PREPARED FOR

SPECIFIC PURPOSE SURVEY
SURVEYOR'S REPORT
VERTICAL DATUM UPGRADE PROJECT

WO# 4600002187-WO08R2

SAP PO# 9500006234

WGI™





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PROJECT OVERVIEW

Purpose of Project:

Procure all materials to construct and install 89 staff gauges calibrated to the North American Vertical Datum of 1988 (NAVD88) at various sites identified by the Vertical Datum Project Manager. Establish a NAVD88 Reference Elevation on the inside deck of existing Telemetry Stations and stamp site specific data onto a brass tag, using a steel stamp die set. The brass tags were delivered to SFWMD and would be installed by SFWMD Field Personnel during site inspections.

Accuracy:

Staff gauges have been set (adjusted) to the nearest two hundredth (.02') of a foot, and reference elevations established to the nearest hundredth (.01') of a foot. Elevations have been transferred from provided bench mark using a digital level, leveling rods, and redundant measurements.

Bench Marks:

A bench mark was provided by SFWMD at each location, unless otherwise noted, and used to establish the reference elevation and calibrate each staff gauge. Where bench marks were destroyed or not provided, a new bench mark was established and a SFWMD Bench Mark Sheet was filled out and provided.

Survey Equipment Used:

Topcon DL-502 (Digital Level)
Fiberglass Digital Level Rods
Conventional Level Rod
GPS Equipment - Topcon GR3

Vertical Datum Factor:

The reference elevations and staff gauges, in this report, have been correctly calibrated to the North American Vertical Datum of 1988. The datum conversion to the National Geodetic Vertical Datum of 1929 (NGVD 29), as shown herein and engraved on each gauge, were provided by the SFWMD VDUP Project Manager.

Completion Date:

Staff Gauge installation, calibration, and the establishment of telemetry station reference elevation was completed on November 19, 2015.

Construction:

Each Staff Gauge is attached to a 4" O.D. galvanized steel pipe with stainless steel hardware. The pipes were driven to a depth to achieve required stability, to a minimum of 10', unless otherwise noted, in field notes. In some instances, additional cross bracing was used and attached to existing structure or an additional 2" O.D. galvanized pipe set. Sections of pipes were driven by jack hammer, and attached together with a galvanized threaded coupling. On I-Beams, staff gauges were attached with stainless steel 316 hardware.

Details of Staff Gauges

Staff Gauge Detail Summary For Miami Sites

Gauges completed:

Staff Gauge Site	Latitude	Longitude	Bench-mark Used	Benchmark Elevation NAVD88	Well Head Reference BM Elevation	Conversion Elevation to NGVD29
G58_H	25° 54' 01.87"	80° 09' 45.496"	G58	7.456	5.851	**1.56**
G72_H	25° 52' 09.022"	80° 20' 21.19"	FCE4665	5.49	9.258	**1.55**
G72_T	25° 52' 09.954"	80° 20' 19.332"	FCE4665	5.49	9.369	**1.55**
S27_H	25° 51' 04.199"	80° 11' 17.673"	FCE1696	3.975	7.865	**1.54**
S27_T	25° 51' 03.057"	80° 11' 18.196"	FCE1696	3.975	7.856	**1.54**
S28_H	25° 52' 22.908"	80° 10' 52.199"	S28	4.597	7.578	**1.54**
S28_T	25° 52' 21.543"	80° 10' 50.754"	S28	4.597	7.587	**1.54**
S29_H	25° 55' 45.153"	80° 09' 05.949"	FCE3089	17.932	9.792	**1.56**
S29_T	25° 55' 45.209"	80° 09' 04.824"	FCE3089	17.932	6.443	**1.56**
S30_H	25° 57' 24.485"	80° 25' 54.642"	SNAKE RM3	6.49	10.752	**1.52**
S30_T	25° 57' 24.465"	80° 25' 49.536"	SNAKE RM3	6.49	9.10	**1.52**
S337_H(S31_H)	25° 56' 34.331"	80° 26' 26.385"	FCE1248	10.135	20.021	**1.52**
S31_T	25° 56' 32.002"	80° 26' 24.633"	FCE1248	10.135	13.009	**1.52**
S32_H	25° 56' 31.779"	80° 26' 22.833"	FCE1248	10.135	10.413	**1.52**
S32A_H(S337_T)	25° 56' 32.002"	80° 26' 24.633"	FCE1248	10.135	11.908	**1.52**
S32A_T	25° 56' 32.002"	80° 26' 24.633"	FCE1248	10.135	11.912	**1.52**
S120_H	25° 40' 15.857"	80° 19' 19.297"	S120	13.429		**1.54**
S120_T	25° 40' 14.949"	80° 19' 16.516"	S120	13.429		**1.54**
C2SW1	25° 42' 34.6"	80° 22' 54.3"	C2SW1	6.682	10.312	**1.56**
C2SW2	25° 41' 28.14"	80° 18' 06.8"	C2SW2	5.123	8.273	**1.54**
L31NN	25° 44' 46.526"	80° 29' 52.591"	JBA33	6.44	11.467	**1.56**
L31NN GW1	25° 44' 46.526"	80° 29' 52.591"	JBA33	6.44	14.399	**1.56**
L31NN GW2	25° 44' 46.526"	80° 29' 52.591"	JBA33	6.44	14.227	**1.56**
L31NN GW3	25° 44' 46.526"	80° 29' 52.591"	JBA33	6.44	14.122	**1.56**
L31NN GW4	25° 44' 46.526"	80° 29' 52.591"	JBA33	6.44	14.439	**1.56**
L31NS	25° 42' 07.12"	80° 29' 46.495"	JBA22	6.73	10.526	**1.56**
L31NS GW1	25° 42' 07.12"	80° 29' 46.495"	JBA22	6.73	13.705	**1.56**
L31NS GW2	25° 42' 07.12"	80° 29' 46.495"	JBA22	6.73	13.847	**1.56**
L31NS GW3	25° 42' 07.12"	80° 29' 46.495"	JBA22	6.73	13.71	**1.56**
L31NS GW4	25° 42' 07.12"	80° 29' 46.495"	JBA22	6.73	13.931	**1.56**
S25_H	25° 47' 00.4"	80° 14' 24.69"	S25	3.658	8.821	**1.54**
S25_T	25° 46' 59.97"	80° 14' 24.14"	S25	3.658	8.81	**1.54**
S25B_H	25° 47' 38.48"	80° 15' 44.27"	FCE3228	7.205	11.976	**1.55**
S25B_T	25° 46' 59.97"	80° 14' 24.14"	FCE3828	7.205	12.028	**1.55**
S25BM_H	25° 47' 37.24"	80° 15' 45.88"	FCE3828	7.205	6.024	**1.55**

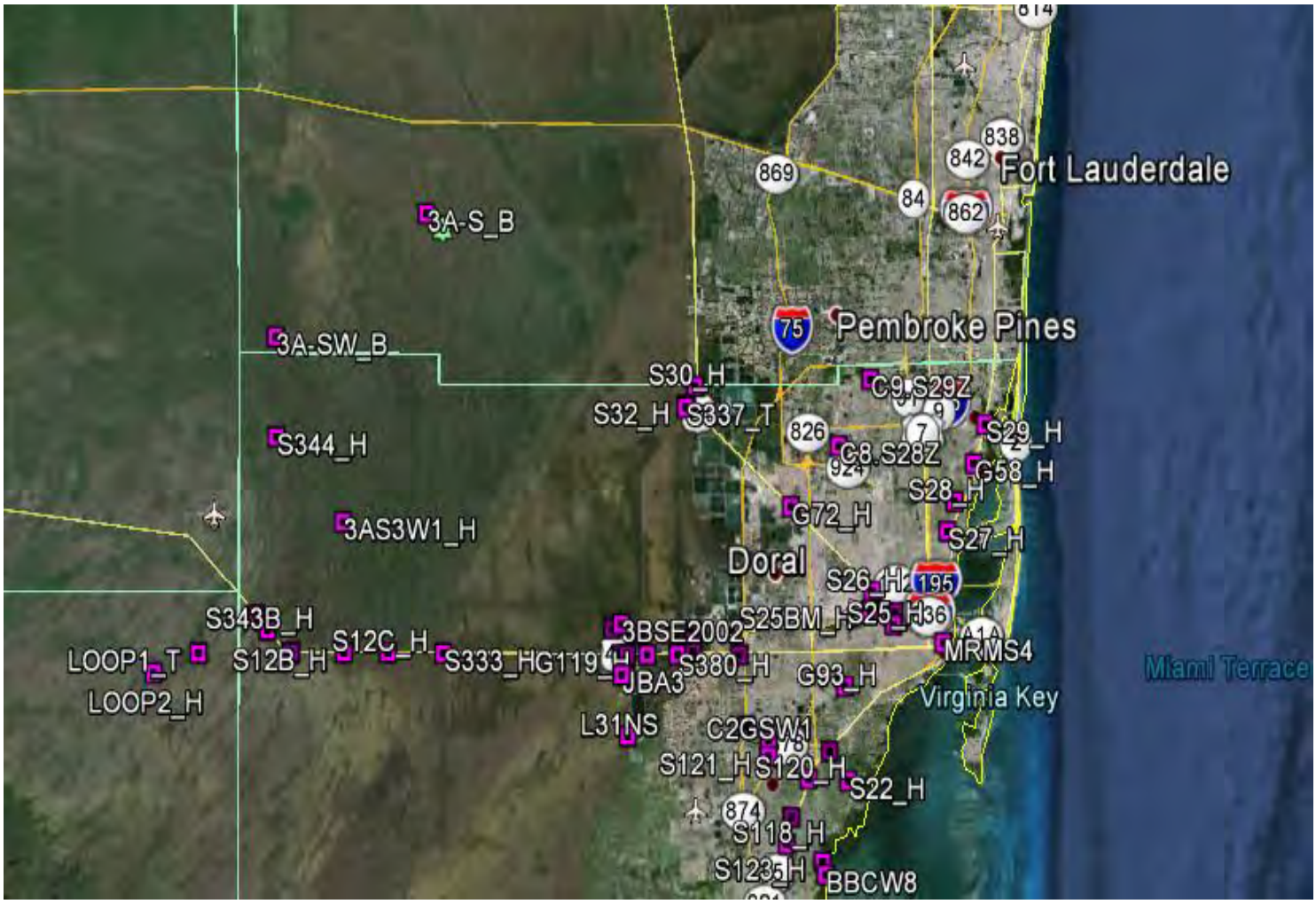
Staff Gauge Site	Latitude	Longitude	Bench-Mark Used	Benchmark Elevation NAVD88	Well Head Reference BM Elevation	Conversion Elevation to NGVD29
S25BM_T	25° 47’ 37.96”	80° 15’ 40.68”	FCE3828	7.205	6.158	**1.55**
S26_H	25° 48’ 27.459”	80° 15’ 39.028”	MIR22	6.984	11.782	**1.54**
S26_T	25° 48’ 25.966”	80° 15’ 36.94”	MIR22	6.984	11.76	**1.54**
S336_H	25° 45’ 40.46”	80° 29’ 49.58”	PR42	9.39	13.217	**1.56**
S336_T	25° 45’ 40.412”	80° 29’ 47.571”	PR42	9.39	10.59	**1.56**
T5W	25° 45’ 41.338”	80° 23’ 19.133”	T5 BM02	5.86	9.331	**1.57**
C8.S28Z	25° 54’ 48.338”	80° 17’ 35.177”	C8.S28Z	7.508	9.953	**1.56**
C9.S29Z	25° 57’ 43.25”	80° 15’ 45.51”	FCE4699	9.326	10.067	**1.58**
G93_H	25° 44’ 18.555”	80° 17’ 13.922”	J400	11.55	8.792	**1.56**
G93_T	25° 44’ 18.837”	80° 17’ 12.615”	J400	11.55	8.87	**1.56**
G420_H	25° 46’ 18.414”	80° 26’ 01.641”	G421	11.266	8.864	**1.57**
G420_T	25° 46’ 18.389”	80° 26’ 02.963”	G421	11.266	13.029	**1.57**
LOOP1_T	25° 45’ 40.369”	80° 54’ 38.238”	**LOOP1 MS**	8.54	11.682	**1.48**
S14_H	25° 45’ 43.138”	80° 49’ 19.079”	V237	14.45		**1.50**
S14_T	25° 45’ 41.445”	80° 49’ 19.11”	V237	14.45		**1.50**
S118_H	25° 37’ 24.949”	80° 20’ 34.967”	S118	8.534	12.384	**1.54**
S118_T	25° 37’ 24.645”	80° 20’ 33.628”	S118	8.534	12.42	**1.54**
S119_H	25° 38’ 35.169”	80° 20’ 18.262”	S119	8.54	12.254	**1.54**
S119_T	25° 38’ 34.483”	80° 20’ 17.268”	S119	8.54	12.248	**1.54**
S121_H	25° 41’ 14.51”	80° 21’ 38.892”	PR48	5.673		**1.56**
S121_T	25° 41’ 12.804”	80° 21’ 38.776”	PR48	5.673		**1.56**
S123_H	25° 36’ 38.68”	80° 18’ 31.89”	S123	8.523	13.989	**1.53**
S123_T	25° 36’ 38.79”	80° 18’ 27.72”	S123	8.523	13.994	**1.53**
C2GSW1	25° 41’ 57.17”	80° 21’ 38.369”	C2GSW1	6.243	9.313	**1.56**
C2GSW1_GW1	25° 41’ 57.17”	80° 21’ 38.369”	C2GSW1	6.243	6.342	**1.56**
C2GSW1_GW2	25° 41’ 57.17”	80° 21’ 38.369”	C2GSW1	6.243	6.423	**1.56**
G420S_H	25° 46’ 19.599”	80° 26’ 02.29”	G421	11.266	11.458	**1.57**
G422_H	25° 45’ 49.287”	80° 26’ 01.192”	T626	10.722	9.745	**1.57**
G422_T	25° 45’ 50.131”	80° 26’ 02.566”	T626	10.722	11.828	**1.57**
LOOP2_H	25° 44’ 48.145”	80° 57’ 14.352”	LOOP2	9.02	11.396	**1.47**
LOOP2_T	25° 44’ 47.362”	80° 57’ 14.257”	LOOP2	9.02	11.301	**1.47**
S12A_H	25° 45’ 43.263”	80° 49’ 16.737”	V237	14.45		**1.50**
S12A_T	25° 45’ 41.7”	80° 49’ 16.764”	V237	14.45		**1.50**
S22_H	25° 40’ 10.89”	80° 17’ 01.684”	FCE1694	7.016	10.904	**1.54**
S22_T	25° 40’ 10.264”	80° 17’ 01.449”	FCE1694	7.016	10.93	**1.54**
S343A_H	25° 47’ 21.167”	80° 51’ 18.474”	L-28	15.55	14.254	**1.49**
S343A_T	25° 47’ 20.021”	80° 51’ 19.871”	L-28	15.55	13.413	**1.49**
S343B_H	25° 46’ 41.965”	80° 50’ 38.313”	S343B	14.69	14.357	**1.49**
S343B_T	25° 46’ 40.835”	80° 50’ 39.343”	S343B	14.69	13.818	**1.49**
S344_H	25° 55’ 08.178”	80° 50’ 10.493”	G502	15.69	14.81	**1.48**
S344_T	25° 55’ 08.689”	80° 50’ 12.309”	G502	15.69	13.25	**1.48**

Staff Gauge Site	Latitude	Longitude	Bench-mark Used	Benchmark Elevation NAVD88	Well Head Reference BM Elevation	Conversion Elevation to NGVD29
S380_H	25° 45’ 40.991”	80° 26’ 54.931”	S380	10.18	9.412	**1.56**
S380_T	25° 45’ 40.913”	80° 26’ 51.968”	S380	10.18	9.442	**1.56**
3BS1W1_H	25° 46’ 49.361”	80° 30’ 41.235”	3BS1W1	6.85	12.495	**1.56**
G3BS11_GW1	25° 46’ 49.361”	80° 30’ 41.235”	3BS1W1	6.85	10.71	**1.56**
G3BS11_GW2	25° 46’ 49.361”	80° 30’ 41.235”	3BS1W1	6.85	10.72	**1.56**
3B-SE_B	25° 47’ 16.358”	80° 29’ 59.199”	3BSE2002	8.56	12.27	**1.56**
C4SW2	25° 46’ 01.234”	80° 26’ 27.039”	C4SW2	5.27	12.50	**1.57**
G119_H	25° 45’ 40.441”	80° 28’ 39.131”	G119	9.781	10.377	**1.56**
G119_T	25° 45’ 40.85”	80° 28’ 36.941”	G119	9.781	10.874	**1.56**
MRMS1	25° 47’ 31.886”	80° 14’ 21.024”	MS1	5.131	7.334	**1.54**
MRMS4	25° 46’ 12.267”	80° 11’ 32.105”	MRMS4	4.016	7.048	**1.56**
S12B_H	25° 45’ 44.259”	80° 46’ 10.775”	T237	14.57		**1.51**
S12B_T	25° 45’ 41.822”	80° 46’ 10.863”	T237	14.57		**1.51**
S12C_H	25° 45’ 44.648”	80° 43’ 38.92”	Q237	14.44		**1.52**
S12C_T	25° 45’ 42.045”	80° 43’ 37.929”	Q237	14.44		**1.52**
S333_H	25° 45’ 43.243”	80° 40’ 26.952”	A410X	12.94	16.849	**1.53**
S333_T	25° 45’ 42.774”	80° 40’ 25.702”	A410X	12.94	16.867	**1.53**
S334_H	25° 45’ 40.509”	80° 30’ 09.305”	S334	12.215	15.814	**1.56**
S334_T	25° 45’ 40.554”	80° 30’ 08.046”	S334	12.215	8.892	**1.56**
S334_MW1	25° 45’ 40.554”	80° 30’ 08.046”	S334	12.215	6.933	**1.56**
S334_MW2	25° 45’ 40.554”	80° 30’ 08.046”	S334	12.215	6.704	**1.56**
S334_MW3	25° 45’ 40.554”	80° 30’ 08.046”	S334	12.215	6.463	**1.56**
S334_MW4	25° 45’ 40.554”	80° 30’ 08.046”	S334	12.215	7.025	**1.56**
3A-S_B	26° 04’ 55.534”	80° 41’ 29.551”	MOSSEY	10.83	16.015	**1.47**
3AS3W1_H	25° 51’ 26.333”	80° 46’ 16.979”	3AS3W1	9.68	14.475	**1.50**
3AS3W1_GW1	25° 51’ 26.333”	80° 46’ 16.979”	3AS3W1	9.68	12.998	**1.50**
3AS3W1_GW2	25° 51’ 26.333”	80° 46’ 16.979”	3AS3W1	9.68	13.011	**1.50**
3A-SW_B	25° 59’ 23.334”	80° 50’ 10.225”	3ASW	8.82	15.905	**1.46**
BBCW8 WQ1S	25° 36’ 04.457”	80° 18’ 20.777”	S123	8.523	7.261	**1.53**
BBCW8 WQ2	25° 36’ 04.457”	80° 18’ 20.777”	S123	8.523	6.196	**1.53**
BBCW8 STG3	25° 36’ 04.457”	80° 18’ 20.777”	S123	8.523	5.836	**1.53**
NESRS3_B	25° 44’ 25.365”	80° 30’ 17.201”	JBA3	5.564	11.394	**1.56**
S335_H	25° 46’ 33.817”	80° 28’ 58.741”	S335	9.856	13.957	**1.56**
S335_T	25° 46’ 33.112”	80° 28’ 58.827”	S335	9.856	13.956	**1.56**

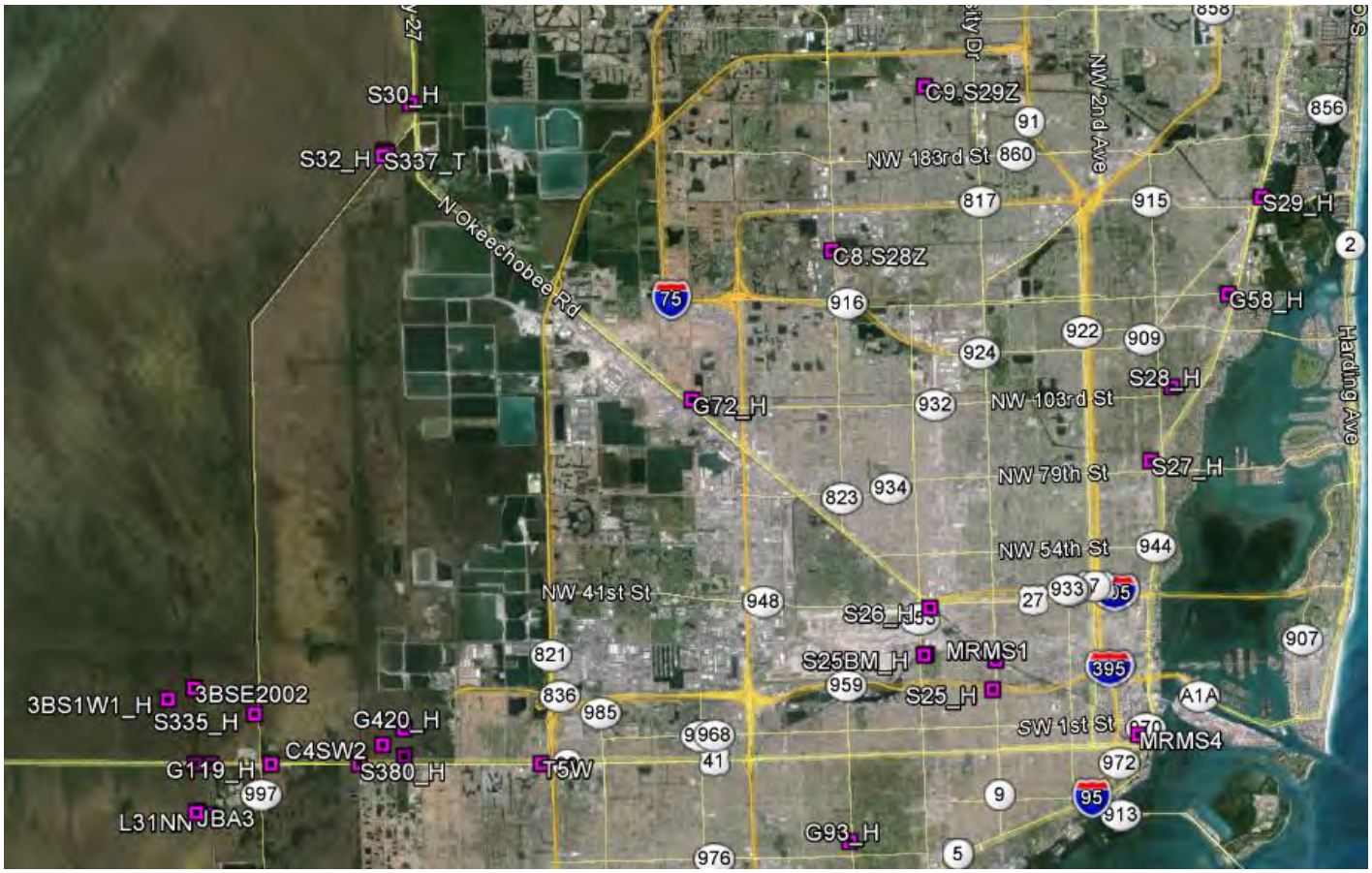
- **<u>All Elevations shown are NAVD 88</u>**

Project Location Maps:

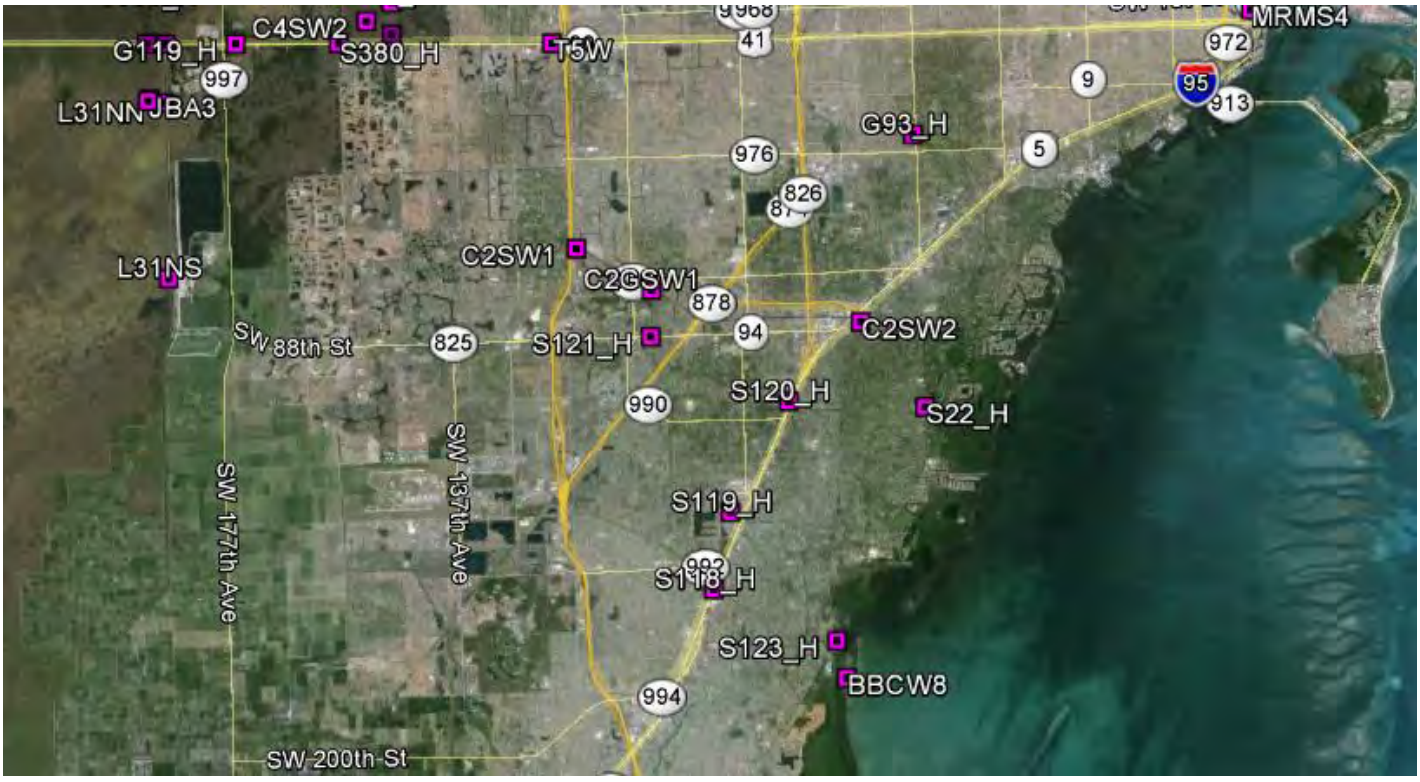
Overall Site



Site Close Up 1 of 3:



Site Close Up 2 of 3:



Site Close Up 3 of 3:

Project Results

Stage Recorder Site: C2SW1

Party Chief: Jose Mendoza	**Field Book Number:** 602/ BK 9	**Page Number:** 32
Benchmark Elevation (NAVD 88): 6.682	**Date of Field Work:** September 4, 2015	**Datum Offset to NGVD 29:** +1.56
Benchmark Agency: SFWMD	**Benchmark Type:** Aluminum Disk	**Benchmark Stamp:** BM C25W1 2002
Reference Elevation (NAVD88): 10.312		**Existing Tag Elevation (Datum):** 11.85 NGVD29
Latitude: 25° 42′ 34.6″		**Longitude:** 80° 22′ 54.3″
Notes: Datum difference SFWMD +1.56 Field +1.538 Gauge braced to set 2in Pipe Bench mark name C2SW1 found disk stamped in field C25W1		
Removed Old Board: No existing gauge on site.		

Photographs:

Overall Site:

Benchmark Location:

Benchmark Close Up:

Brass Tag Close Up:

Reference Mark:

Brass Tag & Reference:

New Staff Gauge:
Front View:

Side View:

Stage Recorder Site: C2SW2

Party Chief: Jose Mendoza	**Field Book Number:** 602/ BK 9	**Page Number:** 33
Benchmark Elevation (NAVD 88): 5.123	**Date of Field Work:** September 8, 2015	**Datum Offset to NGVD 29:** +1.54
Benchmark Agency: SFWMD	**Benchmark Type:** Aluminum Disk	**Benchmark Stamp:** BM C25W2 2002
Reference Elevation (NAVD88): 8.273		**Existing Tag Elevation (Datum):** 9.81 NGVD29
Latitude: 25° 41′ 28.14″		**Longitude:** 80° 18′ 06.8″
Notes: Bench mark name C2SW2 stamped in field C25W2		
Removed Old Board: No existing gauge on site.		

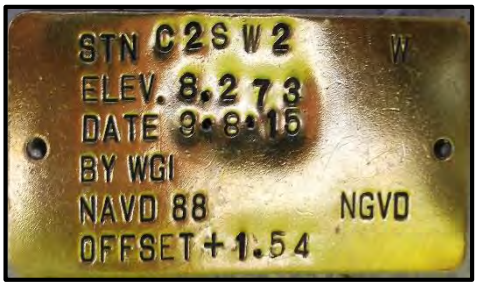
Photographs:

Overall Site:

Benchmark Location:

Benchmark Close Up:

Brass Tag Close Up:



Reference Mark:

Brass Tag & Reference:

New Staff Gauge:
Front View:

Side View:

Stage Recorder Site: C2GSW1

Party Chief: Jose Mendoza	**Field Book Number:** 612/ BK 10	**Page Number:** 42
Benchmark Elevation (NAVD 88): 6.243	**Date of Field Work:** October 27, 2015	**Datum Offset to NGVD 29:** +1.56
Benchmark Agency: SFWMD	**Benchmark Type:** Aluminum Disk	**Benchmark Stamp:** C2GSW1 BM 2015
Reference Elevation (NAVD88): 9.313		**Existing Tag Elevation (Datum):** 10.94 NGVD29
Latitude: 25° 41′ 57.17″		**Longitude:** 80° 21′ 38.369″
Notes: Datum difference SFWMD +1.56 FIELD +1.627 checked thru bench run.		
Removed Old Board: No existing gauge at site.		

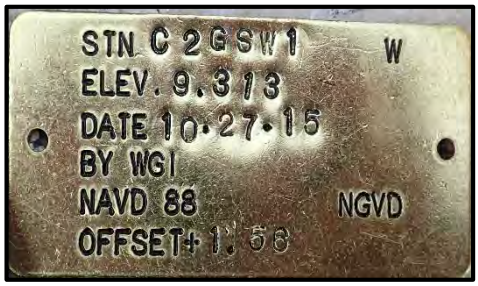
Photographs:

Overall Site:

Benchmark Location:

Benchmark Close Up:

Brass Tag Close Up:



Reference Mark:

Brass Tag & Reference:

New Staff Gauge:
Front View:

Side View:

Stage Recorder Site: C2GSW1_GW1

Party Chief: Jose Mendoza	**Field Book Number:** 602/ BK 9	**Page Number:** 77
Benchmark Elevation (NAVD 88): 6.243	**Date of Field Work:** November 17, 2015	**Datum Offset to NGVD 29:** +1.56
Benchmark Agency: SFWMD	**Benchmark Type:** Aluminum Disk	**Benchmark Stamp:** C2GSW1 BM 2015
Reference Elevation (NAVD88): 6.342		**Existing Tag Elevation (Datum):** 7.96 NGVD29 (Written, No Tag)
Latitude: 25° 41′ 57.17″		**Longitude:** 80° 21′ 38.369″
Notes: Datum: Datum difference SFWMD No existing tag found at GW1		
Removed Old Board: No existing gauge at site.		

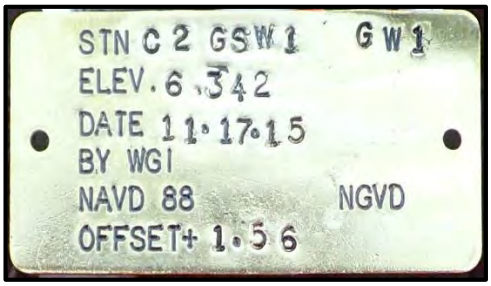
Photographs:

Overall Site:

Benchmark Location:

Benchmark Close Up:

Brass Tag Close Up:



Reference Mark:

Brass Tag & Reference:

New Staff Gauge:
Front View:

Side View:

Stage Recorder Site: C2GSW1_GW2

Party Chief: Jose Mendoza	**Field Book Number:** 602/ BK 9	**Page Number:** 77
Benchmark Elevation (NAVD 88): 6.243	**Date of Field Work:** November 17, 2015	**Datum Offset to NGVD 29:** +1.56
Benchmark Agency: SFWMD	**Benchmark Type:** Aluminum Disk	**Benchmark Stamp:** C2GSW1 BM 2015
Reference Elevation (NAVD88): 6.423		**Existing Tag Elevation (Datum):**
Latitude: 25° 41′ 57.17″		**Longitude:** 80° 21′ 38.369″
Notes: No existing tag found at GW2		
Removed Old Board: No existing gauge at site.		

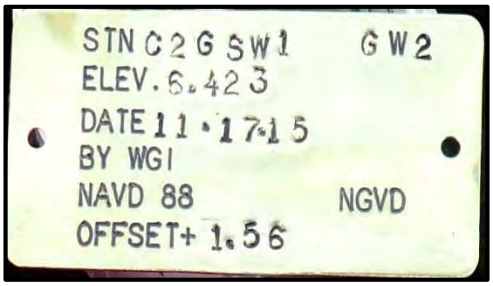
Photographs:

Overall Site:

Benchmark Location:

Benchmark Close Up:

Brass Tag Close Up:



Reference Mark:

Brass Tag & Reference:

New Staff Gauge:
Front View:

Side View:

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

DESIGNATION C2GSW1	**PROJECT** VDUP
ESTABLISHED BY WANTMAN GROUP **RECOVERED BY**	**SURVEYOR** DEREK ZEMAN **DATE** October 13, 2015

GEOGRAPHIC POSITION

SECTION 32	**TOWNSHIP** 54S	**RANGE** 40E
COUNTY MIAMI-DADE	**NAME OF QUADRANGLE** SOUTH MIAMI	

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** **SUB-METER** (circle one) **VERTICAL 1 2** (**3**)

STATE PLANE COORDINATES	**X**	**Y**	**NAVD 88 ELEV. 6.243** **NGVD 29 ELEV.** _____

LATITUDE 25° 41’ 57.17”	**LONGITUDE** 80° 21’ 38.37”

RECOVERY DESCRIPTION

Stamping: C2GSW1 BM 2015

To Reach: FROM THE INTERSECTIOPN OF SW 72nd ST. AND SW 107th AVE. GO EAST ON SW 72nd ST. AND TURN RIGHT AFTER CROSSING C2 CANAL, HEAD S.E. PARALELING THE C2 CANAL ON THE NORTH SIDE FOR 0.20 MILES TO A SFWMD GATE. GO THRU THE GATE AND CONTINUE ALONG THE C2 CANAL FOR 200FT +/- TO THE C2GSW1 STILLING WELL IN A FENCED AREA AND THE BENCH MARK

BENCH MARK IS A SFWMD ALUMINUM DISK SET IN CONCRETE SLAB OF WELL

Notable Land marks: STATION C2GSW1

FIELD BOOK 602 **PAGE** 44-46

SKETCH

Project Results

Deliverable Items to South Florida Water Management District:

The following items were delivered to South Florida Water Management District with this Surveyor's Report. Neither the report nor the items listed below are complete without the other.
A CD Containing the following digital information:

- Survey Report in PDF Format
- Digital Photos of Set Staff Gauges
- Electronic Copy of Field Notes in PDF Format

Legend:

BM – Bench Mark
NAVD 88 – North American Vertical Datum of 1988
NGVD 29 – National Geodetic Vertical Datum of 1929
NGS – National Geodetic Survey
SFWMD – South Florida Water Management District
ACOE – Army Corp of Engineers
O.D. – Outside Diameter

Survey Notes:

1. Survey map & report, or copies thereof, are not valid without the signature and the original raised seal of a Florida Licensed Surveyor and Mapper.
2. Additions or deletions to the survey maps or reports by other than the signing party or parties are prohibited without the written consent of the signing party or parties.
3. The purpose of the survey is to show results of establishing reference elevations and calibrating staff gauges, as shown herein.
4. Latitude and longitude, as shown on Staff Gauge Detail Summary Chart pages, was provided by the District and not verified as part of this survey.
5. Pursuant to client's request, the face boards of old NGVD 29 staff gauges were removed when possible. Posts were not removed.
6. New 4" galvanized posts were driven to a minimum depth of 10' below ground, unless otherwise noted in field notes. All pipes were structurally stable and plumb at time of installation.

Surveyor's Certification:

I hereby certify that this Specific Purpose Survey meets applicable portions of Standards of Practice set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17, Florida Administrative Code. This report is prepared for the sole and specific use of the South Florida Water Management District and is not assignable. All NAVD88 staff gauges were calibrated to a vertical accuracy of +/- 0.02' and reference elevations calibrated to a vertical accuracy of +/- 0.01'.

For the Firm:
Wantman Group, Inc.
L.B. Number 7055

Wantman Group, Inc.
2035 Vista Parkway
West Palm Beach, FL 33411
PH: (561) 687-2220

By: _____
Derek G. Zeman, PSM
State of Florida
Certificate No. LS5655

SFWMD | 6 Oct 2015

K. Brown | Bench Run | 85 P. cloudy

E. Pryor | C2 GSW1

M. Fraser

PR48 Elev change Per SFWMD

BS RH	BS HD	FS RH	FS HD.	EL	ADJ EL	Desc
5.171	148.7			5.673		0000
		5.665	168.9	5.132		0001
5.228	249.1					
		4.871	239.9	5.489		0002
4.703	250.3					
		5.451	250.8	4.741		0003
5.360	252.6					
	900.7	5.333	250.7	4.768		0004
5.050	255.2		910.3			
		4.730	246.3	5.088		0005
4.845	249.1					
		4.674	264.1	5.259		0006
7.511	322.3					
	1727.3	6.737	280.1	6.033		0007
6.271	239.8		1700.8			
		5.592	271.4	6.712		0008
4.229	251.1					
	2218.2	4.383	251.3	6.558		0009
			2223.5			
4.821	249.4					
		5.185	147.3	6.194		0010
4.888	107.2					
		4.421	112.8	6.661		0011

3101071.08 | 602/44

DL 502 #31 | 1021 | DL FILE: S121

SFWMD Disc stamped PR 48 1979

602/44/1 N+TT

602/44/2 N+TT

602/44/3 N+TT

602/44/4 N+TT

602/44/5 N+TT

602/44/6 N+TT

602/44/7 SAT

602/44/8 N+TT

602/44/9

C2GSW1 602/44/10 SFWMD Stamped C2GSW1 2015

602/44/11 ~~STAMPED~~ N+TT

10-8-15 SFWMD 85°C10

MENDOZA C26SW1

MILLER

PEREZ

BS RH	BS DIST	FS RH	FS DIST	ELEV	ADJ ELEV	DESC
				6.6061		602-44-11
4.230	237.3					
		5.294	233.8	5.597		602-45-12
5.033	249.3					
		3.926	249.5	6.704		602-45-13
8.638	188.7					
		6.738	185.3	8.604		602-45-14
3.435	246.6					
		5.159	246.3	6.880		602-45-15
4.089	256.2					
		5.544	256.0	5.425		602-45-16
6.369	48.4					
		3.037	40.9	8.757		602-45-17
1.073	250.7					
		4.193	249.1	5.647		602-45-18
4.580	242.3					
		4.800	244.9	5.427		602-45-19
5.535	236.8					
		5.208	227.9	5.754		602-45-20
4.871	230.5					
		4.761	235.8	5.814		602-45-21
4.378	240.5					
		4.753	246.7	5.389		602-45-22
4.649	194.4					
		4.028	211.4	6.010		602-45-23

DLFILE C26SW1 31011071.CRD 602/45

1021

FND NTT IN PARKING LOT TO NW OF C26SW1

SET LOOP NL ALONG CANAL

SET NLET IN ASPH PARKING @ REAR OF PLAZA @ 10494 WEST END OF BLDG

SET NAIL & TIN TAB E.O.P MONTEREY VILLAS

SET NAIL & TIN TAB E.O.P ② SNAPPER DR AND SW 107 AV

SET NAIL & TIN TAB IN ASPH PATH

SFWMD ALLOY DISK IN WALK OVER BRIDGE NUMBERED 874436
DISK STAMPED PR?7 1993M

SET NLET IN ASPH PATH ALONG SOUTH SIDE OF SNAPPER CREEK TRAIL TYPICAL

" "

" "

"

" "

SET SFWMD ALLOY DISK IN SIDEWALK ± 75'W OF PC OF SNAPPER CREEK DR ± 50'S OF PC OF SW 112 AVE AND @ ABUTMENT OF CONC WALK & ASPH PATH DESCRIBED ABOVE ± 2.0'W OF WOOD POLE

10-8-15
MENDORA
MILLER
PEREZ

SFWMD

C25RSW1 CONT

FS RH	BS DIST		FS RH	FS DIST	ADJ ELEV	~~ADJ~~ ELEV	
						6.010	602-45-23
5.545	234.0						
			5.877	233.9		5.678	602-46-24
4.708	245.7						
			5.527	246.0		4.859	602-46-25
6.689	248.9						
			5.361	245.9		6.187	602-46-26
4.942	251.7						
			4.622	250.5		6.507	602-46-27
4.779	248.1						
			4.459	251.7		6.827	602-46-28
4.715	117.3						
			4.920	118.2		6.622	602-46-29
						VS 6.602	FND SFWMD

95° C10

3101071.08

602/AA6

DL 17

CONTINUED SETTING INLET ALONG MAIN PATH HEADING NW/ TOWARDS C25W1 TYPICAL

" "

" "

" "

SET INLET @ S E/P OF W SNAPPER CREEK DR ± 70 W/ OF INTERSECTION CANAL ℄

ALLOY DISK STAMPED C25 W1 2002 BM

11-17-15 SFWMD 80° PC
MENDOZA C265W1 BREEZY
MILLER ELEVATE GW WELLS

BS RH	BS DIST	FS RH	FS DIST	ELEV	DESC
				6.243	SITE BM C265W1
4.503	5.5				
		4.323	10.4	6.423	WELL "A" NO TAG
4.212	10.5				
		4.293	6.5	6.342	WELL "B" NO TAG
4.224	6.5				
		4.320	5.6	6.246	✓ IN @ SITE BM

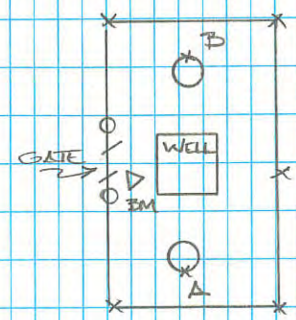
31011071.08

602
77
PL 17

2015

BOTTOM OF LID PUB 8.04 GW2 IN MARKER

7.96 GW1



9.4-15 — SFWMD — 90° SUNNY

DONOHUE

GOOTS

LAST

C25W1

ELEVATE WELL

3WIRE	+	HI	3WIRE	−	ELEV.	DESC.	
					6.682	C25W1	SFWMD Alum. Disk
5.13							
4.39	4.39	11.072					
3.65			0.825				
			0.76	0.76	10.312		MARK @ STILLING WELL
			0.695				
			SET GAUGE				
		11.072					
				9.64	1.43		H2O @ 9:00AM
				15.28	(−)4.708		NG @ PIPE
				6.19	4.882		TOP OF SET GAUGE
			BROKE SETUP				
	6.05	10.932					
				4.25	6.682		BM ALUMINUM END DISK SFWMD
							STAMPED "SFWMD 2002 C25W1"
			BROKE SETUP				
					10.312		MARK @ STILLING WELL
2.16 1.83 1.78	1.82						
		12.132	6.20 5.455 4.71				
				5.455	~~6.677~~		BM ALUMINUM DISK "C25W1"
					6.677		SFWMD

3101071.08

1021

6028#9

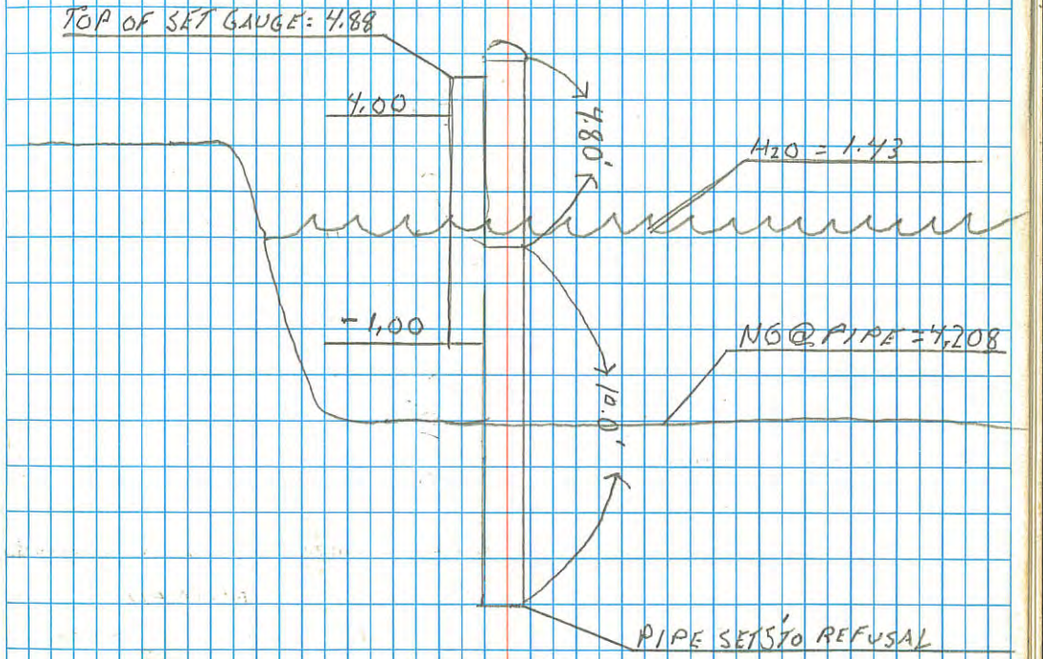
32

DATUM DIFF: 1.56

WELL DIFF: 1.538

* SET 2" PIPE FOR ADDITIONAL SUPPORT, ATTACHED WITH UNI STRUT

EXISTING BRASS TAG PUBLISHED 11.85



* NO EXISTING GAUGE

9-8-15 — SFWMD — 90° PC

DONOHUE

GOOTS

LAST

C2SW2

ELEVATE WELL

3WIRE	+	HI	3WIRE	−	ELEV.	DESC.	
					5.123	C2SW2	2002
6.22							
4.83	4.83	9.953					
3.44			2.18				
			1.68	1.68	8.273	MARK @ STILLING WELL	
			1.18				
			BROKE SET UP				
2.10							
1.61	1.61	9.883					
1.12							
4.43							
			6.17				
			4.77	4.77 (M)	5.113	FND SFWMD ALUM. DISK STAMPED "C2SW2 2002"	
			3.37		vs.		
			10.31	(P)	5.123		
					ERROR =	-0.010'	
			SET GAUGE				
1.73 FINGER ✓	1.73 FJ	10.003			8.273	MARK @ STILLING WELL	
				8.85	1.153	HUB @ H2O 11:45AM,	
				10.55	(−).547	NG @ PIPE	
				5.12	4.883	TOP OF SET GAUGE	
		BROKE SET UP					
	5.32	10.203					
				1.93	8.273	√IN @ WELL	

3/10/10 71.08

1021

602 #9

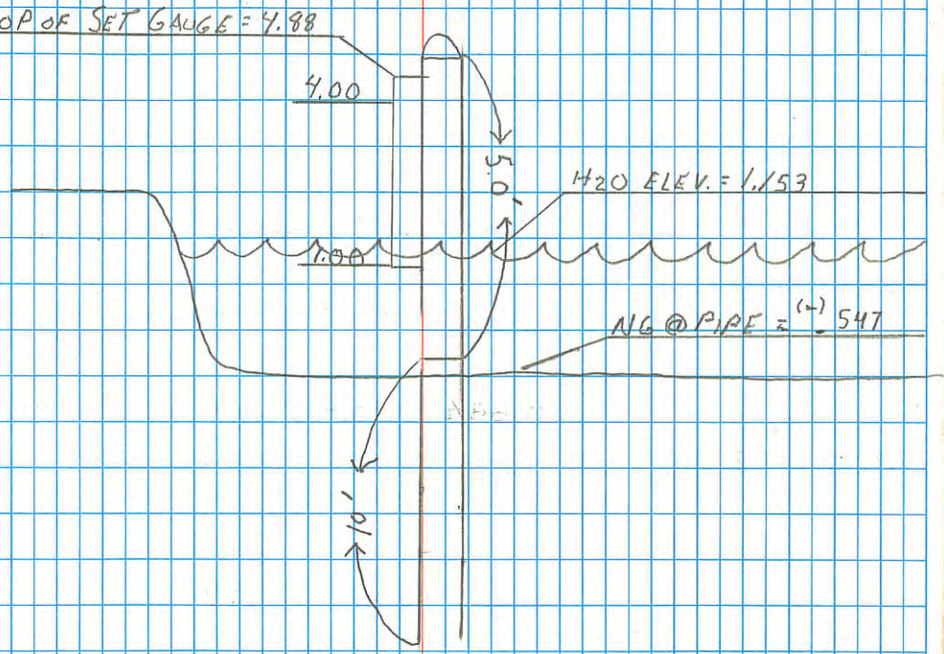
33

DAT DIFF: 1.54

WELL DIFF: 1.537

SFWMD Alum. Disk

EXISTING BRASS TAG = 9.81



* SET PIPE 10' IN GROUND

* NO EXISTING GAUGE