

SURVEYOR'S REPORT

Specific Purpose Survey of

Well site MF37

Okeechobee County, Florida

Prepared for:

South Florida Water Management District

Prepared by:



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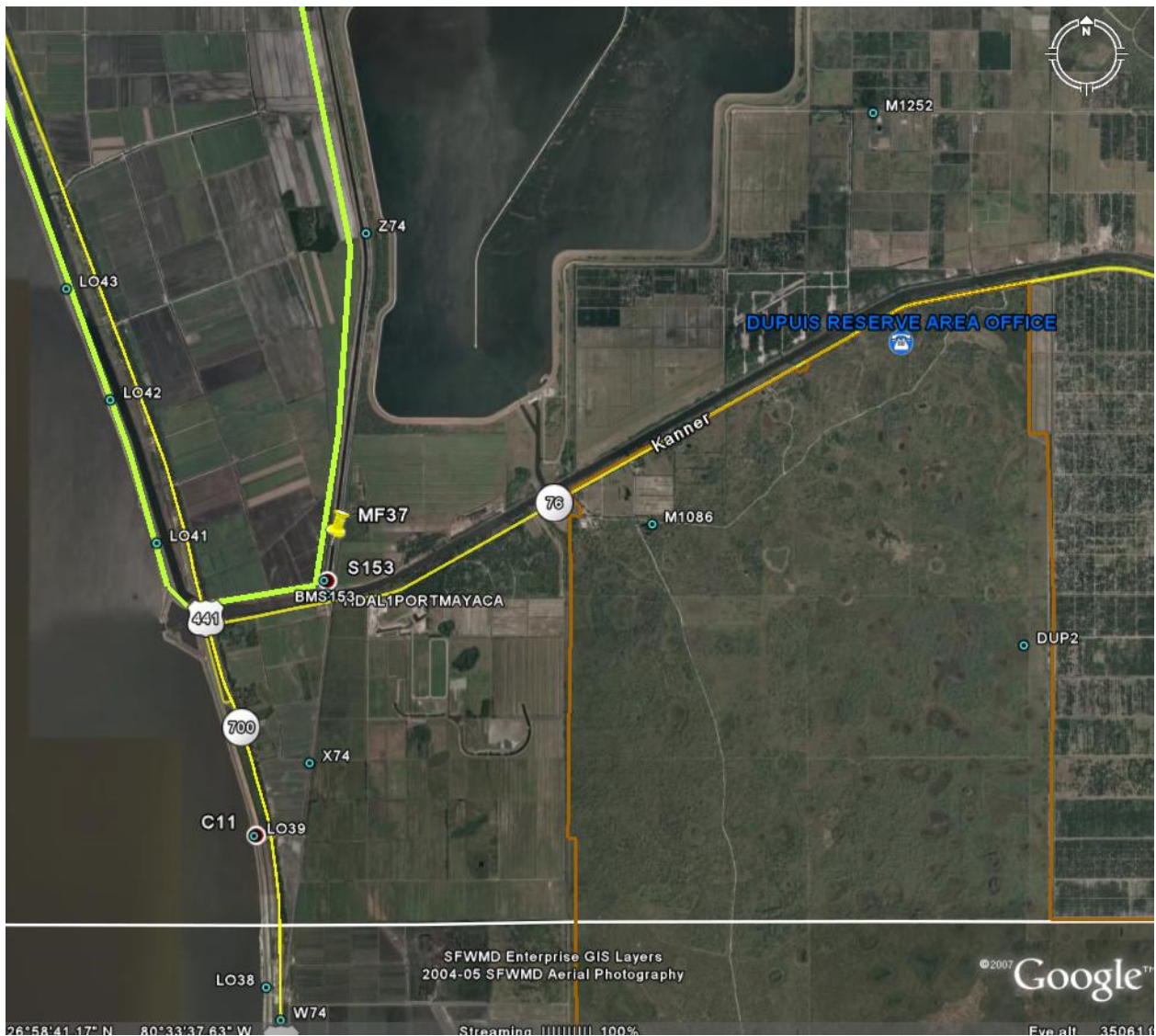
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PURPOSE

To establish accurate North American Vertical Datum of 1988 (NAVD 88) and National Geodetic Vertical Datum of 1929 (NGVD 1929) elevations on 4 measuring point on the well, set a benchmark at the well site and establish an approximate horizontal location.

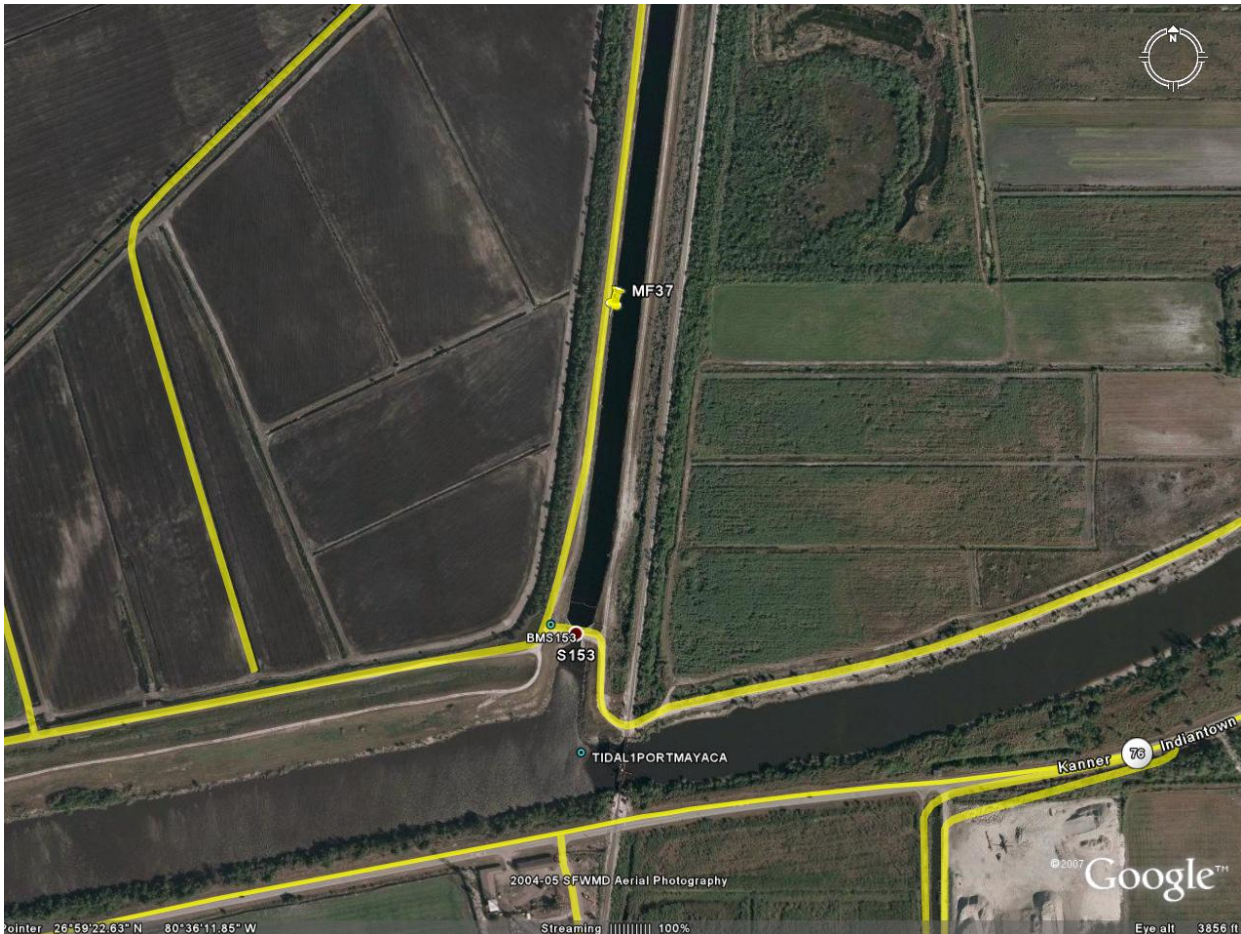
LOCATION OF PROJECT

The project is located in Martin County, Florida, on the west side of South Florida Water Management District's Levee 65 Borrow Canal in Section 14, Township 40 South, Range 37 East Tallahassee Meridian.



General Location (Not to Scale)

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Detailed Location (Not to Scale)

PROJECT DATUM'S

The Vertical datum's for the project are:

National Geodetic Vertical Datum (NGVD) of 1929

North American Vertical Datum (NAVD) of 1988.

The elevations are based on SFWMD benchmark "S-153 1995" and are not a part of the National Geodetic Survey data base. The elevations were established by Weidener Surveying and Mapping.P.A. under Purchase Order No. PC P200635. South Florida Water Management District's Structure 153 is located at the confluence of SFWMD'S Levee 65 Borrow Canal and SFWMD'S Canal 44 (St. Lucie Canal) approximately 950 feet South of the well site. The Site Benchmark "MF37" is a South Florida Water Management District Aluminum cap that was grouted into the well pad at the MF37 well site.

The Horizontal datum is the North American Datum of 1983 (NAD 83/99).

LEVELING METHODS

The elevations were established using conventional third order methods based on third order closures (.05√miles) as required by law. The instrument is a Wild Level , Serial # 215142 Date last checked is unknown.

A level loop was run from S153 to the site benchmark MF37 and back. Standard Philadelphia Rods were used and the measurements were manually recorded in a field book, reduced and adjusted. The level run exceeds the required closure for this type of work.

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HORIZONTAL LOCATIONS

Horizontal locations were obtained using a Trimble Pro XL TDC1 receiver and are approximate.

Description	X, (Easting) 83/99 Coordinates	Y, (Northing) 83/99 Coordinates	Latitude	Longitude
Benchmark "MF37"	9662230	784934	26°59'28.87"	80°36'16.48"

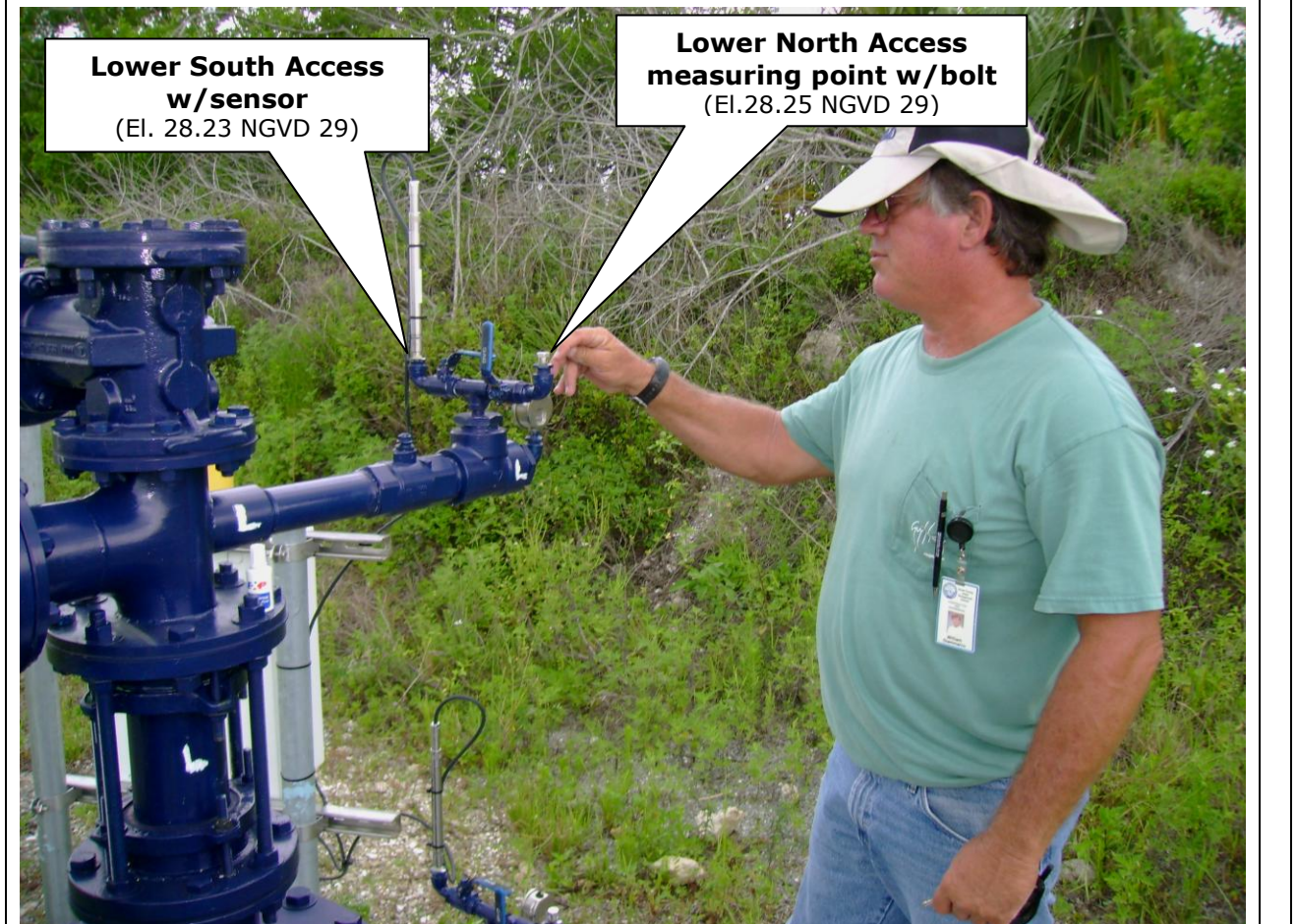
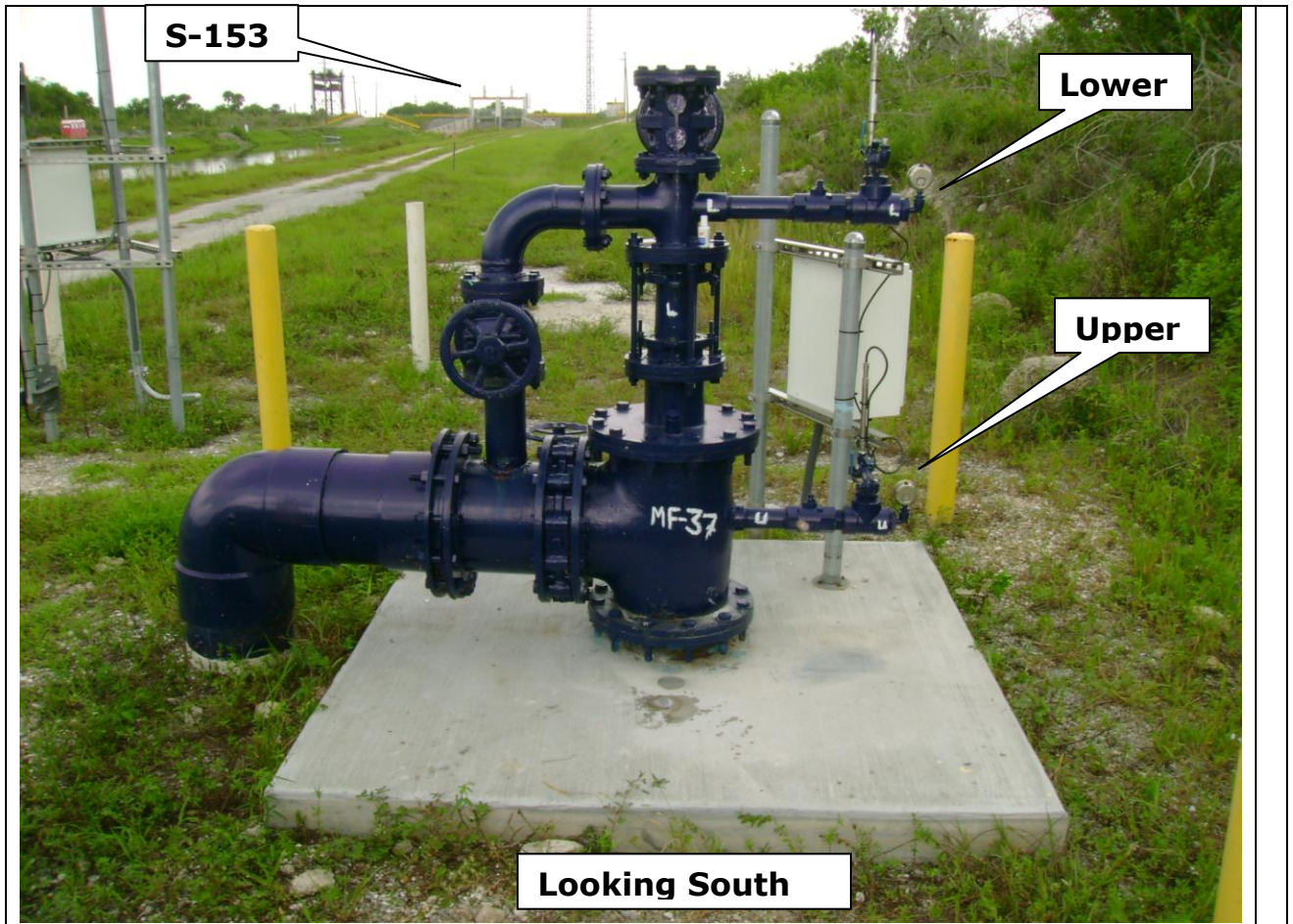
VERTICAL CONTROL

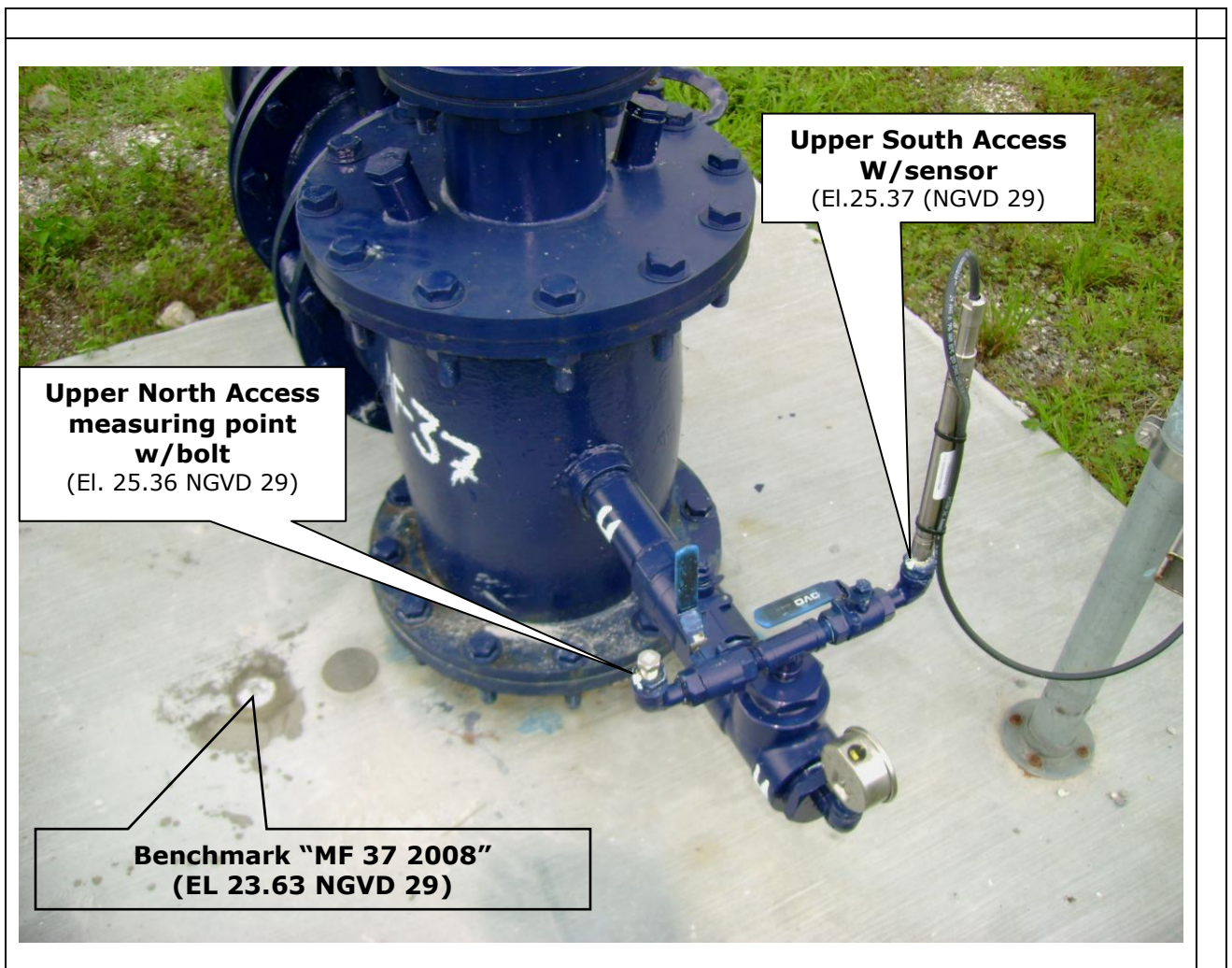
Site benchmark: MF37	Elevation:	22.41 ft	(NAVD 88)	23.63 ft	(NGVD 29)
Monitoring Well: MF37					
Lower North access measuring point	Top pipe	27.03		28.25	(NGVD 29)
Lower South access w/sensor	Top pipe	27.01	(NAVD 88)	28.23	(NGVD 29)
Upper North access measuring point	Bottom pipe	24.14	(NAVD 88)	25.36	(NGVD 29)
Upper South access w/ sensor	Bottom pipe	24.15	(NAVD 88)	25.37	(NGVD 29)
Length of Run:	950 feet ±	To reach: From the intersection of County Road 15B and United States Highway 441 (U.S. 441, Conner's Highway) in Okeechobee County Florida, go Southeasterly on U.S. 441 12 miles to the exit for the South Florida Water Management District (SFWMD) Structure 308 on the right before the bridge over SFWMD'S Canal 44 (St. Lucie River); turn right and follow the road Southerly to the St. Lucie tieback road; turn left (on the North side of the canal and go East 0.8 of a mile to SFWMD'S Structure 153 (S-153); go North on the West side of SFWMD'S Levee 65 borrow canal a distance of 950 feet more or less to MF37 well site and station location.			
Max Allowable Misclosure:	0.021				
Actual Misclosure:	0.00				



Station is a SFWMD aluminum disk grouted into the 6'x6' concrete slab on the North side of the well and is stamped "MF 37 2008". There is a brass disk on the south side of the station.

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ELEVATIONAL DATA





Elevations shown hereon are NGVD 1929 datum unless noted otherwise.

Party Chief: A. Hollin Field Book: 6H Pages 37 and 38

Bench Mark: "MF37" El. 22.41', Vertical Datum: NAVD1988

El. 23.63', Vertical Datum: NGVD1929

Offset: 1.22' (subtract this value from NGVD 1929 to convert to NAVD 1988)

Abbreviation:

NAVD 88 - North American Vertical Datum of 1988

NGVD29 - National Geodetic Vertical Datum of 1929

NAD 83 -99 (Horizontal Datum) North American Datum

NGS - National Geodetic Survey

SFWMD - South Florida Water Management District

PSM – Professional Surveyor & Mapper

SURVEYOR'S CERTIFICATION

I hereby certify that this Specific Purpose Survey meets applicable portions of the Minimum Technical Standards set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 61-G17, Florida Administrative Code.

This report is prepared for the sole and specific use of the South Florida Water Management District and is not assignable.

Date of Survey
June 26, 2008

Howard J. Ehmke PSM
Professional Surveyor and Mapper
State of Florida
Certificate No. 4191