENTEDSFLWMDAF7115HISTORY- 1983GOODFLDNR AF7115 AF7115 STATION DESCRIPTION AF7115 AF7115'DESCRIBED BY FL DEPT OF NAT RES 1983 AF7115'14.7 MI WEST FROM KENANSVILLE. AF7115'BEGIN AT THE INTERSECTION OF U.S. HIGHWAY 441 AND STATE ROAD 523 AF7115' (CANOE CREEK ROAD) IN KENANSVILLE, GO 9.2 MILES NORTH AND WEST ALONG AF7115'STATE ROAD 523 TO THE ENTRANCE FOR PRAIRIE LAKES STATE PRESERVE, GO AF7115'5.5 MILES SOUTHWEST ALONG THE PARK ROAD (ALSO CALLED ROAD NUMBER 4) AF7115'TO THE MARK. THE MARK BEARS 31.5 FEET WEST OF THE CENTERLINE OF AF7115'ROAD 4, 16.0 FEET SOUTH-SOUTHWEST OF THE CENTERLINE OF ROAD 7, AF7115'2.4 FEET SOUTH-SOUTHWEST OF A 4-INCH WELL (NUMBER P-27), AND AF7115'2.7 FEET EAST-NORTHEAST OF A ROAD SIGN. AF7115'THE MARK IS 0.1 FT BELOW GROUND.

*** retrieval complete. Elapsed Time = 00:00:01

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PROGRAM = datasheet95, VERSION = 8.8
1
       National Geodetic Survey, Retrieval Date = DECEMBER 12, 2015
AF7114 DESIGNATION - KLS 30 E 12 B FLDNR
AF7114 PID
              - AF7114
AF7114 STATE/COUNTY- FL/OSCEOLA
AF7114 COUNTRY - US
AF7114 USGS QUAD - LAKE MARIAN NW (1972)
AF7114
AF7114
                              *CURRENT SURVEY CONTROL
AF7114
AF7114* NAD 83(1986) POSITION- 27 53 18.
                                           (N) 081 10 25.
                                                              (W)
                                                                    SCALED
AF7114* NAVD 88 ORTHO HEIGHT -
                                16.836 (meters)
                                                      55.24 (feet) ADJUSTED
AF7114
AF7114 GEOID HEIGHT
                                -27.234 (meters)
                                                                    GEOID12B
AF7114 DYNAMIC HEIGHT -
                                 16.811 (meters)
                                                      55.15 (feet) COMP
AF7114 MODELED GRAVITY -
                           979,148.6 (mgal)
                                                                    NAVD 88
AF7114
AF7114 VERT ORDER
                      - SECOND
                                  CLASS II
AF7114
AF7114. The horizontal coordinates were scaled from a topographic map and have
AF7114.an estimated accuracy of +/- 6 seconds.
AF7114.
AF7114. The orthometric height was determined by differential leveling and
AF7114.adjusted by the NATIONAL GEODETIC SURVEY
AF7114.in June 1991.
AF7114
AF7114.Significant digits in the geoid height do not necessarily reflect accuracy.
AF7114.GEOID12B height accuracy estimate available here.
AF7114
AF7114. The dynamic height is computed by dividing the NAVD 88
AF7114.geopotential number by the normal gravity value computed on the
AF7114.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AF7114.degrees latitude (g = 980.6199 \text{ gals.}).
AF7114
AF7114. The modeled gravity was interpolated from observed gravity values.
AF7114
AF7114;
                                               Units Estimated Accuracy
                          North
                                        East
AF7114;SPC FL E
                      393,850.
                                     182,910.
                                                MT (+/- 180 meters Scaled)
                  _
AF7114
AF7114
                               SUPERSEDED SURVEY CONTROL
AF7114
AF7114 NGVD 29 (09/01/92)
                            17.202 (m)
                                                 56.44
                                                                         2 2
                                                         (f) ADJUSTED
AF7114
AF7114.Superseded values are not recommended for survey control.
AF7114
AF7114.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AF7114.See file dsdata.txt to determine how the superseded data were derived.
AF7114
AF7114 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML829848(NAD 83)
AF7114
AF7114 MARKER: DB = BENCH MARK DISK
AF7114 SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AF7114 STAMPING: KLS 30E 12B 1983 BSM
AF7114 MARK LOGO: FLDNR
AF7114 PROJECTION: FLUSH
AF7114 STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
```

AF7114+STABILITY: SURFACE MOTION AF7114 SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR AF7114+SATELLITE: SATELLITE OBSERVATIONS - February 05, 2003 AF7114 AF7114HISTORY- DateConditionAF7114HISTORY- 1983MONUMENTEDAF7114HISTORY- 20030205GOOD Report By FLDNR USPSOD AF7114 STATION DESCRIPTION AF7114 AF7114 AF7114'DESCRIBED BY FL DEPT OF NAT RES 1983 AF7114'14.4 MI WNW FROM KENANSVILLE. AF7114'BEGIN AT THE INTERSECTION OF U.S. HIGHWAY 441 AND STATE ROAD 523 AF7114' (CANOE CREEK ROAD) IN KENANSVILLE, GO 9.2 MILES NORTH AND WEST ALONG AF7114'STATE ROAD 523 TO THE ENTRANCE FOR PRAIRIE LAKES STATE PRESERVE, GO AF7114'4.5 MILES SOUTHWEST ALONG THE PARK ROAD (ALSO CALLED ROAD NUMBER 4) AF7114'TO THE INTERSECTION OF ROAD NUMBER 6, GO 0.55 MILE WEST ALONG AF7114'ROAD NUMBER 6 TO A DIM DIRT ROAD, GO 0.05 MILE NORTH ALONG THE AF7114'DIM ROAD TO A FENCE GATE, CONTINUE NORTH ALONG THE DIM ROAD TO AF7114'A ROAD THAT RUNS PARALLEL TO JACKSON CANAL, GO NORTH-NORTHEAST AF7114'ALONG CANAL ROAD FOR 0.1 MILE TO THE MARK. THE MARK BEARS 63.5 AF7114'FEET EAST-SOUTHEAST OF THE CENTERLINE OF THE ROAD, 132 FEET AF7114'EAST-SOUTHEAST OF THE CANAL, 5.1 FEET WEST OF THE EAST CORNER AF7114'OF AN OLD CABIN, 12.6 FEET NORTH-NORTHEAST OF THE WEST CORNER, AF7114'AND 3.2 FEET NORTHWEST OF THE NORTHWEST SIDE OF THE CABIN. AF7114'THE MARK IS ABOVE LEVEL WITH GROUND. AF7114 AF7114 STATION RECOVERY (2003) AF7114 AF7114'RECOVERY NOTE BY US POWER SQUADRON 2003 (AFA) AF7114'RECOVERED IN GOOD CONDITION.

*** retrieval complete. Elapsed Time = 00:00:01

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PROGRAM = datasheet95, VERSION = 8.8
1 National Geodetic Survey, Retrieval Date = DECEMBER 12, 2015
DH8876 DESIGNATION - P 617
DH8876 PID - DH8876
DH8876 STATE/COUNTY- FL/OKEECHOBEE
DH8876 COUNTRY - US
DH8876 USGS QUAD - FORT KISSIMMEE SE (1953)
DH8876
DH8876
                              *CURRENT SURVEY CONTROL
DH8876
DH8876* NAD 83(1986) POSITION- 27 33 06. (N) 081 01 21.
                                                             (W)
                                                                   SCALED
DH8876* NAVD 88 ORTHO HEIGHT - 20.742 (meters)
                                                   68.05 (feet) ADJUSTED
DH8876
DH8876 GEOID HEIGHT
                      _
                                -26.266 (meters)
                                                                  GEOID12B
DH8876 DYNAMIC HEIGHT -
                                20.711 (meters)
                                                     67.95 (feet) COMP
DH8876 MODELED GRAVITY - 979,163.0 (mgal)
                                                                  NAVD 88
DH8876
DH8876 VERT ORDER - SECOND
                                 CLASS I
DH8876
DH8876. The horizontal coordinates were scaled from a topographic map and have
DH8876.an estimated accuracy of +/- 6 seconds.
DH8876.
DH8876. The orthometric height was determined by differential leveling and
DH8876.adjusted by the NATIONAL GEODETIC SURVEY
DH8876.in July 2006.
DH8876
DH8876.Significant digits in the geoid height do not necessarily reflect accuracy.
DH8876.GEOID12B height accuracy estimate available here.
DH8876
DH8876. The dynamic height is computed by dividing the NAVD 88
DH8876.geopotential number by the normal gravity value computed on the
DH8876.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
DH8876.degrees latitude (g = 980.6199 \text{ gals.}).
DH8876
DH8876. The modeled gravity was interpolated from observed gravity values.
DH8876
DH8876;
                                              Units Estimated Accuracy
                          North
                                       East
DH8876;SPC FL E - 356,530.
                                    197,780.
                                              MT (+/- 180 meters Scaled)
DH8876
DH8876
                               SUPERSEDED SURVEY CONTROL
DH8876
DH8876.No superseded survey control is available for this station.
DH8876
DH8876 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML977475(NAD 83)
DH8876
DH8876 MARKER: DD = SURVEY DISK
DH8876 SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
DH8876 STAMPING: P 617 2005
DH8876_MARK LOGO: FLDEP
DH8876 PROJECTION: FLUSH
DH8876 MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET
DH8876 STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
DH8876+STABILITY: SURFACE MOTION
DH8876 SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
DH8876+SATELLITE: SATELLITE OBSERVATIONS - January 05, 2005
DH8876
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DH8876 HISTORY - Date Condition DH8876 HISTORY - 20050105 MONUMENTED Report By FLDEP DH8876 DH8876 STATION DESCRIPTION DH8876 DH8876'DESCRIBED BY FL DEPT OF ENV PRO 2005 (JLM) DH8876'THE MARK IS ABOUT 26.7 MI NORTHWEST OF OKEECHOBEE, 18.3 SOUTHWEST OF DH8876'YEEHAW JUNCTION, 11.2 MI NORTH OF BASINGER, IN SECTION 3, TOWNSHIP 34 DH8876'SOUTH, RANGE 33 EAST. DH8876' DH8876'TO REACH THE MARK FROM THE JUNCTION OF U.S. HIGHWAY 98 AND COUNTY ROAD DH8876'700-A (NORTHWEST 176TH AVENUE) IN BASINGER, GO NORTH ON COUNTY ROAD DH8876'700-A (NORTHWEST 176TH AVENUE) FOR 5.4 MI TO THE JUNCTION OF DH8876'NORTHWEST 240TH STREET (COUNTY ROAD 724 EAST), TURN LEFT ON NORTHWEST DH8876'240TH STREET AND GO WEST FOR 1.0 MI TO A 90 DEGREE TURN NORTH DH8876' (NORTHWEST 192ND AVENUE, PEAVINE TRAIL), CONTINUE NORTH ON NORTHWEST DH8876'192ND AVENUE (PEAVINE TRAIL) FOR 5.1 MI TO THE ENTRANCE TO THE DH8876'KISSIMMEE PRAIRIE PRESERVE STATE PARK, CONTINUE NORTH ON THE PARK DH8876'ROAD (PEAVINE TRAIL) FOR 0.85 MI TO THE MARK ON THE RIGHT, SET IN THE DH8876'TOP OF A ROUND CONCRETE MONUMENT FLUSH WITH THE GROUND AND ABOUT LEVEL DH8876'WITH THE PARK ROAD. DH8876' DH8876'LOCATED 37.5 FT EAST OF THE APPROXIMATE CENTERLINE OF THE PARK ROAD DH8876'AND 11.0 FT NORTHEAST OF THE NORTHEAST CORNER OF A GREEN ELECTRIC DH8876'POWER BOX. DH8876' DH8876'NOTE A MAGNET WAS IMBEDDED IN THE GROUND ON THE SOUTH SIDE OF THE DH8876'MONUMENT. *** retrieval complete. Elapsed Time = 00:00:02

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PROGRAM = datasheet95, VERSION = 8.8
1
  National Geodetic Survey, Retrieval Date = DECEMBER 12, 2015
DH8889 DESIGNATION - R 617
DH8889 PID - DH8889
DH8889 STATE/COUNTY- FL/OKEECHOBEE
DH8889 COUNTRY - US
DH8889 USGS QUAD - FORT KISSIMMEE SE (1953)
DH8889
DH8889
                              *CURRENT SURVEY CONTROL
DH8889
DH8889* NAD 83(1986) POSITION- 27 32 21. (N) 081 01 21.
                                                                  SCALED
                                                            (W)
DH8889* NAVD 88 ORTHO HEIGHT - 20.426 (meters) 67.01 (feet) ADJUSTED
DH8889
DH8889 GEOID HEIGHT -
                               -26.259 (meters)
                                                                  GEOID12B
DH8889 DYNAMIC HEIGHT -
                               20.395 (meters)
                                                     66.91 (feet) COMP
DH8889 MODELED GRAVITY - 979,160.1 (mgal)
                                                                  NAVD 88
DH8889
DH8889 VERT ORDER - SECOND
                                 CLASS I
DH8889
DH8889. The horizontal coordinates were scaled from a topographic map and have
DH8889.an estimated accuracy of +/-6 seconds.
DH8889.
DH8889. The orthometric height was determined by differential leveling and
DH8889.adjusted by the NATIONAL GEODETIC SURVEY
DH8889.in July 2006.
DH8889
DH8889.Significant digits in the geoid height do not necessarily reflect accuracy.
DH8889.GEOID12B height accuracy estimate available here.
DH8889
DH8889. The dynamic height is computed by dividing the NAVD 88
DH8889.geopotential number by the normal gravity value computed on the
DH8889.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
DH8889.degrees latitude (g = 980.6199 \text{ gals.}).
DH8889
DH8889. The modeled gravity was interpolated from observed gravity values.
DH8889
DH8889;
                                              Units Estimated Accuracy
                          North
                                       East
DH8889; SPC FL E - 355, 150.
                                    197,780.
                                              MT (+/- 180 meters Scaled)
DH8889
DH8889
                               SUPERSEDED SURVEY CONTROL
DH8889
DH8889. No superseded survey control is available for this station.
DH8889
DH8889 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RML977461(NAD 83)
DH8889
DH8889 MARKER: F = FLANGE-ENCASED ROD
DH8889 SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
DH8889 STAMPING: R 617 2005
DH8889 MARK LOGO: NGS
DH8889 PROJECTION: FLUSH
DH8889 MAGNETIC: M = MARKER EQUIPPED WITH BAR MAGNET
DH8889 STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
DH8889 SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
DH8889+SATELLITE: SATELLITE OBSERVATIONS - January 05, 2005
DH8889 ROD/PIPE-DEPTH: 13.5 meters
DH8889
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DH8889 HISTORY - Date Condition DH8889 HISTORY - 20050105 MONUMENTED Report By FLDEP DH8889 DH8889 STATION DESCRIPTION DH8889 DH8889'DESCRIBED BY FL DEPT OF ENV PRO 2005 (JLM) DH8889'THE MARK IS ABOUT 25.8 MI NORTHWEST OF OKEECHOBEE, 19.0 SOUTHWEST OF DH8889'YEEHAW JUNCTION, 10.5 MI NORTH OF BASINGER, IN SECTION 3, TOWNSHIP 34 DH8889'SOUTH, RANGE 33 EAST. DH8889' DH8889'TO REACH THE MARK FROM THE JUNCTION OF U.S. HIGHWAY 98 AND COUNTY ROAD DH8889'700-A (NORTHWEST 176TH AVENUE) IN BASINGER, GO NORTH ON COUNTY ROAD DH8889'700-A (NORTHWEST 176TH AVENUE) FOR 5.4 MI TO THE JUNCTION OF DH8889'NORTHWEST 240TH STREET (COUNTY ROAD 724 EAST), TURN LEFT ON NORTHWEST DH8889'240TH STREET AND GO WEST FOR 1.0 MI TO A 90 DEGREE TURN NORTH DH8889' (NORTHWEST 192ND AVENUE, PEAVINE TRAIL), CONTINUE NORTH ON NORTHWEST DH8889'192ND AVENUE (PEAVINE TRAIL) FOR 5.1 MI TO THE ENTRANCE TO THE DH8889'KISSIMMEE PRAIRIE PRESERVE STATE PARK AND THE MARK ON THE RIGHT, A DH8889'STAINLESS STEEL ROD DRIVEN TO REFUSAL AT A DEPTH OF 44.2 FT WITH A DH8889'NGS LOGO CAP FLUSH WITH THE GROUND AND ABOUT 1.0 FT BELOW THE LEVEL OF DH8889'THE PARK ROAD, THE DATUM POINT IS RECESSED 0.6 FT BELOW THE LEVEL OF DH8889'THE NGS LOGO CAP. DH8889' DH8889'LOCATED 62.0 FT NORTH OF THE APPROXIMATE CENTERLINE OF A SAND ROAD DH8889'EAST, 42.5 FT EAST OF A KISSIMMEE PRAIRIE PRESSRVE STATE PARK SIGN, DH8889'32.8 FT NORTH OF THE SOUTHWEST CORNER OF A FENCE, 32.0 FT NORTH OF DH8889'POWER POLE WITH ONE GUY WIRE, ONE TRANSFORMER AND ONE LIGHT ATTACHED, DH8889'25.0 FT SOUTHEAST OF THE APPROXIMATE CENTERLINE OF THE ENTRANCE ROAD DH8889'AND A STEEL GATE, 3.6 FT WEST OF A HOGWIRE FENCE AND 3.5 FT WEST OF A DH8889'CARSONITE WITNESS POST. DH8889' DH8889'NOTE A MAGNET WAS PLACED INSIDE OF THE NGS LOGO CAP. DH8889' DH8889'NOTE ACCESS TO THE DATUM POINT IS HAD THROUGH A 5-INCH NGS LOGO CAP. *** retrieval complete. Elapsed Time = 00:00:02