



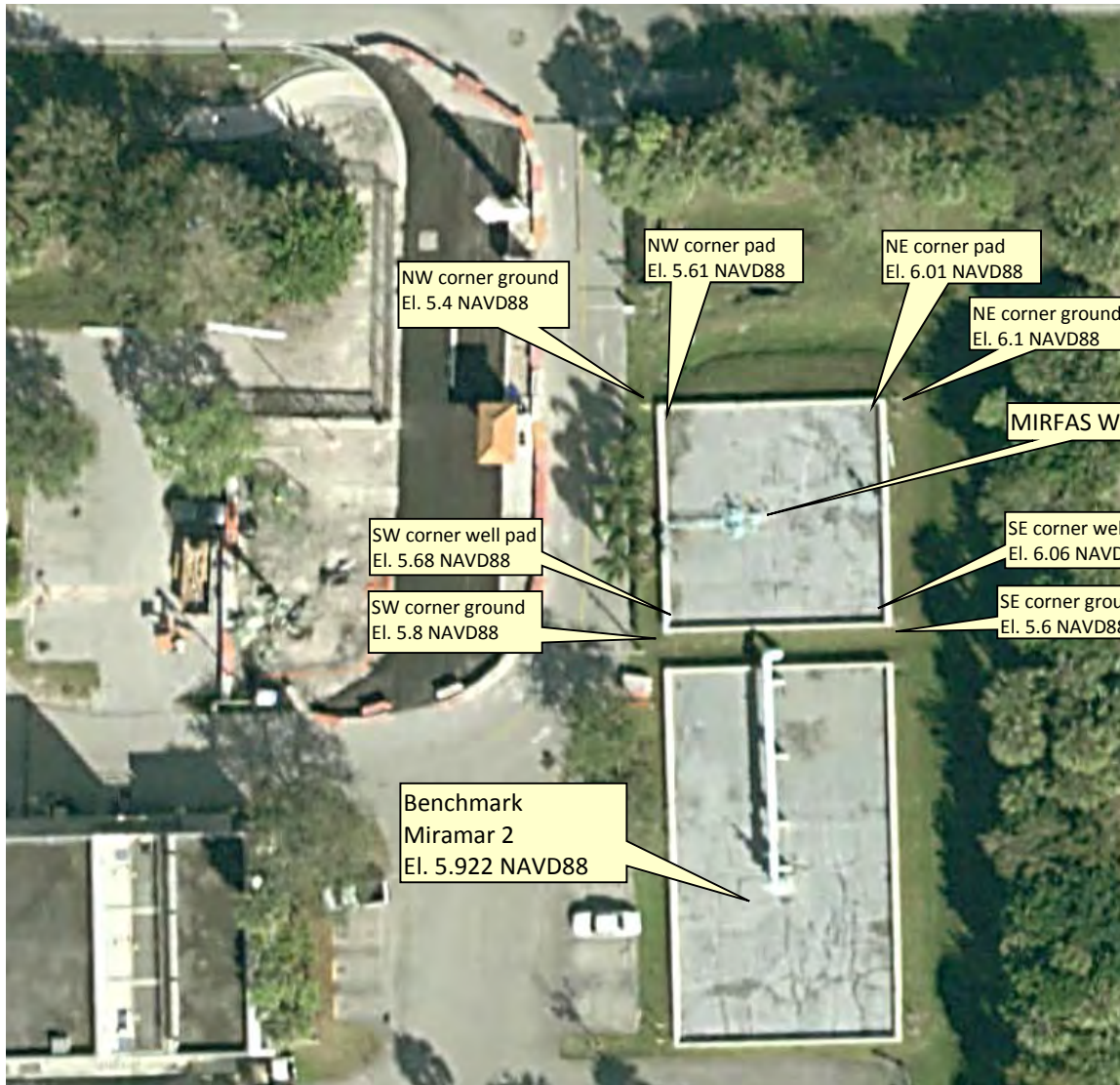
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 1/16

Site Name: MIRFAS		Date of Field Work: 03-apr-17	
Party Chief: Giammarco	Field Book: MISC 6Z	Page 57	
Site Benchmark: MIRAMAR 2	Benchmark Elevation (NAVD88) 5.922	Corpscon 6.0.1 Conversion Factor (NAVD88 to NGVD29) +1.581	
Reference Elevation(s) (NAVD88): 7.22	Existing Tag Elevation (Datum): NONE	Calibration Port Elevation(s) (NAVD88): 7.24	
Ground Elevation (NAVD88): (taken at the corners of the concrete pad) Northwest: 5.4 Northeast: 6.1 Southwest: 5.8 Southeast: 5.6		Pad Elevation (NAVD88): (taken at the corners) Northwest: 5.61 Northeast: 6.01 Southwest: 5.68 Southeast: 6.06	
Latitude: 25°59'33.8"		Longitude: 80°19'56.2" (taken from esri product)	
Equipment used: Zeiss Ni2 Level and a Topcon GPS unit NAVD88 – North American Vertical Datum of 1988 NGVD29 - National Geodetic Vertical Datum of 1929 Corpscon 6.0.1 - A U.S. Army Corps of Engineers Engineering Research and Development Center Topographic Engineering Center Alexandria, Virginia Windows-based program to convert coordinates and elevations between datum's using vertcon05.txt and vertcon05.05 files supplied by the U.S. Army Corps of Engineers South Atlantic Division, Jacksonville FL.			

PICTURES

MIRFAS Well Site



(Not to scale) taken from esri product



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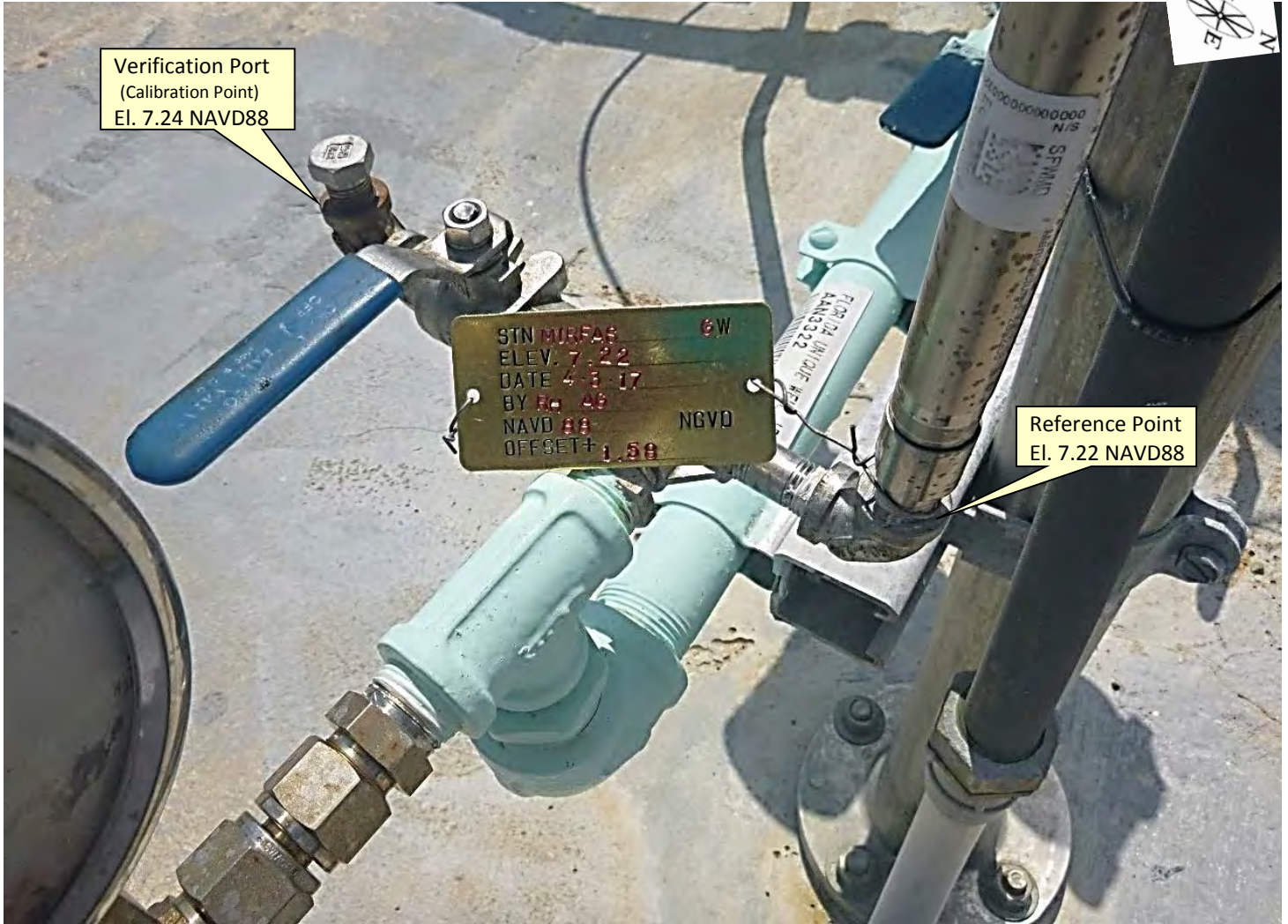
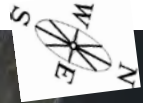
Overall Well Site



Looking Northwesterly (03-apr-17)



Well Measuring Points



Looking Westerly (03-apr-17)

Brass Tag Close Up



Brass Tag and Reference Mark





SOUTH FLORIDA WATER MANAGEMENT DISTRICT

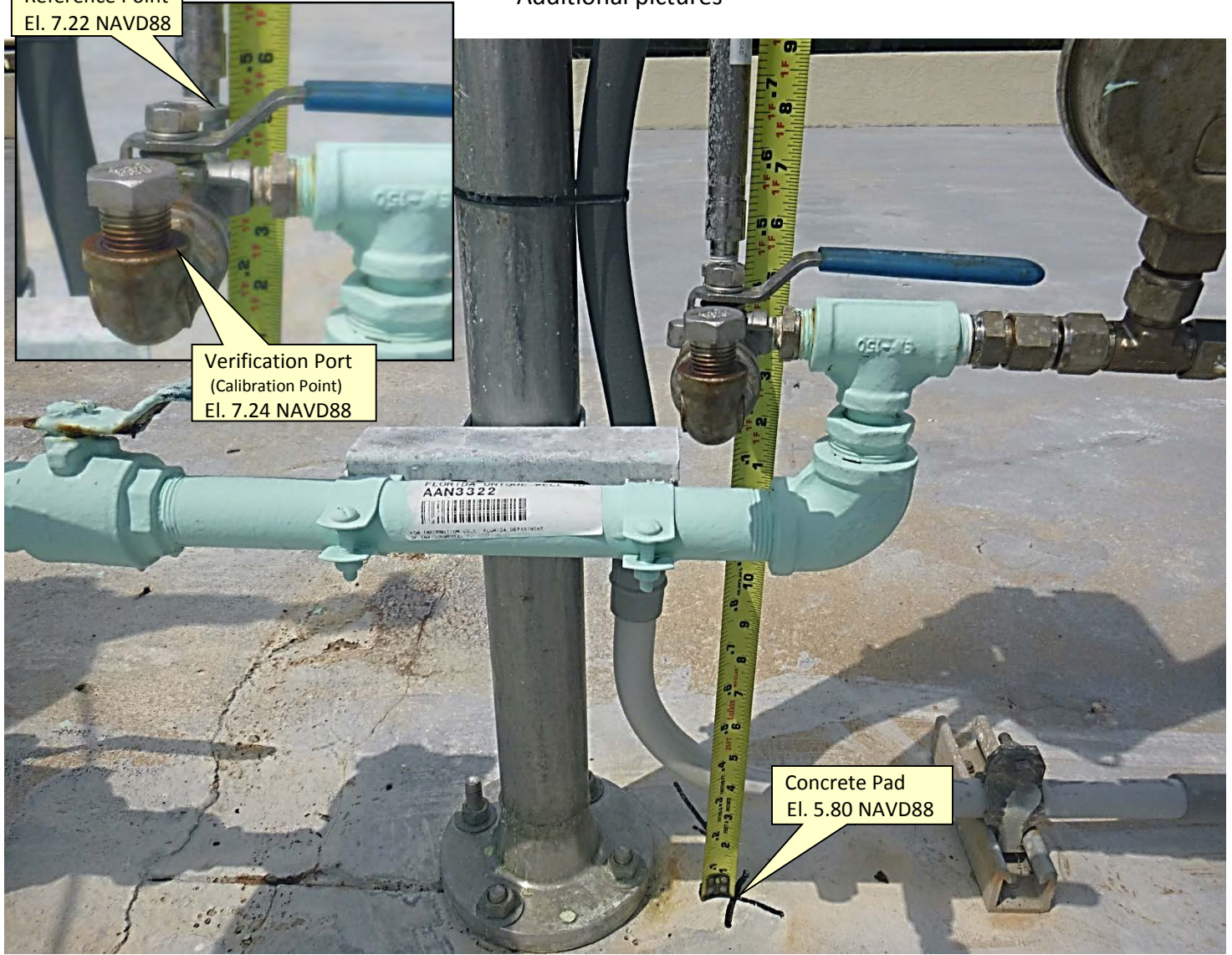
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Additional pictures

Reference Point
El. 7.22 NAVD88

Verification Port
(Calibration Point)
El. 7.24 NAVD88

Concrete Pad
El. 5.80 NAVD88



SEC 22 TWP 51 RNC 40

FILE NAME MRAMR

MIRAMAR 1 & MIRAMAR 2 VERIFY VERTICAL
ON WELL SITES

REF. S.F.W.M.D BENCH MARK DESCRIPTION SHEETS

BASE @ POINT #1 MIRAMAR 2 Fd S.F.W.M.D ALUMN DISK
STAMPED MIRAMAR 2 2004 G.P.S 5410

ROVER POINT #2 MIRAMAR 1 Fd S.F.W.M.D ALUMN DISK
STAMPED MIRAMAR 1 2004 GPS 5378

N: 0.014 E 0.028 V 0.031

BM	T	HI		ELEV	
MIRAMAR 2	4.34	10.26		5.92	5.922
REF. PT.			4.46	5.80	7.22
VERIFICATION PT			3.02	7.24	
CONC PAD N.W COR			4.65	5.61	
GROUND @ N.W COR			4.9	5.36	
CONC PAD N.E COR			4.25	6.01	
GROUND N.E COR			4.2	6.06	
CONC PAD S.E COR			4.20	6.06	
GROUND S.E COR			4.7	5.56	
CONC PAD S.W COR			4.58	5.68	
GROUND S.W COR			4.5	5.76	
MIRAMAR 2			4.34	5.92	✓

NAVD 88
ZIGSSN 2
TOPCON G.P.S.

A. GIMMARCO
R HUDSON

mramr.asc file

1,603507.929000,875502.204000,5.922000,MIRAMAR2

2,603570.305000,874325.885000,6.072000,MIRAMAR1

3,603570.290905,874325.856637,6.040656,PT2ck

1_GNSS,603507.929000,875502.204000,5.922000,Base Setup

GROUND SHOT AT REF. PT. A PLUS 1.42 TO BE ADDED FOR
ACTUAL REF. ELEV.



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

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COUNTY <u>BROWARD</u>	PROJECT <u>MIRAMAR WASTEWATER RECLAMATION FACILITY</u>	DESIGNATION <u>MIRAMAR 2</u>
SECTION <u>22</u>	TOWNSHIP <u>51S</u>	RANGE <u>40E</u>
GEOGRAPHIC INDEX OF QUAD <u>Florida</u>		
Established by Biscayne Engineering Company, Inc.	NAME OF QUADRANGLE <u>1603</u>	
SURVEYOR <u>Mike J. Bartholomew</u> DATE <u>10 / 02 / 2004</u>	FIELD BOOK <u>2516</u> PAGE <u>62</u> <u>2525</u> PAGE <u>2-7</u>	
HORIZONTAL DATUM: 1927 <input checked="" type="checkbox"/> 1983 <input type="checkbox"/> Other _____ (circle one) ZONE <u>0901 (EAST)</u>		
VERTICAL DATUM: MSL <input checked="" type="checkbox"/> 1929 <input type="checkbox"/> 1988 <input type="checkbox"/> Other _____ (circle one)		
CONTROL ACCURACY: HORIZONTAL 1 2 3 <u>SUB-METER</u> (circle one) VERTICAL 1 2 <input checked="" type="checkbox"/> 3		
STATE PLANE COORDINATES		
MIRAMAR-2 (U.S. Survey feet)	X= 875502.204	Y= 603507.929
		EL= 5.92' (NAVD-88) EL= 7.50' (NGVD-29)
MIRAMAR-2 LATITUDE	25°59'32.83"N	LONGITUDE 080°19'56.15"W
DESCRIPTION		
To Reach: From intersection of SR-824 (Pembroke Rd.) and SR-823 (Flamingo Rd) in Miramar; Go		
West along the SR-824 (Pembroke Rd) for 1.3 mile; THENCE go South for 0.01 mile to the entrance gate of the Miramar Wastewater Treatment Facility.		
Continue South to station Miramar-2 on the left. Miramar-2 is a standard South Florida Water Management District Aluminum Disk (stamped "Miramar-2") set near the center of a concrete platform for wellheads. Miramar-2 is 26.40 feet East of and 37.40 feet North of the Southwest corner of said platform.		
Note: Origin of NAVD-88 elevation for BM Miramar-2 is closed bench level circuit through NGS benchmarks AH2270 and AH2272 using published NAVD-88 values. Origin of NGVD-29 elevation for BM Miramar-2 is conversion of NAVD-88 value using NGS Vertcon (on NGS web site)		

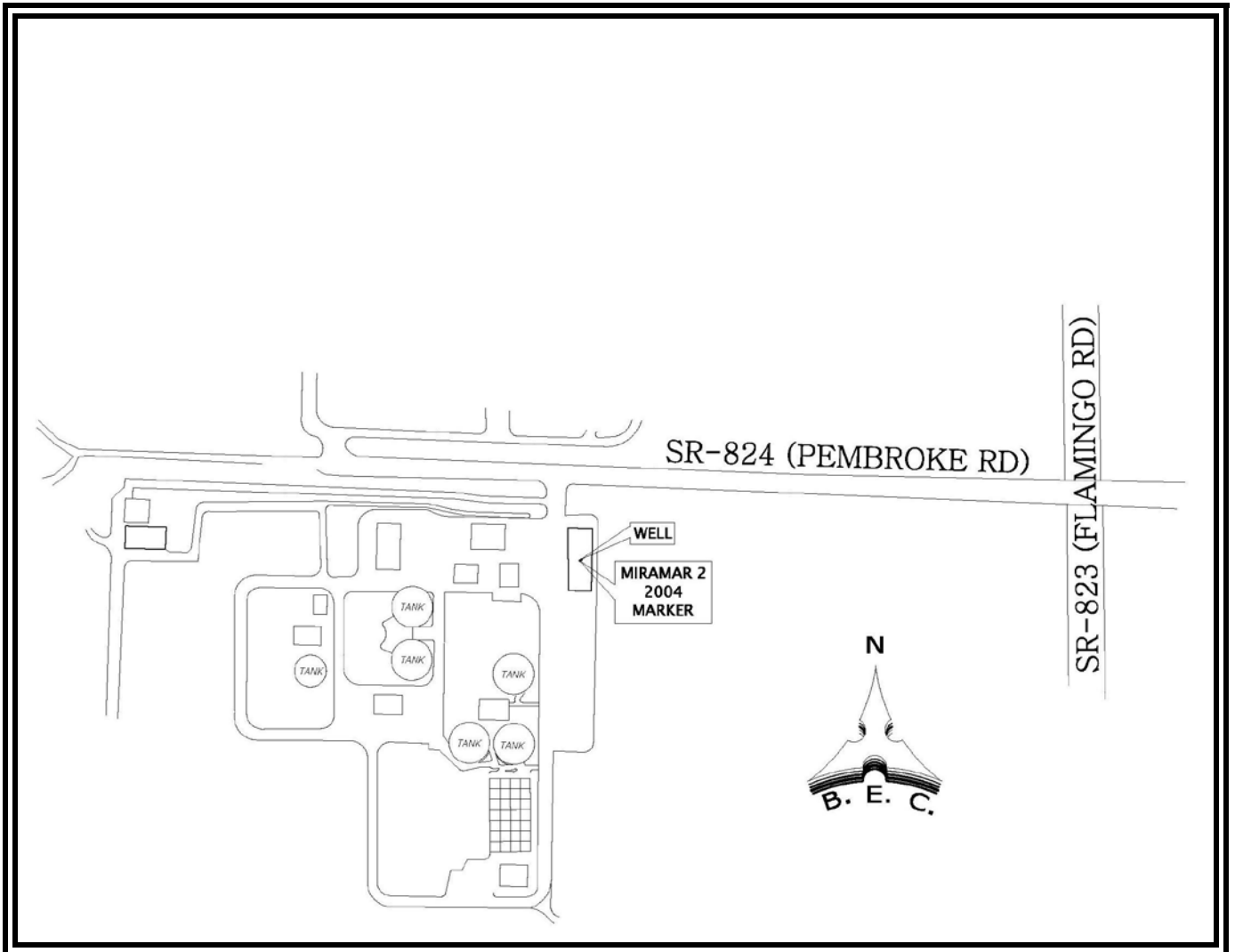
5.922

SKETCH: SEE PAGE 2



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Office

Project

17 April 2017

INPUT

Geographic, flhp gn - Florida HPGN
Vertical - NAVD88, U.S. Feet

OUTPUT

State Plane, flhp gn - Florida HPGN
0901 - Florida East, U.S. Feet
Vertical - NGVD29 (Custom), U.S. Feet

MIRFAS

1/1

Latitude: 25 59 33.8
Longitude: 80 19 56.2
Elevation/Z: 0

Northing/Y: 603605.519
Easting/X: 875496.764
Elevation/Z: 1.581
Convergence: 0 17 33.52129
Scale Factor: 0.999996338
Combined Factor: 1.000000194

Remark:

Corpscon v6.0.1, U.S. Army Corps of Engineers

DBHYDRO | by station

STATION INFORMATION

Station	MIR-MZU
Site	MIRFAS
Type	SUBSTATION
Latitude (ddmmss.sss)	255933.913
Longitude (ddmmss.sss)	801956.128
X Coord (ft) NAD83	875503.187
Y Coord (ft) NAD83	603616.9
County	Broward
Basin	C-9 WEST
Section	22
Township	51
Range	40
Show Map	Google Map
Well Info	Info
Description	Substation of MIR-MW1 (1600-1700 ft bls)
Notes	
Nearby Stations	Nearby Stations
Attachments	None Available

Query returned 1 station record(s).

Get Sample Data

Get Time Series Data