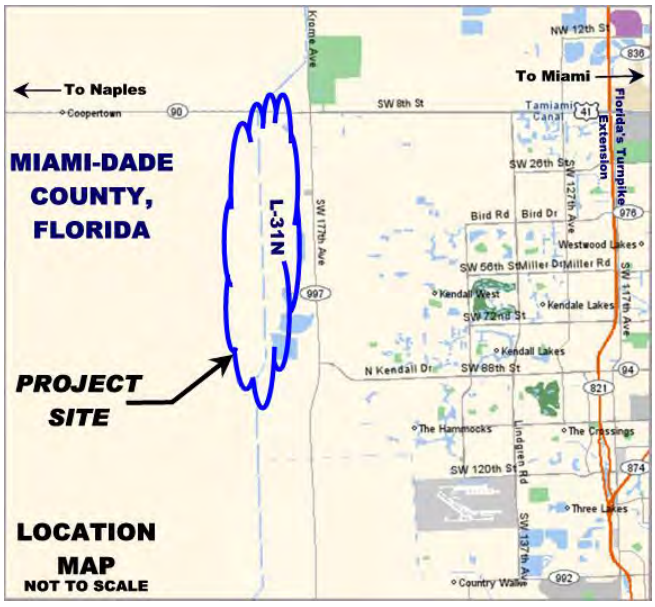
SURVEYOR'S REPORT

INTRODUCTION

Weidener Surveying & Mapping, P.A. (WSM), LB4207, operating under the authority of the **South Florida Water Management District (the "District")** by Work Order was tasked with the execution of this Specific Purpose Survey. The purpose of this Specific Purpose Survey was to provide 8 Monitoring Well locations and other elevations at 2 sites within the L-31 Seepage Canal project area and right-of-way south of Tamiami Trail and north of Coral Reef Drive in Miami-Dade County, Florida. Additionally, one stilling well encoder located within the Everglades National Park was to be located. This work builds on previous work that was done for the District dated 08 December 2003 (WSM Project No. 1729-A). **THIS IS NOT A BOUNDARY SURVEY**.



PROJECT LOCATION

The project area is located in Sections 11, 12, 13, 14, 23, 24, 25, 26, 35, 36 , Lots 1 and 2 of Township 54 South, Range 38 East, and Sections 23, 24 of Township 55 South, Range 38 East in Miami-Dade County, Florida. The sites are accessed from Tamiami Trail (US Highway 41) along a levee road that runs along the west side of the L-31 Seepage Canal.

PROJECT EXECUTION

After receiving Notice to Proceed from the District WSM began work on the project. WSM recovered sufficient horizontal and vertical control points along the L-31 Seepage Canal Levee and along U.S. Highway No. 41 (Tamiami Trail) that were previously used to develop a GPS horizontal and vertical control network. All control meets or exceeds the National Geodetic Survey (NGS) standards for Third Order

accuracy and procedural methodology and complies with engineering manuals as specified in the Statement of Work issued by the District for this project.

WSM set no new traverse points for this project. Points were located horizontally by RTK-GPS. Bench level runs using conventional methods were executed to locate the points vertically.

Pictures were taken at the NERS-2 site and were submitted as part of the project's digital deliverables package in JPG format. A Microsoft Power Point presentation format was also included, as specified in the Statement of Work.

All field work was completed on 25 February 2005.

HORIZONTAL and VERTICAL CONTROL

Horizontal control is based on the State Plane Coordinate System, Florida East Zone, North American Datum of 1983, Adjustment of 1999.

The original vertical control is based on the North American Vertical Datum of 1988. All control used was 1st Order or better. NGS "JBA22" and "JBA33", "203", "Q503", "R503", "S503", "T503", "U503", "KROME" and "KROME RM2" were used. Supplemental data as requested by contractual obligations is based on the National Geodetic Vertical Datum of 1929. Levels to the new monitoring wells were run by closed level loops from existing benchmarks at the sites established during the previous task. All level loops closing to within .03 feet times the square root of the distance in miles, as specified in the Statement of Work.

PRIMARY GPS SURVEY CONTROL USED (All held fixed)

Name	PID	Horizontal Order	Vertical Order
C 237	AJ7746	1	1
J 407	AC4738	A	1

CHECK BENCHMARK ELEVATIONS

Benchmark	Published Elev - 88	Published Elev -29	BM Elev 88[2]	BM Elev 29[3]
JBA22	6.73'	8.29'	6.73'	8.24'`
JBA33	6.44'	8.00'	6.44'	7.94'
JBA62	Not	Published	5.32'	6.88'

[1] State Plane Coordinate System, Florida East Zone, North American Datum of 1983 (Adjustment of 1999). At Benchmark.
[2] North American Vertical Datum of 1988 (NAVD 88).
[3] National Geodetic Vertical datum of 1929 (NGVD 29).

WELL & BORINGS LOCATIONS AND ELEVATIONS

Monitoring Well	Northing[1] (Y)	Easting[1] (X)	Ground Elev 88[2]	Ground Elev 29[3]	Top of Casing Elev 88[2]	Top of Casing Elev 29[3]
G-3551	*Not*	*Found*	*Not*	*Found*	*Not*	*Found*
G-3559	513,803.8	821,722.2	7.2’	8.7’	9.63’	11.13’
G-3574	497,756.8	822,020.8	4.5’	6.0’	7.42’	8.93’
G-3575	513,815.3	821,401.8	4.4’	5.9’	7.33’	8.83’
G-3576	*Not*	*Accessible*	*Inside*	*Of*	*Everglades*	*NP*
G-3778	513,814.5	821,444.8	14.8’	16.3’	14.08’	15.58’
G-3779	513,795.8	821,445.5	14.8’	16.3’	14.14’	15.64’
G-3780	513,777.1	821,445.2	14.8’	16.3’	14.13’	15.63’
G-3781	513,753.8	821,447.3	15.0’	16.5’	14.45’	15.95’
G-3784	497,704.8	822,062.2	14.2’	15.7’	13.88’	15.39’
G-3785	497,715.0	822,061.2	14.3’	15.8’	13.70’	15.21’
G-3786	497,683.9	822,063.3	14.2’	15.7’	13.72’	15.23’
G-3787	497,672.3	822,063.7	14.3’	15.8’	13.96’	15.47’
Stilling Well	**Northing (Y)** [1]	**Easting (X)** [1]	**Ground / Water 88**[2]	**Ground / Water 29**[3]	**Mark on Encoder 88**[2]	**Mark on Encoder 29**[3]
22907647	513,804.7	821,522.6	-1.3’ / 3.55’[5]	0.2’ / 5.05’[5]	11.66’	13.16’
2290766	497,753.6	822,132.3	-1.4’ / 3.14’[7]	0.2’ / 4.65’[7]	10.01’	11.52’
NERS-2	504,052.2	801,890.7	5.3’ / 4.96’[6]	6.9’ / 6.52’[6]	9.96’	11.52’
Staff Gauges	**Northing (Y)** [1]	**Easting (X)** [1]	**Ground 88**[2]**/29**[3]	**Bolt 88**[2]**/ 29**[3]	**Mark on Encoder 88**[2]	**Mark on Encoder 29**[3]
L31NNStaff	513,786.9	821,401.0	4.3’ / 5.8’	7.73’ / 9.23’	N/A	N/A
L31NNSW	513,785.0	821,399.8	4.7’ / 6.2’	N/A	11.44’	12.94’
L31NSStaff	497,687.2	822,022.7	4.6’ / 6.1’	9.38’ / 10.89’	N/A	N/A
L31NSSW	497,690.8	822,021.2	4.4’ / 5.9’	N/A	10.54’	12.05’

Reversed

[1] State Plane Coordinate System, Florida East Zone, North American Datum of 1983 (Adjustment of 1999). At Benchmark.
[2] North American Vertical Datum of 1988 (NAVD 88).
[3] National Geodetic Vertical datum of 1929 (NGVD 29).
[4] Only the Vertical Position was taken at this location.
[5] Shot taken at approximately 7:30 a.m. on 11 January 2005.
[6] Shot taken at approximately 3:00 p.m. on 15 February 2005.

GPS PLAN

As part of the original GPS Plan, six (3) L1/L2 Trimble 4000ssi and 4700 units would be used to collect GPS observation data. Fixed height tripods were used were applicable. Data was collected with a minimum of ninety (90) minute observations, 5-second epochs and a 15-degree elevation mask.

Elevations for the original task were not derived from GPS methods. Field observation logs were maintained for each setup. Third order accuracies (centimeter) or better were achieved using this methodology. No problems were encountered.

Vector processing of the GPS observations were performed using Trimble GPSurvey, version 2.35. The precise ephemeris was downloaded from the NGS website and was used in the vector processing. VectorNT was used to perform a Least Squares Adjustment. Only independent vectors were included in the adjustment. Error estimates for constant error are 0.005m / 5 ppm. The adjustment passes the Chi Square test at the 5% significance level. "Geoid 99" was used to compute geoidal separation values (NGS Geoid 99). The minimally vertical constrained adjustment did not result in any outliers beyond 0.1', therefore all vertical control was held as fixed. All horizontal control was also held as fixed. Separate adjustments were run for NAVD 88 and for NGVD 29 values.

For this task, RTK was utilized to provide horizontal values on the wells. Elevations to the wells were run conventionally with the exception of NERS-2. An RTK elevation was used for the work at this site as specified because of access issues.

ISSUES AND PROBLEMS

There were no rights of entry issues for this project. Roads adjoining canals require keys for the gates to provide entry and are in well maintained condition. The only problem encountered on this project was the long delay in scheduling a helicopter to transport our personnel to the NERS-2 site within the Everglades National Park as this site is not accessible by foot by order to the Park's staff.

QA/QC

The project's progress was closely monitored throughout the entire period of work. Drawings and report were reviewed on 28 February 2005 before the final submittal.

PROJECT DELIVERABLES

As specified and in consideration of the project's Statement of Work issued, the following items were generated by WSM as deliverables (in hardcopy and digital format on CD-ROM) to the District: (1) This Surveyor's Report; (2) GPS raw data files, field logs and sketches with computation files with horizontal and vertical extracts; (3) Original Field Book; (4) REVISED AutoCAD digital drawing files; (5) Two (2) Signed and Sealed copies of cross-sections and REVISED survey; (6) Benchmark Forms; (7) X,Y,Z, Descriptor ASCII Files in NAVD 88 datum; (8) X,Y,Z, Descriptor ASCII Files in NGVD 29 datum; (9) Digital site pictures in Power Point presentation format; (10) Digital site pictures in JPG format; (11) Metadata file using Corpsmet95.

CERTIFICATION

(1) This survey meets all applicable requirements of the Florida Minimum Technical Standards as contained in Chapter 61G17-6 FAC. (2) This report is not valid without the signature and the original raised seal of the Florida Surveyor and Mapper in responsible charge. (3) Additions or deletions to this data by anyone other than the signing party are prohibited without written consent of the signing party.

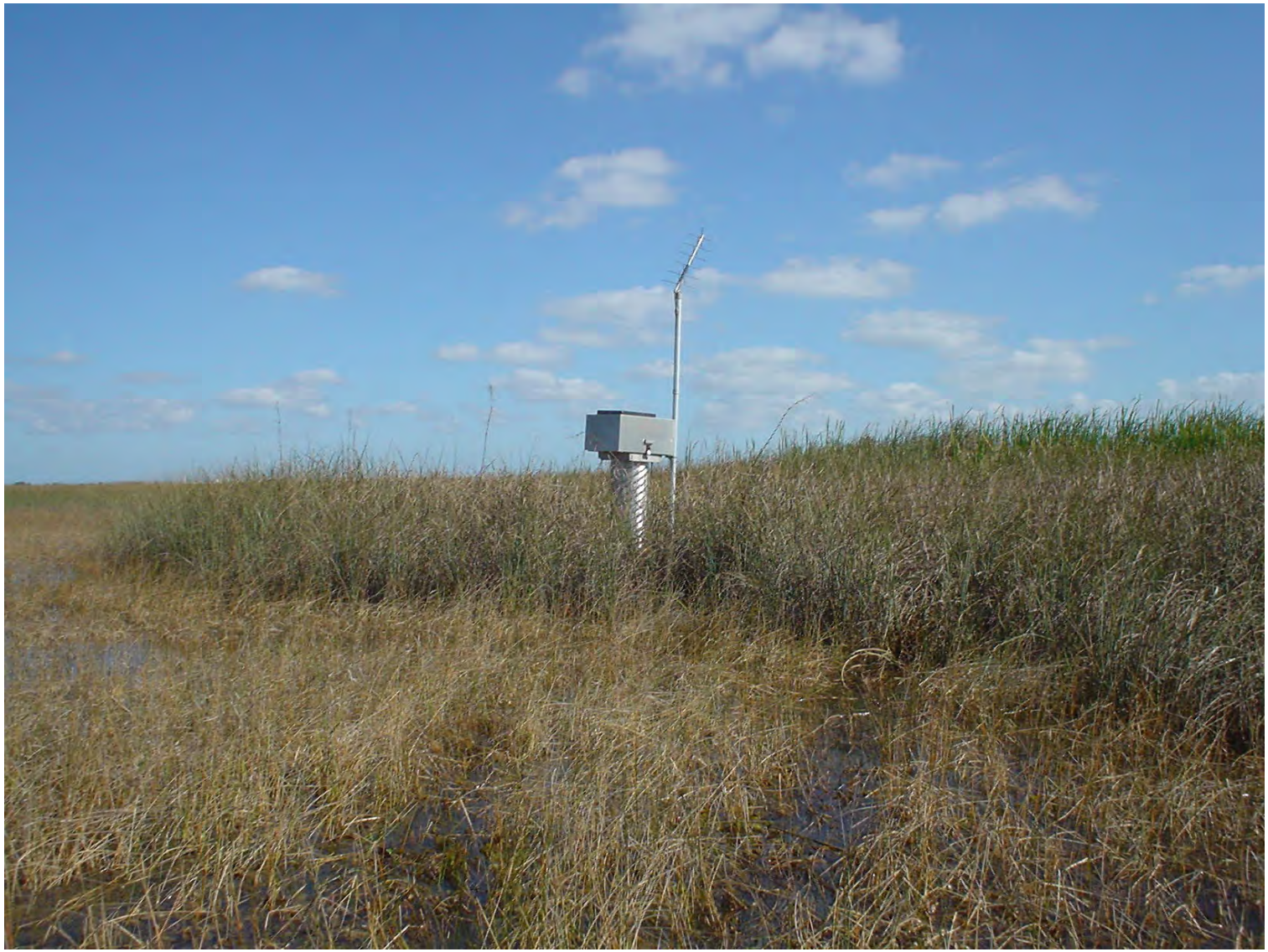
Surveyor and Mapper in Responsible Charge:
Jorge Fernandez, II
Florida Professional Land Surveyor License No. 5103

For the Firm of:
Weidener Surveying & Mapping, P.A. (LB 4207)
10418 NW 31 Terrace
Miami, Florida 33172

Signed:_____ SEAL

Date:_____

NERS-2



Weidener Surveying & Mapping, P.A.
Date of Photo: February 15, 2005
View: NERS-2

NERS-2

Weidener Surveying & Mapping, P.A.
Date of Photo: February 15, 2005
View: Encoder Unit

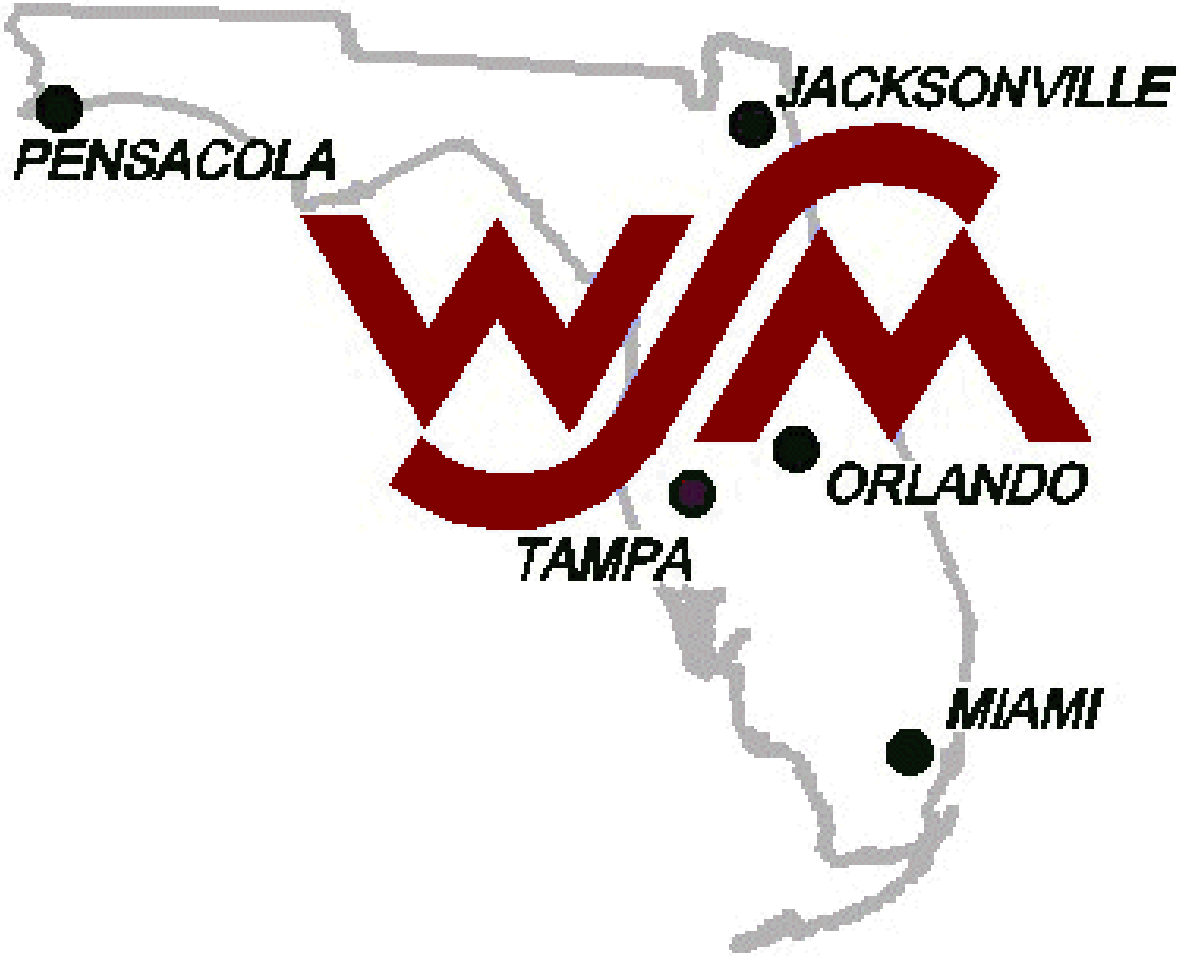
NERS-2

Weidener Surveying & Mapping, P.A.
Date of Photo: February 15, 2005
View: Encoder with Elevation Information

NERS-2

Weidener Surveying & Mapping, P.A.
Date of Photo: February 15, 2005
View: "JBA 62" Monument at site

End of Project Slideshow



- Weidener Surveying & Mapping P.A.
- WSM Project Manager: Jorge Fernandez,II, PLS
- SFWMD Project Manager: Howard Ehmke, PSM

Points

Project : 1729A2

User name	mmckay	**Date & Time**	2:54:12 PM 3/1/2005
Coordinate System	US State Plane 1983	**Zone**	Florida East 0901
Project Datum	NAD 1983 (Conus)		
Vertical Datum		**Geoid Model**	GEOID03-Florida
Coordinate Units	US survey feet		
Distance Units	US survey feet		
Height Units	US survey feet		

Point listing

Name	Northing	Easting	Elevation	Feature Code
J407	519320.139	819724.942	6.465	CMON
C237R	519360.515	819531.873	6.975	CMON
102	519359.426	819530.173	6.954	C 237 RESET
103	519359.421	819530.153	6.943	C 237 RESET
104	513807.604	821510.251	6.323	JBA 33
105	513771.798	821476.622	7.497	WELLTOP
106	513753.828	821447.252	14.976	WELLSN1
107	513777.129	821445.190	14.774	WELLSN2
108	513795.825	821445.477	14.662	WELLSN3
109	513814.540	821444.839	14.859	WELLSN4
110	513815.650	821402.430	6.039	WELLOBSGRN
111	513811.406	821413.905	6.494	JBA31
112	513785.026	821399.790	8.306	STILLING
113	513786.880	821401.009	8.418	STAFFGAUGE
114	513808.290	821522.787	7.701	STAFFGAUGE
115	513804.673	821522.629	7.839	STILLING
116	513807.560	821510.218	6.453	JBA33
117	513807.544	821510.216	6.430	JBA33
118	504056.805	801902.723	10.785	ST WELL
119	504053.747	801890.999	6.109	BM JBA62
120	504052.206	801890.670	5.310	BM JBA62

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Points

Project : 1729D

User name	mmckay	**Date & Time**	2:59:26 PM 3/1/2005
Coordinate System	US State Plane 1983	**Zone**	Florida East 0901
Project Datum	NAD 1983 (Conus)		
Vertical Datum		**Geoid Model**	GEOID03-Florida
Coordinate Units	US survey feet		
Distance Units	US survey feet		
Height Units	US survey feet		

Point listing

Name	Northing	Easting	Elevation	Feature Code
cref	519320.137	819724.942	6.408	
100	519320.139	819724.942	6.920	CMON
101	519359.439	819530.222	6.862	CMON
102	513815.305	821401.836	5.923	G3575
103	513811.381	821413.947	6.500	JBA31
104	513784.114	821420.001	8.774	SWELL
105	513807.589	821510.248	6.437	JBA33
106	497672.273	822063.661	14.545	G3787
107	497683.896	822063.276	14.216	G3786
108	497704.767	822062.248	14.236	G3784
109	497714.969	822061.181	14.172	G3785
110	497756.837	822020.820	6.299	G3574
111	497756.730	822035.690	7.839	JBA39
112	497689.896	822038.272	8.099	SWELL
113	497690.800	822021.182	7.442	L31NSSW
114	497687.181	822022.662	8.432	L31NSSSTAFF
115	497751.124	822120.615	6.738	JBA22
116	497751.117	822120.626	6.717	JBA22
117	497753.551	822132.346	7.062	2290766
118	497753.289	822129.779	8.420	2290766STAFF
119	513803.834	821722.155	6.983	G3559
120	513762.724	821714.669	9.640	WELLPVCN
121	513759.368	821714.814	9.357	WELLPVCS8259
122	513967.442	821701.267	7.034	WELL150FTN
123	519359.438	819530.252	6.863	C237RESET
124	519359.423	819530.269	6.855	C237RESET

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J MAESTRE "SFWMD" 1/11/05 75° SUNNY M540-32
T E DIAZ L 31 N (Additional Wells)
@ A MORESON JOB # 1729AZ
— ELEVATIONS —

STA	BS(+)	AV	HI	FS(-)	AV	ELEV.	REMARKS
BM	9.570 9.170 8.760	9.167	15.601 17.107	—	—	6.44 (88) 7.94 (29)	BM JBA 33 3" ALUMINUM DISC IN CONCRETE MONUMENT JAMES BEDOMAN & ASSOC. NATIONAL PARK SERVICE (IN 4½" PVC PIPE) AT END OF THE WOOD WALK OF 2250767 STEELING WELL STRUCTURE, 3' FROM THE E. WEST E/W OF THE CANAL.
						14.084	NAVD 88 IN RED
6-3778 MW 1				1.523	1.523	15.58	MW 1 (ON TOP OF PVC PIPE)
				0.771	0.771	16.336 14.836	GROUND NEXT TO MW 1
						14.140	
6-3779 MW 2				1.467	1.467	15.64	MW 2 (ON TOP OF PVC PIPE)
				0.805	0.805	16.302 14.802	GROUND NEXT TO MW 2
						14.125	ON TOP OF THE LEVEE
6-3780 MW 3				1.482	1.482	15.626	MW 3 (ON TOP OF PVC PIPE)
				0.775	0.775	16.332 14.832	GROUND NEXT TO MW 3
						14.446	
6-3781 MW 4				1.161	1.161	15.946	MW 4 (ON TOP OF PVC PIPE)
				0.660	0.660	16.447 14.947	GROUND NEXT TO MW 4

V. MAESTRE "SFWMD" 1/11/05
E. DIAZ
A. MORESON L31 N (Additional Wells)
- Elevations -

75° SUNNY

M540 .33

STA	BS(+)	AU	HI	FS(-)	ΔU	ELEV.	REMARKS
					4163	12.944	STILING WELL L N31 NW STAF
L31 NW STAF					10.870	6.237	WATER LEVEL ON L N31 NW STAF TIME: 8.32 AM
					7.880	9 227	TOP OF THE BOLT NORTH OF L31 NW STAF
					11.280	5.827	GROUND SURFACE NEXT TO L31 NW STAF (NORTH SIDE)

Stilling Wells

22907647	3543	13.164	STESCING WELL ON EAST SIDE OF THE CANAL
	12.06	5 047	WATER LEVEL TIME: 7 30 AM
	1687	0 237	GROUND SURFACE, NEXT TO 22907647 STRUCTURE (STILLING WELL)
GND	5.55	7.557	GROUND NEXT TO THE BM JR 33 (NORTH SIDE)
NW	819	8 917	NORTH WELL ON TOP OF THE PVC PIPE
	8 68	8 427	GROUND NEXT TO THE NORTH WELL
MW	861	8 497	SOUTH WELL ON TOP OF THE PVC PIPE
	876	8.347	GROUND NEXT TO S. WELL

} WEST SIDE OF CANAL

V. MAESTRE "SFWMD" 1/11/05
E. 0102 L31N (Additional Wells)
Δ. MORESON - Elevations.

75° SUNNY

M540 - 34

STA	BS(+)	AU	HI	FS(-)	AVE	ELEV	REMARKS
63574					8.280	8.827 (1.521)	MW ON TOP OF THE PVC PIPE
					11.168	5.939 (4.950)	GROUND NEXT TO 63574 STRUCTURE
					5.975	11.132 (9.656)	MW ON TOP OF THE PVC PIPE
63559					8.420	8.687 (1.181)	GROUND NEXT TO 63559 STRUCTURE
MW					5.900	11.207 (9.107)	MW NORTH SIDE (EAST SIDE OF CANAL) ON TOP OF THE PVC PIPE
					8.35	8.757 (1.281)	GROUND SHOT NEXT TO MW
MW					6.172	10.935 (9.935)	MW SOUTH SIDE (EAST SIDE OF CANAL) ON TOP OF THE PVC PIPE
					8.33	8.777 (1.211)	GROUND SHOT NEXT TO THE MW
	10.003		16.313	9.302			
BM (TP1)	9.893	9.893	17.813	9.187	9.187	7.92 (6.140)	BM JBΔ 31 3" BRASS DISK ON CONC. MONUMENT NATIONAL PARK SERVICE. ± 3' TO THE SW OF THE NORTH STERLING WELL AT WEST SIDE OF THE LEVEE ACROSS THE LEVEE FROM BM JBΔ 33
	9.782			9.071			
				10.270		7.94 (6.936) (R)	
BM JBΔ 33				9.879	9.877		
				9.483		7.936 (H)	

NOTE: EVERYTHING WAS CALCULATED ON "NGVD 29".

ε = 0.004'

J. H DESTREE "SFWMD" 75° SUNNY H540-35
T E DIDZ L 31 N (Additional Work) 1/11/04
Ø Δ MORESON - Elevations -

STA	BS(+)	Δ U	H I	FS(-)	Δ U	ELEV	REMARKS
BM	9.280					6.73 (88)	BM JBΔ 22 3" ALUMINIUM DISC INC CONCRETE MONUMENT
JBΔ 22	8.909	8.906	17.146	—	—	8.24 (23)	(IN ACU PIPE) NATIONAL PARK SERVICE.
	8.527						2' TO SOUTH OF WEST END OF THE WOOD WALK OF THE STEALING WELL 2290766 STRUCTURE
					1759	15 387	MW 2 ON TOP OF THE 2" PVC PIPE
G-3784 MW 2					1.432	15.714	GROUND SHOOT NEXT TO THE M.W 2
					1938	15 208	M.W1 ON TOP OF THE 2" PVC PIPE
G3785 MW1					1.389	15 757	GROUND SHOOT NEXT TO THE MW 1
					1 914	15 232	MW 3 ON TOP OF THE 2" PVC PIPE
G.3786 MW3					1 438	15.708	GROUND SHOOT NEXT TO THE MW 3
					1 681	15 405	MW 4 ON TOP OF THE 2" PVC PIPE
G.3787 MW 4					1 320	15 826	GROUND SHOOT NEXT TO THE MW 4
					5.10	12 040	STEALING WELL
L31 NSSW					11 280	5 866	GROUND SHOOT NEXT TO L31 NSSW
					6 260	10 886	STAFF GOUGE ON TOP OF THE BOLT
					11 08	6.066	GROUND SHOOT NEXT TO THE STAFF GAUGE

J. MAESTRE "SFWMD" 1/11/05 75° SUNNY M540-36
E 0142 L 31 N (ADDITIONAL WELLS)
Δ MORESON - 6 EQUATIONS -

STA	BS(+)	Δ	HI	FS(-)	Δ	ELEV	REMARKS
					5.628	11.518	STEWING WELL
2290766					12.09	5.056	WATER LEVEL ON 2290766 STRUCTURE
					16.99	0.156	GROUND SURFACE NEXT TO 2290766 STRUCTURE
					8.870	8.276	TOP OF THE STAFF GAUGE ON 2290766 (TOP OF BOLT)
GND					9.07	8.076	GROUND SHOT NEX TO BM JBΔ 22
					8.216	8.930	STEALING WELL
63575					11.170	5.976	GROUND SHOT NEXT TO 63575 STRUCTURE
	7.639			7.884			BM JBΔ 39 3" ALUMINUM DISC IN CONC MONUMENT
BM							NATIONAL PARK SERVICE
JBΔ39	7.511	7.512	16.90	7.761	7.758	9.388	8' TO EAST OF THE EAST END OF THE WOOD WALK OF THE
	7.388			7.630			STEALING WELL 63575 STRUCTURE
				9.038		8.24 (R)	NOTE EVERYTHING WAS CALCULATED ON "NGVD 29"
BM				8.654	8.657		
JBΔ							
22				8.281		8.243 (M)	

JGM LEVEE 31N SEEPAGE [illegible] 2-15-05 -35
[illegible] CANAL [illegible] LEVEL.
"NERS 2"
WSM# 1729D (88) +1.56 (29)

STA	+	M	Λ	−	M	ELEV	Ldg	REMARKS			
JBA62		5.79	11.11			5.32					6.88'
MARK					1.15	9.96'		MARK	[illegible]	[illegible]	11.52'
					[illegible]	6.16		AUX	PT 1		7.72
GND					[illegible]	3.46		[illegible]		50'	5.22
					[illegible] 35	10.76		AUX	PT [illegible]	[illegible]	12.32
JBA62					5.79	5.32					6.88'

NOTE: WATER LEVEL IS 0.35' BELOW BM JBA62
ELEV = 4.97' @ 3:00PM ON 2-15-2005.

Benchmark Form

SOUTH FLORIDA WATER MANAGEMENT DISTRICT Rev. 4/01

COUNTY Miami-Dade	**PROJECT** L-31N	**DESIGNATION** JBA 62
SECTION 16	**TOWNSHIP** 54 South	**RANGE** 38 East
GEOGRAPHIC INDEX OF QUAD		
Established by ____ **Recovered by** X **Weidener Surveying & Mapping, P.A.**	**NAME OF QUADRANGLE** **Hialeah SW**	
SURVEYOR Jorge Fernandez, II, PLS **DATE** 8/27/2004	**FIELD BOOK** M-540 **PAGE** 32-36	
HORIZONTAL DATUM: **1927** (**1983**) **Other** _____(circle one) ZONE (**E**) or **W**		
VERTICAL DATUM: MSL **1929** (**1988**) **Other** _____ (circle one)		
CONTROL ACCURACY: HORIZONTAL 1 2 (3) _____(circle one) **VERTICAL** 1 2 (3)		
STATE PLANE COORDINATES	**X** 504,052	**Y** 801,890
EL. 5.32' (88) 8.24' (29)		
LATITUDE **25°43'10"**	LONGITUDE **80°33'27"**	

DESCRIPTION

TO REACH: The project area is located in Section 5 of Township 54 South, Range 39 East, in in western Miami-Dade County, Florida. The benchmark is located at the NERS-2 monitoring well site in the northeast corner of the Everglades National Park. The site is only accessible by helicopter and with permission of the National Parks Service. The elevation was established by RTK-GPS and WAS NOT done by a conventional surveying bench run due to access constraints. This disk is stamped "JBA 62 James Beadman & Assoc. Benchmark National Park Service".

Notable Land marks: NERS-2 Monitoring Well

SKETCH


TAMIAMI TRAIL (U.S. 41)
N
NERS-2
Well Site
BM
JBA 62
L-31N CANAL
KROME AVENUE
EVERGLADES
NATIONAL PARK


NATIONAL
62

From the "ngvd29.txt" file provided by NGS for the CERP Geodetic Vertical Control Project.
Line/Part: L26195 SSN+: mark floated, SSN*: mark constrained, SSN#: mark floated & constrained

Mark ID	SSN	PID	Designation	Geopotential	Elevation	Codes
811	0032	AJ8370	JBA 33	2.3883	2.4371	
815	0036	AJ8374	JBA 22	2.4767	2.5272	

The NGS Data Sheet

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

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PROGRAM = datasheet95, VERSION = 8.8
1         National Geodetic Survey,   Retrieval Date = M
 AJ8374 ***********************************************
 AJ8374  DESIGNATION -  JBA 22
 AJ8374  PID         -  AJ8374
 AJ8374  STATE/COUNTY-  FL/MIAMI-DADE
 AJ8374  COUNTRY     -  US
 AJ8374  USGS QUAD   -  SOUTH MIAMI NW (1988)
 AJ8374
 AJ8374                         *CURRENT SURVEY CONTROL
 AJ8374 ______________________________________________________________________
 AJ8374* NAD 83(1986) POSITION- 25 42 05.     (N) 080 29 46.     (W)    SCALED
 AJ8374* NAVD 88 ORTHO HEIGHT -     2.051 (meters)        6.73   (feet) ADJUSTED
 AJ8374 ______________________________________________________________________
 AJ8374  GEOID HEIGHT    -        -24.685 (meters)                      GEOID12B
 AJ8374  DYNAMIC HEIGHT  -          2.047 (meters)        6.72   (feet) COMP
 AJ8374  MODELED GRAVITY -    979,022.7   (mgal)                        NAVD 88
 AJ8374
 AJ8374  VERT ORDER      -  FIRST     CLASS II
 AJ8374
 AJ8374.The horizontal coordinates were scaled from a topographic map and have
 AJ8374.an estimated accuracy of +/- 6 seconds.
 AJ8374.
 AJ8374.The orthometric height was determined by differential leveling and
 AJ8374.adjusted by the NATIONAL GEODETIC SURVEY
 AJ8374.in June 2002.
 AJ8374
 AJ8374.Significant digits in the geoid height do not necessarily reflect accuracy.
 AJ8374.GEOID12B height accuracy estimate available here.
 AJ8374
 AJ8374.The dynamic height is computed by dividing the NAVD 88
 AJ8374.geopotential number by the normal gravity value computed on the
 AJ8374.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AJ8374.degrees latitude (g = 980.6199 gals.).
 AJ8374
 AJ8374.The modeled gravity was interpolated from observed gravity values.
 AJ8374
 AJ8374;                     North         East     Units  Estimated Accuracy
 AJ8374;SPC FL E     -   151,630.      250,570.      MT   (+/- 180 meters Scaled)
 AJ8374
 AJ8374                            SUPERSEDED SURVEY CONTROL
 AJ8374
 AJ8374.No superseded survey control is available for this station.
 AJ8374
 AJ8374_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ505427(NAD 83)
 AJ8374
 AJ8374_MARKER: DD = SURVEY DISK
 AJ8374_SETTING: 0 = UNSPECIFIED SETTING
 AJ8374_STAMPING: JBA 22
 AJ8374_MARK LOGO: BEDMEN
 AJ8374_MAGNETIC: B = BAR MAGNET IMBEDDED IN MONUMENT
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AJ8374_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AJ8374+STABILITY: SURFACE MOTION
AJ8374_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AJ8374+SATELLITE: SATELLITE OBSERVATIONS - January 17, 2008
AJ8374
AJ8374 HISTORY - Date Condition Report By
AJ8374 HISTORY - UNK MONUMENTED BEDMEN
AJ8374 HISTORY - 20010103 GOOD FLDEP
AJ8374 HISTORY - 20080117 GOOD DCPWD
AJ8374
AJ8374 STATION DESCRIPTION
AJ8374
AJ8374'DESCRIBED BY FL DEPT OF ENV PRO 2001 (JLM)
AJ8374'THE MARK IS ABOUT 13.0 MI (20.9 KM) NORTH OF HOMESTEAD, 5.0 MI (8.0
AJ8374'KM) WEST OF KENDALL, IN SECTION 35, TOWNSHIP 54 SOUTH, RANGE 38 EAST.
AJ8374'TO REACH THE MARK FROM THE JUNCTION OF STATE ROAD 997 (KROME AVENUE SW
AJ8374'177 AVENUE) AND U.S. HIGHWAY 41 (TAMIAMI TRAIL SW 8TH ST) ABOUT 10.0
AJ8374'MI (16.1 KM) SOUTHWEST OF HIALEAH, GO WEST ON U.S. HIGHWAY 41
AJ8374'(TAMIAMI TRAIL SW 8TH ST) FOR 1.0 MI (1.6 KM) T0 THE WEST END OF
AJ8374'BRIDGE NUMBER 8705851979 AND THE JUNCTION OF A LEVEE ROAD (L-31N) ON
AJ8374'THE WEST SIDE OF THE CANAL, TURN LEFT ON LEVEE ROAD (L-31N) AND GO
AJ8374'SOUTH FOR 4.1 MI (6.6 KM) TO THE MARK ON THE LEFT, A STAINLESS STEEL
AJ8374'ROD WITH A 3 1/2-INCH ALUMINUM DISK SET IN CONCRETE IN A 4-INCH PVC
AJ8374'PIPE PROJECTING 0.3 FT (9.1 CM) ABOVE THE LEVEL OF THE GROUND AND
AJ8374'ABOVE THE LEVEL OF THE LOWER LEVEE ROAD (NEXT TO A 4.0 FT (1.2 M) X
AJ8374'7.0 FT (2.1 M) BLOCK BUILDING USED TO HOUSE A U.S. GEOLOGICAL STORM
AJ8374'GAGE) . LOCATED 3.7 FT (1.1 M) SOUTH OF A WOODEN DECK HOLDING A STORM
AJ8374'GAGE IN THE WATER, 2.1 FT (0.6 M) EAST OF THE SOUTHEAST CORNER OF A
AJ8374'4.0 FT (1.2 M) X 7.0 FT (2.1 M) BLOCK BUILDING AND 1.3 FT (0.4 M) WEST
AJ8374'OF A CARSONITE WITNESS POST. NOTE A BAR MAGNETIC WAS PLACED ON THE

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Line/Part: L26195 SSN+: mark floated, SSN*: mark constrained, SSN#: mark floated & constrained

Mark ID	SSN	PID	Designation	Geopotential	Elevation	Codes
811	0032	AJ8370	JBA 33	2.3883	2.4371	
815	0036	AJ8374	JBA 22	2.4767	2.5272	

The NGS Data Sheet

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

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PROGRAM = datasheet95, VERSION = 8.8
1         National Geodetic Survey,   Retrieval Da
 AJ8370 ***************************************
 AJ8370  DESIGNATION -  JBA 33
 AJ8370  PID         -  AJ8370
 AJ8370  STATE/COUNTY-  FL/MIAMI-DADE
 AJ8370  COUNTRY     -  US
 AJ8370  USGS QUAD   -  SOUTH MIAMI NW (1988)
 AJ8370
 AJ8370                         *CURRENT SURVEY C
 AJ8370
 AJ8370* NAD 83(1986) POSITION- 25 44 42.      (N) 080 29 52.      (W)    SCALED
 AJ8370* NAVD 88 ORTHO HEIGHT -      1.962 (meters)         6.44   (feet) ADJUSTED
 AJ8370
 AJ8370  GEOID HEIGHT    -        -24.676 (meters)                       GEOID12B
 AJ8370  DYNAMIC HEIGHT  -          1.958 (meters)         6.42   (feet) COMP
 AJ8370  MODELED GRAVITY -    979,028.6   (mgal)                         NAVD 88
 AJ8370
 AJ8370  VERT ORDER      -  FIRST     CLASS II
 AJ8370
 AJ8370.The horizontal coordinates were scaled from a topographic map and have
 AJ8370.an estimated accuracy of +/- 6 seconds.
 AJ8370.
 AJ8370.The orthometric height was determined by differential leveling and
 AJ8370.adjusted by the NATIONAL GEODETIC SURVEY
 AJ8370.in June 2002.
 AJ8370
 AJ8370.Significant digits in the geoid height do not necessarily reflect accuracy.
 AJ8370.GEOID12B height accuracy estimate available here.
 AJ8370
 AJ8370.The dynamic height is computed by dividing the NAVD 88
 AJ8370.geopotential number by the normal gravity value computed on the
 AJ8370.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AJ8370.degrees latitude (g = 980.6199 gals.).
 AJ8370
 AJ8370.The modeled gravity was interpolated from observed gravity values.
 AJ8370
 AJ8370;                    North         East     Units  Estimated Accuracy
 AJ8370;SPC FL E     -   156,460.      250,390.      MT  (+/- 180 meters Scaled)
 AJ8370
 AJ8370                           SUPERSEDED SURVEY CONTROL
 AJ8370
 AJ8370.No superseded survey control is available for this station.
 AJ8370
 AJ8370_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ503475(NAD 83)
 AJ8370
 AJ8370_MARKER: DB = BENCH MARK DISK
 AJ8370_SETTING: 0 = UNSPECIFIED SETTING
 AJ8370_STAMPING: JBA 33
 AJ8370_MARK LOGO: BEDMEN
 AJ8370_MAGNETIC: N = NO MAGNETIC MATERIAL
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AJ8370_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AJ8370_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AJ8370+SATELLITE: SATELLITE OBSERVATIONS - January 17, 2008
AJ8370
AJ8370 HISTORY   - Date   Condition   Report By
AJ8370 HISTORY   - UNK   MONUMENTED   BEDMEN
AJ8370 HISTORY   - 20010103 GOOD   FLDEP
AJ8370 HISTORY   - 20080117 GOOD   DCPWD
AJ8370
AJ8370   STATION DESCRIPTION
AJ8370
AJ8370'DESCRIBED BY FL DEPT OF ENV PRO 2001 (JLM)
AJ8370'THE MARK IS ABOUT 18.2 MI (29.3 KM) NORTH OF HOMESTEAD, 9.0 MI (14.5
AJ8370'KM) NORTHWEST OF KENDALL, IN SECTION 11, TOWNSHIP 54 SOUTH, RANGE 38
AJ8370'EAST. TO REACH THE MARK FROM THE JUNCTION OF STATE ROAD 997 (KROME
AJ8370'AVENUE SW 177 AVENUE) AND U.S. HIGHWAY 41 (TAMIAMI TRAIL SW 8TH ST)
AJ8370'ABOUT 10.0 MI (16.1 KM) SOUTHWEST OF HIALEAH, GO WEST ON U.S. HIGHWAY
AJ8370'41 (TAMIAMI TRAIL SW 8TH ST) FOR 1.0 MI (1.6 KM) T0 THE WEST END OF
AJ8370'BRIDGE NUMBER 8705851979 AND THE JUNCTION OF A LEVEE ROAD (L-31N) ON
AJ8370'THE WEST SIDE OF THE CANAL, TURN LEFT ON LEVEE ROAD (L-31N) AND GO
AJ8370'SOUTH FOR 1.1 MI (1.8 KM) TO THE MARK ON THE LEFT, A 5/8-INCH
AJ8370'STAINLESS STEEL ROD SET IN CONCRETE ENCASED IN A 4-INCH PVE PIPE
AJ8370'PROJECTING 0.5 FT (15.2 CM) ABOVE THE LEVEL OF THE GROUND AND ABOVE
AJ8370'THE LEVEL OF THE LEVEE ROAD. LOCATED 65.6 FT (20.0 M) EAST OF THE
AJ8370'APPROXIMATE CENTERLINE OF THE LEVEE ROAD, 23.5 FT (7.2 M) EAST OF THE
AJ8370'APPROXIMATE CENTERLINE OF A TURNOUT, 12.0 FT (3.7 M) WEST OF A U.S.
AJ8370'GEOLOGICAL SURVEY STORM GAGE IN THE WATER, 2.7 FT (0.8 M) EAST OF THE
AJ8370'SOUTHEAST CORNER OF A 4.0 FT (1.2 M) X 7.0 FT (2.1 M) BLOCK BUILDING
AJ8370'AND 1.0 FT (0.3 M) WEST OF A CARSONITE WITNESS POST. NOTE FOR KEY
AJ8370'CONTACT SOUTH FLORIDA WATER MANAGEMENT DISTRICT AT 2195 NORTHEAST 8TH
AJ8370'STREET HOMESTEAD, FL 33033, PHONE 305-242-5955.
AJ8370
AJ8370   STATION RECOVERY (2008)
AJ8370
AJ8370'RECOVERY NOTE BY DADE COUNTY PUBLIC WORKS DEPARTMENT 2008 (MJW)
AJ8370'RECOVERED IN GOOD CONDITION.