SURVEYOR'S REPORT

Specific Purpose Survey of the
United Stated Geological Survey
Recorder Well G-757-AR
in
Miami-Dade County, Florida

Prepared for:

South Florida Water Management District

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Prepared by:

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State of Florida

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Tel (305) 324-7671

Field Date: March 28, 2018
Report Date: March 30, 2018

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PURPOSE

The purpose of this survey is to set an Elevation Reference Mark (Benchmark) using the guidelines for a National Geodetic Survey (NGS), Class "C" concrete monument and to establish a North American Vertical Datum of 1988 (NAVD 88) elevation on said Benchmark and on an additional Reference Point with a Brass plate, both at United States Geological Survey Well **G-757-AR**.

LOCATION OF PROJECT

The United Stated Geological Survey's Recorder Well **G-757-AR** is located in Section 06, Township 56 South, Range 39 East, Miami-Dade County, Florida.

General Location (Intended Display scale is "Not to Scale")

PROJECT VERTICAL DATUM

The project vertical datum is the North American Vertical Datum (NAVD) of 1988.

To convert the NAVD 88 elevation to the National Geodetic Vertical Datum of 1929 at station **G-757-AR add 1.552'**. These value are based on Corpscon 6.0.1 a US. 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 US. Army Corps of Engineers South Atlantic Division, Jacksonville Fl.

PROJECT HORIZONTAL DATUM

The project horizontal datum is the North American Datum 83 (NAD 83(2011)(EPOCH:2010.0000)

LEVELING METHODS

The leveling for this project was performed in accordance with standard survey practice using conventional third order methods, techniques and equipment.
The allowable error on this project meets or exceeds third order closures (.02 √miles) as required by SFWMD for this project per executed SOW for 4600003705-WO01.
A level loop was run from the National Geodetic Survey (NGS) monument "PR 32 (PID AJ8382)" to the site Benchmarks and back to NGS "PR 32 (PID AJ8382)", and from NGS "Z 503 (AJ8383)" to NGS "PR 32 (PID AJ8382)". The measurements were hand written in Biscayne Engineering Co, Inc. Field Book 2913 pages 43-69, dated March 28, 2018, reduced and adjusted electronically. Additional data was manually recorded in the field book.

GPS METHODS

Latitude and Longitude for Benchmark G-757-AR were established by observing a 2-hour session of Static GPS data using a Trimble R-8S set over the point on March 28, 2018. A Rinex file containing the collected data was uploaded through OPUS website and a report containing the final coordinated was obtained on March 28, 2018.

EQUIPMENT USED

- Trimble GPS unit R-8S, Serial Number 5625R06118.
- Trimble DiNi digital level Serial Number 772297 and a folding bar code rod.
- TOPCON Total Station ES 105, Serial Number GZ3536.
- TOPCON Auto-level ATG3, Serial Number 5F9515.

VERTICAL CONTROL POINT

The Vertical Control point utilized and set as part of this survey is the:

NGS BM PR 32 (PID AJ8382)						
25° 36' 31" (N)	80° 30' 42" (W)	Published	10.56 ft.	(NAVD88)	3.219 m	Published

THE MARK IS SET IN A MASSIVE STRUCTURE (BRIDGE), STAMPED PR 32 1975, SFLWMD. LOCATED 19.2 FT (5.9 M) NORTH OF THE APPROXIMATE CENTERLINE OF SOUTHWEST 168TH STREET, 2.6 FT (0.8 M) WEST OF THE NORTHEAST END OF THE BRIDGE, 2.2 FT (0.7 M) WEST OF A CARSONITE WITNESS POST AND 0.9 FT (27.4 CM) SOUTH OF THE WEST END OF THE GUARDRAIL.

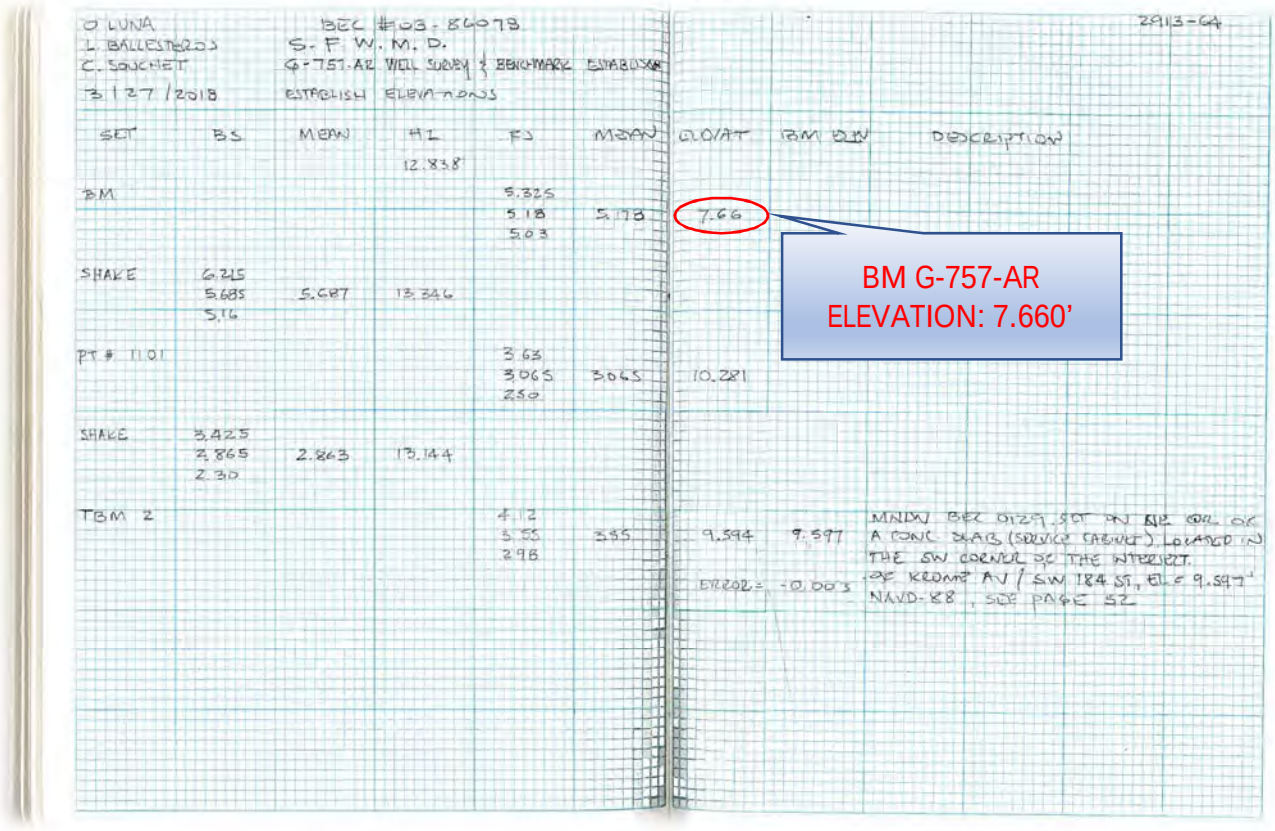
NGS BM Z 503 (PID AJ8383)						
25° 35' 58" (N)	80° 31' 21" (W)	Published	9.78 ft.	(NAVD88)	2.981 m	Published

THE MARK IS SET IN THE TOP OF CONCRETE MONUMENT, STAMPED Z 503 2000, FLDEP, LOCATED 35.5 FT (10.8 M) EAST-SOUTHEAST OF MILE MARKER NUMBER 17, 21.5 FT (6.6 M) EAST-SOUTHEAST OF THE APPROXIMATE CENTERLINE OF THE LEVEE ROAD, 4.0 FT (1.2 M) NORTH-NORTHWEST OF THE APPROXIMATE EDGE OF THE CANAL AND 1.5 FT (0.5 M) NORTH-NORTHWEST OF A CARSONITE WITNESS POST. NOTE A BAR MAGNET WAS IMBEDDED ON THE SOUTH SIDE OF THE MONUMENT.

BM: G-757-AR (Set as part of this survey)

25° 35' 38.71205" (N) | 80° 28' 40.72501" (W)		7.66 ft.	(NAVD88)	2.335 m	Level run
OPUS - NAD_83(2011)(EPOCH:2010.0000)		9.212 ft.	(NGVD29)	2.808 m	Level run
				1.552 ft. (conversion factor)	Corpscon 6.0.1
		STATION IS A SOUTH FLORIDA WATER MANAGEMENT DISTRICT ALUMINUM DISK SET IN THE TOP OF CONCRETE MONUMENT, STAMPED BM G-757-AR 2018, SFLWMD. LOCATED 160 FT (48.8 M) EAST OF THE APPROXIMATE CENTERLINE OF THE SR 997 (KROME AVENUE), 75.0 FT (22.9 M) SOUTH OF THE APPROXIMATE CENTERLINE OF SW 184TH STREET, 1.5 FT (0.5 M) NORTH OF A CARSONITE WITNESS POST, AND 8.0 FT (2.4 M) SOUTH-SOUTHEAST OF THE UNITED STATES GEOLOGICAL SURVEY (USGS) WELL "G-757-AR"			

Field Book 2913, page 64



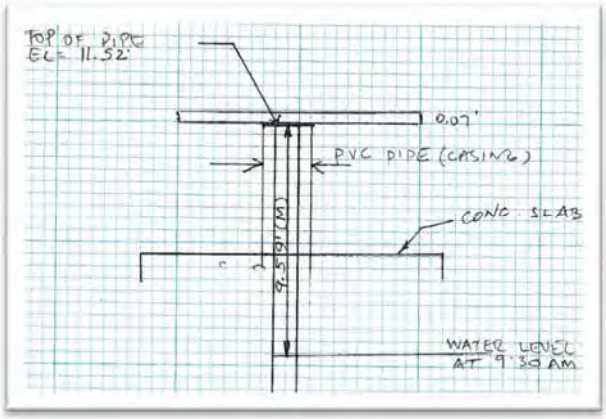
PROJECT RESULTS

Tabular Form

Reference and Ground Elevations:			
Well	Ground Elevation	Reference Elevation	Comments
G-757-AR	7.9 ft.	11.52 ft.	Top of PVC at cut out in Casing Deck

Elevation on four (4) corners of the concrete well pad			
NE corner	SE corner	SW corner	NW corner
8.65 ft.	8.61 ft.	8.61 ft.	8.67 ft.

Well diameter	Casing material	DTW
3 3/4"	PVC	9.59 ft.(3/27/18, 9.30 am)



Source & Site Benchmark	NAVD88	NGVD29 (Published)	NGVD29 (Corpscon)
NGS PR 32(AJ8382)	10.56 ft.		
NGS Z 503(AJ8383)	9.78 ft.		
G-757-AR (SFWMD)	7.66 ft.		9.212 ft.

Surveyors' Notes:

1. All measurements herein are in United States Survey feet and decimal thereof, unless otherwise specified.
2. Underground utilities were not located as part of this survey.
3. This survey report or copies thereof are not valid without the signature and the original raised seal of a Florida licensed Surveyor and Mapper.
4. Additions or deletions to this survey report by other than the signing party (or parties) is prohibited without written consent of the signing party (or parties).
5. To convert from NAVD 88 to NGVD 29 add 1.552 feet. This value is based on 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.
6. Date of last field work: March 28, 2018.
7. SFWMD Data records (on file at the District's headquarters):
   A. Electronic Data files:
      Miscellaneous picture files
      Digital level run
      File names: 0386078.DAT
   B. Conventional reporting
      Field Book: 2913 pages 43-69

Abbreviations:
El. – Elevation
DTW - Distance to the water table inside the well
NAVD 88 - North American Vertical Datum of 1988
NGVD29 - National Geodetic Vertical Datum of 1929
NGS - National Geodetic Survey
PSM - Professional Surveyor & Mapper
PID - Permanent Identifiers
SFWMD - South Florida Water Management District
USGS - United States Geological Survey

SURVEYOR'S CERTIFICATION

In my professional opinion this Specific Purpose Survey meets applicable portions of the Standards of Practice set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J, Florida Administrative Code. This report is prepared for the sole and specific use of the South Florida Water Management District and is not assignable.

Last date of Survey
March 28, 2018

Mike Bartholomew, PSM, President
Florida Professional Surveyor and Mapper
License Number 5666
State of Florida
Biscayne Engineering Company, Inc. LB No 0129
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SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 1/16

DB Hydro Station Name:	DB Hydro Site Name:	Agency:	Date of Field Work:
G-757-AR	**G-757-AR**	**WMD**	**March 28, 2018**
Party Chief: **Oscar Luna**	Field Book: **2913**	Page(s) **43-68**	Prepared by: **X Negrin**

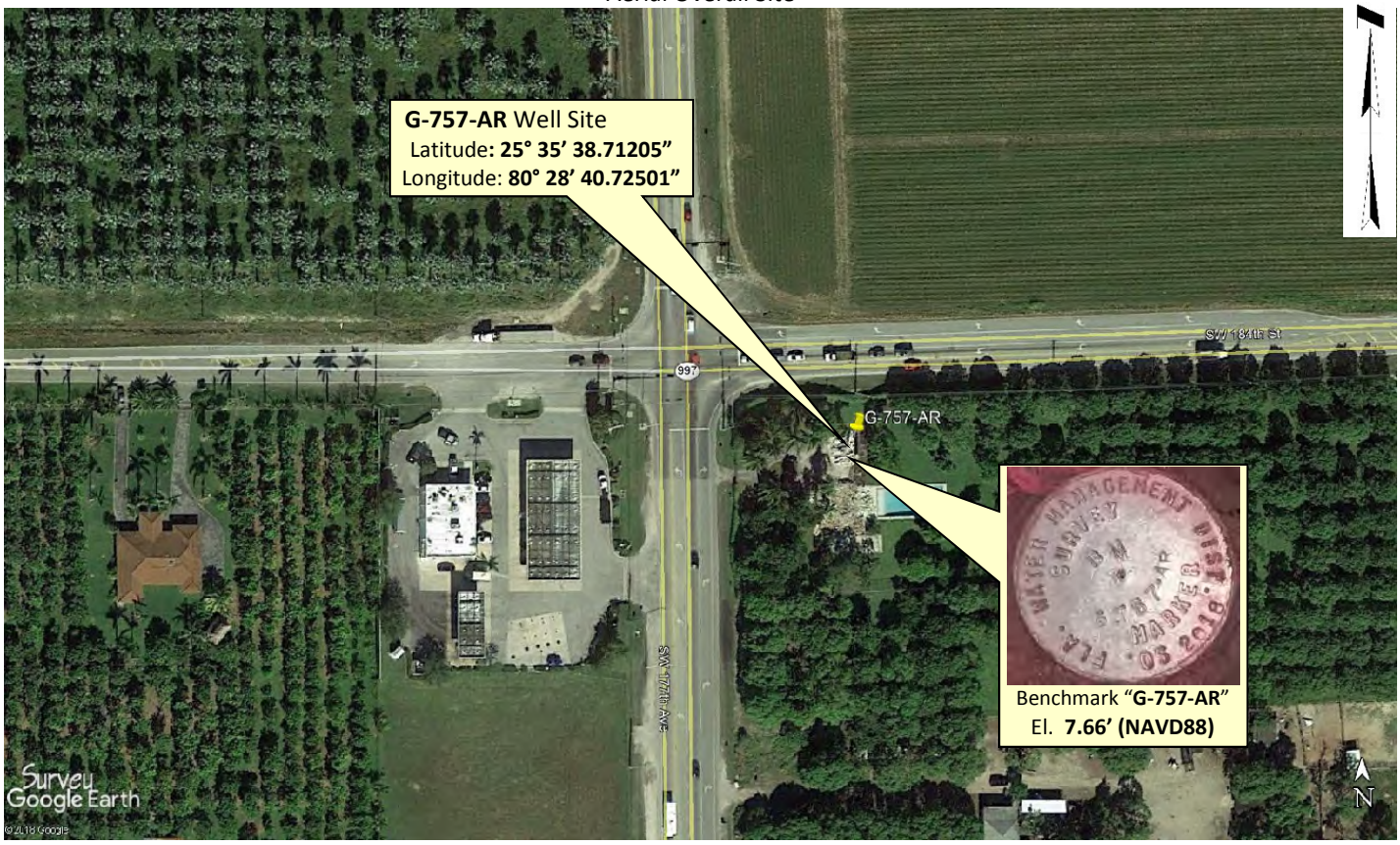
SITE SPECIFIC DATA		
Site Benchmark: **G-757-AR**	Benchmark Elevation (NAVD88) **7.66'**	Corpscon 6.0.1 Conversion Factor (*NAVD88 to NGVD29*) **1.552'**
Reference Elevation(s) (*NAVD88*): **11.52'**	Existing Brass Tag Elevation (Datum): **11.52' (NAVD 88)**	Calibration Port Elevation(s) (*NAVD88*): **Not Applicable**
Ground Elevation (NAVD88): **7.9'**	Pad Elevation (NAVD88): **Not Applicable**	

GEOOGRAPHIC DATA			
Section **06**	Township **56** South	Range **39** East	
Benchmark	Latitude: **25° 35' 38.71205" (N)**	Longitude: **80° 28' 40.72501" (W)**	Source: Scaled pick point aerial esri product
	State Plane Coordinates	Northing (Y) =	Easting (X) =

Notes:
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

Aerial Overall Site



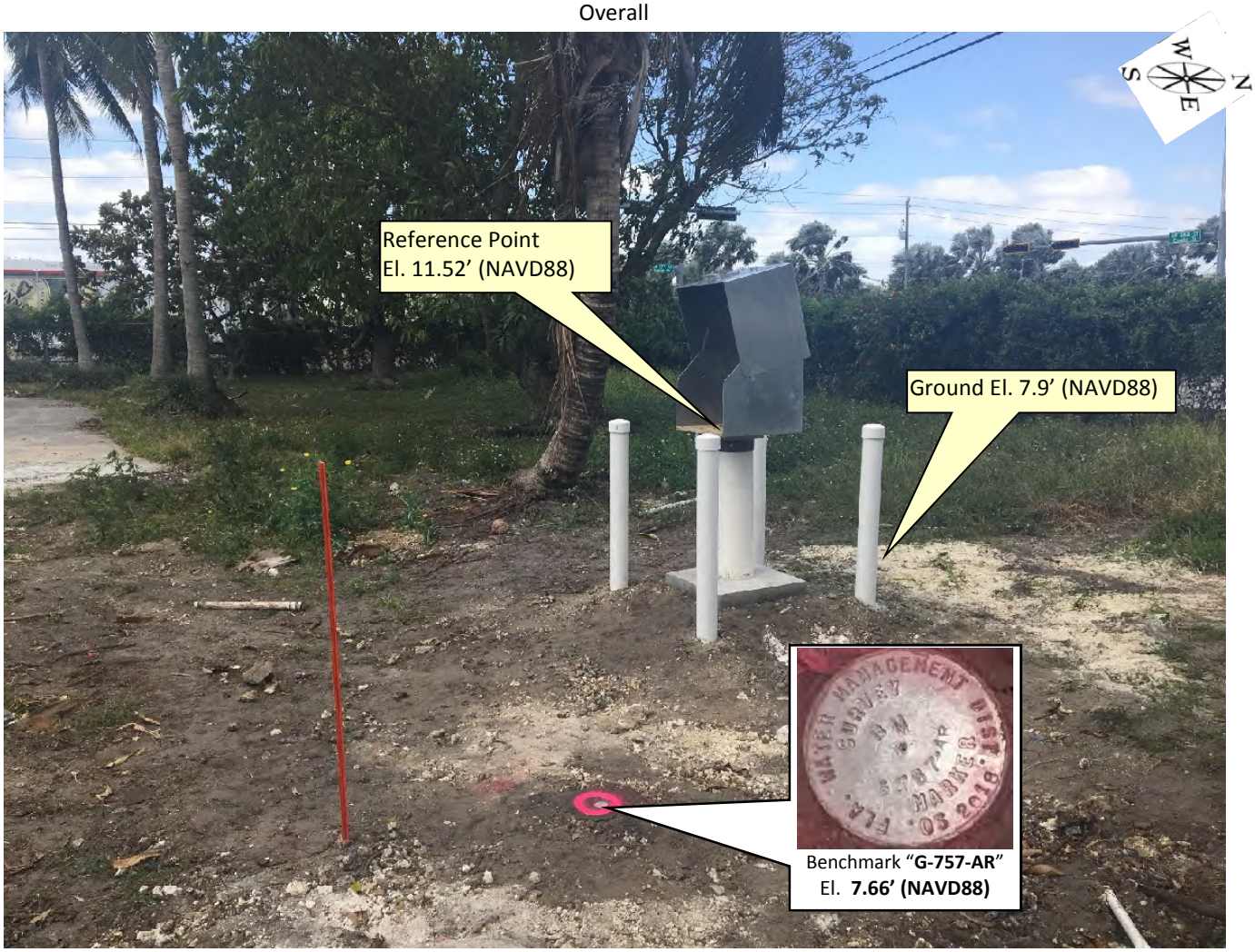
Benchmark "**G-757-AR**"
El. **7.66' (NAVD88)**

Not to scale (Google Earth product)

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

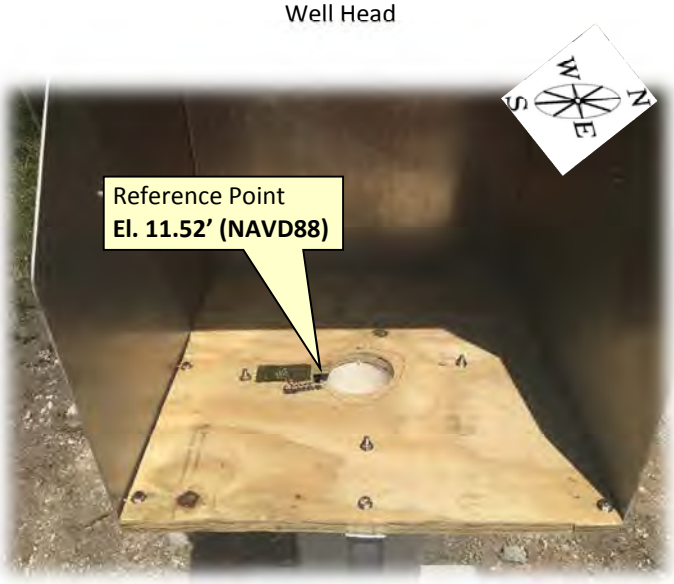
Rev. 1/16

Overall

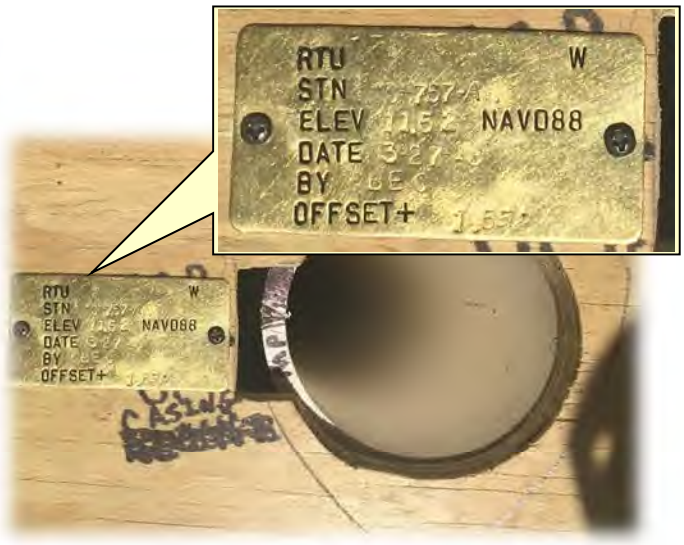


Looking Northwesterly (oblique not to scale) (28-March-18)

Well Head



Side view (Oblique Not to scale) (28-March-18)



Top view (Not to scale) (28-March-18)

Office

Project

27 March 2018

INPUT	OUTPUT
Geographic, flhpgn - Florida HPGN	State Plane, flhpgn - Florida HPGN
Vertical - NAVD88, U.S. Feet	0901 - Florida East, U.S. Feet
	Vertical - NGVD29 (Custom), U.S. Feet

G757-AR Well

Latitude:	25 35 38.7647	**Northing/Y:**	458507.085
Longitude:	80 28 40.7963	**Easting/X:**	828204.414
Elevation/Z:	0	**Elevation/Z:**	1.552
		Convergence:	0 13 31.82123
		Scale Factor:	0.999975117
		Combined Factor:	0.999978930

Remark:

```
 FILE: 61180870.DAT OP1522266867374

 2005   NOTE:  The IGS precise and IGS rapid orbits were not available
 2005   at processing time.  The IGS ultra-rapid orbit was/will be used to
 2005   process the data.
 2005
```

NGS OPUS SOLUTION REPORT

All computed coordinate accuracies are listed as peak-to-peak values.
For additional information: https://www.ngs.noaa.gov/OPUS/about.jsp#accuracy

```
      USER: jmuckerman@biscayneengineering.co       DATE: March 28, 2018
RINEX FILE: 6118087n.18o                            TIME: 19:55:38 UTC


  SOFTWARE: page5  1603.24 master91.pl 160321      START: 2018/03/28  13:52:00
 EPHEMERIS: igu19943.eph [ultra-rapid]              STOP: 2018/03/28  16:01:00
  NAV FILE: brdc0870.18n                        OBS USED:  3886 /  4455   :  87%
  ANT NAME: TRMR8S          NONE              # FIXED AMB:    30 /    33   :  91%
ARP HEIGHT: 2.000                             OVERALL RMS: 0.017(m)


 REF FRAME: NAD_83(2011)(EPOCH:2010.0000)              IGS08 (EPOCH:2018.2373)

         X:       952174.679(m)   0.010(m)            952173.885(m)   0.010(m)
         Y:     -5676568.179(m)   0.008(m)          -5676566.576(m)   0.008(m)
         Z:      2738564.817(m)   0.010(m)           2738564.644(m)   0.010(m)

      LAT:   25 35 38.71205      0.012(m)        25 35 38.73102      0.012(m)
    E LON:  279 31 19.27499      0.010(m)       279 31 19.25641      0.010(m)
    W LON:   80 28 40.72501      0.010(m)        80 28 40.74359      0.010(m)
   EL HGT:          -22.482(m)   0.007(m)              -24.101(m)   0.007(m)
 ORTHO HGT:           2.349(m)   0.024(m) [NAVD88 (Computed using GEOID12B)]
```

El. 7.707

```
                      UTM COORDINATES    STATE PLANE COORDINATES
                       UTM (Zone 17)         SPC (0901 FL E)
Northing (Y) [meters]     2830835.926          139751.627
Easting (X)  [meters]      552421.314          252439.206
Convergence  [degrees]     0.22551433          0.22551433
Point Scale                0.99963393          0.99997512
Combined Factor            0.99963746          0.99997865
```

Y=458501.796249
X= 828210.961685

```
US NATIONAL GRID DESIGNATOR: 17RNJ5242130835(NAD 83)


                              BASE STATIONS USED
PID       DESIGNATION                        LATITUDE    LONGITUDE DISTANCE(m)
DF7050 MTNT MIAMI TNT CORS ARP             N255156.760 W0805425.186   52527.5
DF7052 NAPL NAPLES CORS ARP                N260855.103 W0814634.626  143894.2
DH3834 LAUD LAUDERDALE CORS ARP            N261146.341 W0801023.014   73370.7

                    NEAREST NGS PUBLISHED CONTROL POINT
AC3914      PERRINE                        N253618.605 W0802844.478    1232.1
```

This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.

```
For M5|Adr     1|TO  0386078 .dat                |                    |
|                    |
For M5|Adr     2|TO  LB                          |                    |
|                    |
For M5|Adr     3|TO  OL                          |                    |
|                    |
For M5|Adr     4|TO  Start-Line         BF     1|                    |
|                    |
For M5|Adr     5|KD1     PR32 DISC              1|                    |
|Z          10.560 ft  |
For M5|Adr     6|KD1     PR32#####          1   1|Rb          1.810 ft  |HD         221.65 ft
|                    |
For M5|Adr     7|TO  Measurement repeated       1|                    |
|                    |
For M5|Adr     8|KD1     PR32 DISC          1   1|Rb          2.362 ft  |HD         201.44 ft
|                    |
For M5|Adr     9|KD1      TP1 NLTT          1   1|Rf          6.266 ft  |HD         247.47 ft
|                    |
For M5|Adr    10|KD1      TP1 NLTT              1|                    |
|Z           6.656 ft  |
For M5|Adr    11|KD1      TP1 NLTT          1   1|Rb          5.588 ft  |HD         245.77 ft
|                    |
For M5|Adr    12|KD1      TP2 NLTT          1   1|Rf          5.435 ft  |HD         267.09 ft
|                    |
For M5|Adr    13|KD1      TP2 NLTT              1|                    |
|Z           6.809 ft  |
For M5|Adr    14|KD1      TP2 NLTT          1   1|Rb          5.343 ft  |HD         254.36 ft
|                    |
For M5|Adr    15|KD1      TP3 NLTT          1   1|Rf          5.339 ft  |HD         243.50 ft
|                    |
For M5|Adr    16|KD1      TP3 NLTT              1|                    |
|Z           6.813 ft  |
For M5|Adr    17|KD1      TP3 NLTT          1   1|Rb          4.738 ft  |HD         253.71 ft
|                    |
For M5|Adr    18|KD1      TP4 NLTT          1   1|Rf          4.490 ft  |HD         263.65 ft
|                    |
For M5|Adr    19|KD1      TP4 NLTT              1|                    |
|Z           7.060 ft  |
For M5|Adr    20|KD1      TP4 NLTT          1   1|Rb          4.981 ft  |HD         251.25 ft
|                    |
For M5|Adr    21|KD1      TP5 NLTT          1   1|Rf          4.942 ft  |HD         268.83 ft
|                    |
For M5|Adr    22|KD1      TP5 NLTT              1|                    |
|Z           7.100 ft  |
For M5|Adr    23|KD1      TP5 NLTT          1   1|Rb          5.002 ft  |HD         254.33 ft
|                    |
For M5|Adr    24|KD1      TP6 NLTT          1   1|Rf          5.381 ft  |HD         279.53 ft
|                    |
For M5|Adr    25|KD1      TP6 NLTT              1|                    |
|Z           6.721 ft  |
For M5|Adr    26|KD1      TP6 NLTT          1   1|Rb          5.499 ft  |HD         253.64 ft
|                    |
For M5|Adr    27|KD1      TP7 NLTT          1   1|Rf          5.375 ft  |HD         261.58 ft
|                    |
For M5|Adr    28|KD1      TP7 NLTT              1|                    |
|Z           6.845 ft  |
For M5|Adr    29|KD1      TP7 NLTT          1   1|Rb          5.060 ft  |HD         256.50 ft
|                    |
For M5|Adr    30|KD1      TP8 NLTT          1   1|Rf          5.172 ft  |HD         250.72 ft
|                    |
For M5|Adr    31|KD1      TP8 NLTT              1|                    |
|Z           6.732 ft  |
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For M5|Adr    32|KD1      TP8 NLTT          1   1|Rb          5.040 ft  |HD          258.50 ft
|                    |
For M5|Adr    33|KD1      TP9 NLTT          1   1|Rf          4.862 ft  |HD          249.05 ft
|                    |
For M5|Adr    34|KD1      TP9 NLTT              1|                     |
|Z           6.910 ft  |
For M5|Adr    35|KD1      TP9 NLTT          1   1|Rb          4.905 ft  |HD          251.31 ft
|                    |
For M5|Adr    36|KD1     TP10 NLTT          1   1|Rf          4.648 ft  |HD          235.50 ft
|                    |
For M5|Adr    37|KD1     TP10 NLTT              1|                     |
|Z           7.167 ft  |
For M5|Adr    38|KD1     TP10 NLTT          1   1|Rb          4.726 ft  |HD          238.35 ft
|                    |
For M5|Adr    39|KD1     TP11 NLTT          1   1|Rf          5.020 ft  |HD          255.81 ft
|                    |
For M5|Adr    40|KD1     TP11 NLTT              1|                     |
|Z           6.873 ft  |
For M5|Adr    41|KD1     TP11 NLTT          1   1|Rb          5.466 ft  |HD          257.41 ft
|                    |
For M5|Adr    42|KD1     TP12 NLTT          1   1|Rf          5.240 ft  |HD          249.84 ft
|                    |
For M5|Adr    43|KD1     TP12 NLTT              1|                     |
|Z           7.099 ft  |
For M5|Adr    44|KD1     TP12 NLTT          1   1|Rb          5.271 ft  |HD          245.14 ft
|                    |
For M5|Adr    45|KD1     TP13 NLTT          1   1|Rf          4.942 ft  |HD          256.43 ft
|                    |
For M5|Adr    46|KD1     TP13 NLTT              1|                     |
|Z           7.428 ft  |
For M5|Adr    47|KD1     TP13 NLTT          1   1|Rb          5.006 ft  |HD          247.24 ft
|                    |
For M5|Adr    48|KD1     TP14 NLTT          1   1|Rf          5.008 ft  |HD          261.78 ft
|                    |
For M5|Adr    49|KD1     TP14 NLTT              1|                     |
|Z           7.426 ft  |
For M5|Adr    50|KD1     TP14 NLTT          1   1|Rb          4.891 ft  |HD          247.60 ft
|                    |
For M5|Adr    51|KD1     TP15 NLTT          1   1|Rf          4.882 ft  |HD          243.04 ft
|                    |
For M5|Adr    52|KD1     TP15 NLTT              1|                     |
|Z           7.435 ft  |
For M5|Adr    53|KD1     TP15 NLTT          1   1|Rb          4.810 ft  |HD          249.31 ft
|                    |
For M5|Adr    54|KD1     TP16 NLTT          1   1|Rf          4.840 ft  |HD          259.94 ft
|                    |
For M5|Adr    55|KD1     TP16 NLTT              1|                     |
|Z           7.405 ft  |
For M5|Adr    56|KD1     TP16 NLTT          1   1|Rb          5.391 ft  |HD          262.66 ft
|                    |
For M5|Adr    57|KD1     TP17 NLTT          1   1|Rf          5.354 ft  |HD          256.95 ft
|                    |
For M5|Adr    58|KD1     TP17 NLTT              1|                     |
|Z           7.443 ft  |
For M5|Adr    59|KD1     TP17 NLTT          1   1|Rb          4.998 ft  |HD          258.00 ft
|                    |
For M5|Adr    60|KD1     TP18 NLTT          1   1|Rf          4.862 ft  |HD          249.28 ft
|                    |
For M5|Adr    61|KD1     TP18 NLTT              1|                     |
|Z           7.578 ft  |
For M5|Adr    62|KD1     TP18 NLTT              1|Sh         -2.982 ft  |dz           -0.000 ft
|Z           7.578 ft  |
```

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For M5|Adr    63|KD2     TP18 NLTT  18         1|Db        4486.54 ft  |Df        4599.99 ft
|Z          7.578 ft  |
For M5|Adr    64|TO  End-Line                  1|                     |
|                     |
For M5|Adr    65|TO  Start-Line         BF     2|                     |
|                     |
For M5|Adr    66|KD1     PR32 DISC             2|                     |
|Z         10.560 ft  |
For M5|Adr    67|TO  Cont-Line                 1|                     |
|                     |
For M5|Adr    68|KD1     TP18 NLTT             1|Sh         -2.982 ft  |
|                     |
For M5|Adr    69|KD2     TP18 NLTT  18         1|Db        4486.54 ft  |Df        4599.99 ft
|Z          7.578 ft  |
For M5|Adr    70|TO  End-Line                  1|                     |
|                     |
For M5|Adr    71|TO  Cont-Line                 1|                     |
|                     |
For M5|Adr    72|KD1     TP18 NLTT             1|Sh         -2.982 ft  |
|                     |
For M5|Adr    73|KD2     TP18 NLTT  18         1|Db        4486.54 ft  |Df        4599.99 ft
|Z          7.578 ft  |
For M5|Adr    74|TO  End-Line                  1|                     |
|                     |
For M5|Adr    75|TO  Start-Line         BF     2|                     |
|                     |
For M5|Adr    76|KD1     Z503 STMD             2|                     |
|Z          9.780 ft  |
For M5|Adr    77|KD1     Z503 STMD         1   2|Rb          5.865 ft  |HD         244.68 ft
|                     |
For M5|Adr    78|KD1     TP100 60D         1   2|Rf          5.245 ft  |HD         257.45 ft
|                     |
For M5|Adr    79|KD1     TP100 60D             2|                     |
|Z         10.400 ft  |
For M5|Adr    80|KD1     TP100 60D         1   2|Rb          4.597 ft  |HD         247.74 ft
|                     |
For M5|Adr    81|KD1     TP101 60D         1   2|Rf          4.737 ft  |HD         239.66 ft
|                     |
For M5|Adr    82|KD1     TP101 60D             2|                     |
|Z         10.261 ft  |
For M5|Adr    83|KD1     TP101 60D         1   2|Rb          5.714 ft  |HD         247.83 ft
|                     |
For M5|Adr    84|KD1     TP102 60D         1   2|Rf          6.179 ft  |HD         250.13 ft
|                     |
For M5|Adr    85|KD1     TP102 60D             2|                     |
|Z          9.795 ft  |
For M5|Adr    86|KD1     TP102 60D         1   2|Rb          6.415 ft  |HD         249.41 ft
|                     |
For M5|Adr    87|KD1     TP103 60D         1   2|Rf          6.090 ft  |HD         252.62 ft
|                     |
For M5|Adr    88|KD1     TP103 60D             2|                     |
|Z         10.121 ft  |
For M5|Adr    89|KD1     TP103 60D         1   2|Rb          5.496 ft  |HD         248.26 ft
|                     |
For M5|Adr    90|KD1     TP104 60D         1   2|Rf          5.942 ft  |HD         251.25 ft
|                     |
For M5|Adr    91|KD1     TP104 60D             2|                     |
|Z          9.674 ft  |
For M5|Adr    92|KD1     TP104 60D         1   2|Rb          6.019 ft  |HD         249.21 ft
|                     |
For M5|Adr    93|KD1     TP105 60D         1   2|Rf          5.870 ft  |HD         238.71 ft
|                     |
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For M5|Adr    94|KD1    TP105 60D              2|                      |
|Z          9.823 ft  |
For M5|Adr    95|KD1    TP105 60D          1   2|Rb          5.702 ft  |HD         245.14 ft
|                     |
For M5|Adr    96|KD1    TP106 60D          1   2|Rf          6.065 ft  |HD         257.05 ft
|                     |
For M5|Adr    97|KD1    TP106 60D              2|                      |
|Z          9.461 ft  |
For M5|Adr    98|KD1    TP106 60D          1   2|Rb          6.241 ft  |HD         251.67 ft
|                     |
For M5|Adr    99|KD1    TP107 60D          1   2|Rf          5.641 ft  |HD         252.69 ft
|                     |
For M5|Adr   100|KD1    TP107 60D              2|                      |
|Z         10.061 ft  |
For M5|Adr   101|KD1    TP107 60D          1   2|Rb          6.003 ft  |HD         239.34 ft
|                     |
For M5|Adr   102|KD1    TP108 60D          1   2|Rf          6.057 ft  |HD         236.97 ft
|                     |
For M5|Adr   103|KD1    TP108 60D              2|                      |
|Z         10.007 ft  |
For M5|Adr   104|KD1    TP108 60D          1   2|Rb          5.088 ft  |HD          79.92 ft
|                     |
For M5|Adr   105|KD1     PR32 DISC         1   2|Rf          4.535 ft  |HD         111.22 ft
|                     |
For M5|Adr   106|KD1     PR32 DISC             2|                      |
|Z         10.560 ft  |
For M5|Adr   107|KD1     PR32 DISC             2|Sh          0.780 ft  |
|                     |
For M5|Adr   108|KD2     PR32 DISC  10         2|Db       2303.21 ft  |Df        2347.76 ft
|Z         10.560 ft  |
For M5|Adr   109|TO  End-Line                  2|                      |
|                     |
For M5|Adr   110|TO  Cont-Line                 2|                      |
|                     |
For M5|Adr   111|KD1     PR32 DISC             2|Sh          0.780 ft  |dz         -0.000 ft
|Z         10.560 ft  |
For M5|Adr   112|KD2     PR32 DISC  10         2|Db       2303.21 ft  |Df        2347.76 ft
|Z         10.560 ft  |
For M5|Adr   113|TO  End-Line                  2|                      |
|                     |
For M5|Adr   114|TO  Cont-Line                 2|                      |
|                     |
For M5|Adr   115|KD1     PR32 DISC             2|Sh          0.780 ft  |
|                     |
For M5|Adr   116|KD2     PR32 DISC  10         2|Db       2303.21 ft  |Df        2347.76 ft
|Z         10.560 ft  |
For M5|Adr   117|TO  End-Line                  2|                      |
|                     |
For M5|Adr   118|TO  Cont-Line                 1|                      |
|                     |
For M5|Adr   119|KD1     TP18 NLTT          1   1|Rb          5.089 ft  |HD         261.97 ft
|                     |
For M5|Adr   120|KD1     TP19 NLTT          1   1|Rf          4.723 ft  |HD         263.25 ft
|                     |
For M5|Adr   121|KD1     TP19 NLTT              1|                      |
|Z          7.944 ft  |
For M5|Adr   122|KD1     TP19 NLTT          1   1|Rb          4.761 ft  |HD         261.81 ft
|                     |
For M5|Adr   123|KD1     TP20 NLTT          1   1|Rf          4.773 ft  |HD         259.02 ft
|                     |
For M5|Adr   124|KD1     TP20 NLTT              1|                      |
|Z          7.932 ft  |
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For M5|Adr   125|KD1     TP20 NLTT          1   1|Rb          5.010 ft  |HD          259.97 ft
|                    |
For M5|Adr   126|KD1     TP21 NLTT          1   1|Rf          4.418 ft  |HD          237.43 ft
|                    |
For M5|Adr   127|KD1     TP21 NLTT              1|                     |
|Z           8.524 ft  |
For M5|Adr   128|KD1     TP21 NLTT          1   1|Rb          5.011 ft  |HD          234.32 ft
|                    |
For M5|Adr   129|KD1     TP22 NLTT          1   1|Rf          4.685 ft  |HD          201.54 ft
|                    |
For M5|Adr   130|KD1     TP22 NLTT              1|                     |
|Z           8.850 ft  |
For M5|Adr   131|KD1     TP22 NLTT          1   1|Rb          4.588 ft  |HD          250.62 ft
|                    |
For M5|Adr   132|KD1     TP23 NLTT          1   1|Rf          4.667 ft  |HD          257.68 ft
|                    |
For M5|Adr   133|KD1     TP23 NLTT              1|                     |
|Z           8.771 ft  |
For M5|Adr   134|KD1     TP23 NLTT          1   1|Rb          4.514 ft  |HD          256.13 ft
|                    |
For M5|Adr   135|KD1     TP24 NLTT          1   1|Rf          4.520 ft  |HD          248.92 ft
|                    |
For M5|Adr   136|KD1     TP24 NLTT              1|                     |
|Z           8.765 ft  |
For M5|Adr   137|KD1     TP24 NLTT          1   1|Rb          4.666 ft  |HD          251.38 ft
|                    |
For M5|Adr   138|KD1     TP25 NLTT          1   1|Rf          4.489 ft  |HD          259.68 ft
|                    |
For M5|Adr   139|KD1     TP25 NLTT              1|                     |
|Z           8.942 ft  |
For M5|Adr   140|KD1     TP25 NLTT          1   1|Rb          4.250 ft  |HD          255.31 ft
|                    |
For M5|Adr   141|KD1     TP26 NLTT          1   1|Rf          4.235 ft  |HD          242.91 ft
|                    |
For M5|Adr   142|KD1     TP26 NLTT              1|                     |
|Z           8.956 ft  |
For M5|Adr   143|KD1     TP26 NLTT          1   1|Rb          3.533 ft  |HD          247.34 ft
|                    |
For M5|Adr   144|KD1     TP27 NLTT          1   1|Rf          3.673 ft  |HD          235.24 ft
|                    |
For M5|Adr   145|KD1     TP27 NLTT              1|                     |
|Z           8.817 ft  |
For M5|Adr   146|KD1     TP27 NLTT          1   1|Rb          4.075 ft  |HD          246.62 ft
|                    |
For M5|Adr   147|KD1     TP28 NLTT          1   1|Rf          4.089 ft  |HD          246.23 ft
|                    |
For M5|Adr   148|KD1     TP28 NLTT              1|                     |
|Z           8.803 ft  |
For M5|Adr   149|KD1     TP28 NLTT          1   1|Rb          4.109 ft  |HD          254.20 ft
|                    |
For M5|Adr   150|KD1     TP29 NLTT          1   1|Rf          4.189 ft  |HD          252.16 ft
|                    |
For M5|Adr   151|KD1     TP29 NLTT              1|                     |
|Z           8.722 ft  |
For M5|Adr   152|KD1     TP29 NLTT          1   1|Rb          4.062 ft  |HD          254.99 ft
|                    |
For M5|Adr   153|KD1     TP30 NLTT          1   1|Rf          4.549 ft  |HD          247.15 ft
|                    |
For M5|Adr   154|KD1     TP30 NLTT              1|                     |
|Z           8.236 ft  |
For M5|Adr   155|KD1     TP30 NLTT          1   1|Rb          4.957 ft  |HD          246.98 ft
|                    |
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For M5|Adr   156|KD1     TP31 NLTT          1   1|Rf          4.933 ft  |HD          265.55 ft
|                  |
For M5|Adr   157|KD1     TP31 NLTT              1|                     |
|Z          8.259 ft  |
For M5|Adr   158|KD1     TP31 NLTT          1   1|Rb          4.628 ft  |HD          254.03 ft
|                  |
For M5|Adr   159|KD1     TP32 NLTT          1   1|Rf          4.899 ft  |HD          283.69 ft
|                  |
For M5|Adr   160|KD1     TP32 NLTT              1|                     |
|Z          7.988 ft  |
For M5|Adr   161|KD1     TP32 NLTT          1   1|Rb          4.776 ft  |HD           83.04 ft
|                  |
For M5|Adr   162|KD1     TP33 NLTT          1   1|Rf          3.167 ft  |HD          119.88 ft
|                  |
For M5|Adr   163|KD1     TP33 NLTT              1|                     |
|Z          9.597 ft  |
For M5|Adr   164|KD1     TP33 NLTT          1   1|Rb          3.007 ft  |HD          120.31 ft
|                  |
For M5|Adr   165|KD1     TP34 NLTT          1   1|Rf          4.613 ft  |HD           83.07 ft
|                  |
For M5|Adr   166|KD1     TP34 NLTT              1|                     |
|Z          7.991 ft  |
For M5|Adr   167|KD1     TP34 NLTT              1|Sh         -2.569 ft  |
|                  |
For M5|Adr   168|KD2     TP34 NLTT  34          1|Db       8225.57 ft  |Df       8303.40 ft
|Z          7.991 ft  |
For M5|Adr   169|TO  End-Line                   1|                     |
|                  |
For M5|Adr   170|TO  Cont-Line                  1|                     |
|                  |
For M5|Adr   171|KD1     TP34 NLTT          1   1|Rb          4.997 ft  |HD          256.40 ft
|                  |
For M5|Adr   172|KD1     TP35 TP31          1   1|Rf          4.724 ft  |HD          280.71 ft
|                  |
For M5|Adr   173|KD1     TP35 TP31              1|                     |
|Z          8.263 ft  |
For M5|Adr   174|KD1     TP35 TP31          1   1|Rb          4.780 ft  |HD          245.60 ft
|                  |
For M5|Adr   175|KD1     TP36 TP30          1   1|Rf          4.803 ft  |HD          268.21 ft
|                  |
For M5|Adr   176|KD1     TP36 TP30              1|                     |
|Z          8.240 ft  |
For M5|Adr   177|KD1     TP36 TP30          1   1|Rb          4.479 ft  |HD          244.49 ft
|                  |
For M5|Adr   178|KD1     TP37 TP29          1   1|Rf          3.992 ft  |HD          260.53 ft
|                  |
For M5|Adr   179|KD1     TP37 TP29              1|                     |
|Z          8.727 ft  |
For M5|Adr   180|KD1     TP37 TP29          1   1|Rb          4.318 ft  |HD          250.36 ft
|                  |
For M5|Adr   181|KD1     TP38 TP28          1   1|Rf          4.243 ft  |HD          254.92 ft
|                  |
For M5|Adr   182|KD1     TP38 TP28              1|                     |
|Z          8.802 ft  |
For M5|Adr   183|KD1     TP38 TP28          1   1|Rb          4.161 ft  |HD          243.93 ft
|                  |
For M5|Adr   184|KD1     TP39 TP27          1   1|Rf          4.146 ft  |HD          248.39 ft
|                  |
For M5|Adr   185|KD1     TP39 TP27              1|                     |
|Z          8.817 ft  |
For M5|Adr   186|KD1     TP39 TP27          1   1|Rb          3.584 ft  |HD          246.10 ft
|                  |
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For M5|Adr   187|KD1     TP40 TP26          1   1|Rf          3.447 ft  |HD          235.92 ft
|                  |
For M5|Adr   188|KD1     TP40 TP26              1|                     |
|Z           8.954 ft  |
For M5|Adr   189|KD1     TP40 TP26          1   1|Rb          4.587 ft  |HD          246.42 ft
|                  |
For M5|Adr   190|KD1     TP41 TP25          1   1|Rf          4.596 ft  |HD          249.64 ft
|                  |
For M5|Adr   191|KD1     TP41 TP25              1|                     |
|Z           8.946 ft  |
For M5|Adr   192|KD1     TP41 TP25          1   1|Rb          3.809 ft  |HD          246.65 ft
|                  |
For M5|Adr   193|KD1     TP42 TP24          1   1|Rf          3.995 ft  |HD          266.96 ft
|                  |
For M5|Adr   194|KD1     TP42 TP24              1|                     |
|Z           8.760 ft  |
For M5|Adr   195|KD1     TP42 TP24          1   1|Rb          4.472 ft  |HD          250.29 ft
|                  |
For M5|Adr   196|KD1     TP43 TP23          1   1|Rf          4.464 ft  |HD          255.18 ft
|                  |
For M5|Adr   197|KD1     TP43 TP23              1|                     |
|Z           8.768 ft  |
For M5|Adr   198|KD1     TP43 TP23          1   1|Rb          4.848 ft  |HD          214.37 ft
|                  |
For M5|Adr   199|KD1     TP44 TP22          1   1|Rf          4.763 ft  |HD          293.77 ft
|                  |
For M5|Adr   200|KD1     TP44 TP22              1|                     |
|Z           8.853 ft  |
For M5|Adr   201|KD1     TP44 TP22          1   1|Rb          4.712 ft  |HD          194.36 ft
|                  |
For M5|Adr   202|KD1     TP45 TP21          1   1|Rf          5.035 ft  |HD          248.36 ft
|                  |
For M5|Adr   203|KD1     TP45 TP21              1|                     |
|Z           8.530 ft  |
For M5|Adr   204|KD1     TP45 TP21          1   1|Rb          4.550 ft  |HD          238.19 ft
|                  |
For M5|Adr   205|KD1     TP46 TP21          1   1|Rf          5.144 ft  |HD          257.48 ft
|                  |
For M5|Adr   206|KD1     TP46 TP21              1|                     |
|Z           7.937 ft  |
For M5|Adr   207|KD1     TP46 TP21          1   1|Rb          5.106 ft  |HD          234.28 ft
|                  |
For M5|Adr   208|KD1     TP47 TP19          1   1|Rf          5.096 ft  |HD          285.14 ft
|                  |
For M5|Adr   209|KD1     TP47 TP19              1|                     |
|Z           7.946 ft  |
For M5|Adr   210|KD1     TP47 TP19          1   1|Rb          5.138 ft  |HD          242.32 ft
|                  |
For M5|Adr   211|KD1     TP48 TP18          1   1|Rf          5.503 ft  |HD          279.10 ft
|                  |
For M5|Adr   212|KD1     TP48 TP18              1|                     |
|Z           7.581 ft  |
For M5|Adr   213|KD1     TP48 TP18          1   1|Rb          5.026 ft  |HD          249.47 ft
|                  |
For M5|Adr   214|KD1     TP49 TP17          1   1|Rf          5.168 ft  |HD          258.07 ft
|                  |
For M5|Adr   215|KD1     TP49 TP17              1|                     |
|Z           7.439 ft  |
For M5|Adr   216|KD1     TP49 TP17          1   1|Rb          5.183 ft  |HD          242.22 ft
|                  |
For M5|Adr   217|KD1     TP50 TP16          1   1|Rf          5.217 ft  |HD          277.23 ft
|                  |
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For M5|Adr   218|KD1     TP50 TP16            1|                    |
|Z           7.405 ft  |
For M5|Adr   219|KD1     TP50 TP16         1  1|Rb          5.271 ft  |HD         246.39 ft
|                      |
For M5|Adr   220|KD1     TP51 TP15         1  1|Rf          5.237 ft  |HD         257.35 ft
|                      |
For M5|Adr   221|KD1     TP51 TP15            1|                    |
|Z           7.439 ft  |
For M5|Adr   222|KD1     TP51 TP15         1  1|Rb          4.917 ft  |HD         250.20 ft
|                      |
For M5|Adr   223|KD1     TP52 TP14         1  1|Rf          4.926 ft  |HD         240.42 ft
|                      |
For M5|Adr   224|KD1     TP52 TP14            1|                    |
|Z           7.430 ft  |
For M5|Adr   225|KD1     TP52 TP14         1  1|Rb          5.094 ft  |HD         253.12 ft
|                      |
For M5|Adr   226|KD1     TP53 TP13         1  1|Rf          5.082 ft  |HD         258.46 ft
|                      |
For M5|Adr   227|KD1     TP53 TP13            1|                    |
|Z           7.442 ft  |
For M5|Adr   228|KD1     TP53 TP13         1  1|Rb          4.940 ft  |HD         241.31 ft
|                      |
For M5|Adr   229|KD1     TP54 TP12         1  1|Rf          5.268 ft  |HD         259.84 ft
|                      |
For M5|Adr   230|KD1     TP54 TP12            1|                    |
|Z           7.114 ft  |
For M5|Adr   231|KD1     TP54 TP12         1  1|Rb          5.535 ft  |HD         258.27 ft
|                      |
For M5|Adr   232|KD1     TP55#####         1  1|Rf          5.759 ft  |HD         250.13 ft
|                      |
For M5|Adr   233|KD1     TP55#####            1|                    |
|Z           6.890 ft  |
For M5|Adr   234|TO  Measurement repeated      1|                    |
|                      |
For M5|Adr   235|KD1     TP55 TP11         1  1|Rf          5.765 ft  |HD         249.70 ft
|                      |
For M5|Adr   236|KD1     TP55 TP11            1|                    |
|Z           6.884 ft  |
For M5|Adr   237|KD1     TP55 TP11         1  1|Rb          5.417 ft  |HD         253.71 ft
|                      |
For M5|Adr   238|KD1     TP56 TP10         1  1|Rf          5.125 ft  |HD         240.91 ft
|                      |
For M5|Adr   239|KD1     TP56 TP10            1|                    |
|Z           7.176 ft  |
For M5|Adr   240|KD1     TP56 TP10         1  1|Rb          5.220 ft  |HD         258.27 ft
|                      |
For M5|Adr   241|KD1     TP57  TP9         1  1|Rf          5.476 ft  |HD         225.36 ft
|                      |
For M5|Adr   242|KD1     TP57  TP9            1|                    |
|Z           6.920 ft  |
For M5|Adr   243|KD1     TP57  TP9         1  1|Rb          4.779 ft  |HD         257.22 ft
|                      |
For M5|Adr   244|KD1     TP58  TP8         1  1|Rf          4.953 ft  |HD         251.71 ft
|                      |
For M5|Adr   245|KD1     TP58  TP8            1|                    |
|Z           6.746 ft  |
For M5|Adr   246|KD1     TP58  TP8         1  1|Rb          5.262 ft  |HD         246.69 ft
|                      |
For M5|Adr   247|KD1     TP59#####         1  1|Rf          5.143 ft  |HD         258.43 ft
|                      |
For M5|Adr   248|KD1     TP59#####            1|                    |
|Z           6.864 ft  |
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For M5|Adr   249|TO  Measurement repeated      1|                    |
|                    |
For M5|Adr   250|KD1     TP59  TP7         1   1|Rf          5.145 ft  |HD         259.05 ft
|                    |
For M5|Adr   251|KD1     TP59  TP7             1|                    |
|Z          6.863 ft  |
For M5|Adr   252|KD1     TP59  TP7         1   1|Rb          5.426 ft  |HD         250.33 ft
|                    |
For M5|Adr   253|KD1     TP60  TP6         1   1|Rf          5.553 ft  |HD         265.32 ft
|                    |
For M5|Adr   254|KD1     TP60  TP6             1|                    |
|Z          6.736 ft  |
For M5|Adr   255|KD1     TP60  TP6         1   1|Rb          5.181 ft  |HD         268.67 ft
|                    |
For M5|Adr   256|KD1     TP61  TP5         1   1|Rf          4.800 ft  |HD         266.14 ft
|                    |
For M5|Adr   257|KD1     TP61  TP5             1|                    |
|Z          7.118 ft  |
For M5|Adr   258|KD1     TP61  TP5         1   1|Rb          5.130 ft  |HD         249.97 ft
|                    |
For M5|Adr   259|KD1     TP62  TP4         1   1|Rf          5.169 ft  |HD         271.85 ft
|                    |
For M5|Adr   260|KD1     TP62  TP4             1|                    |
|Z          7.078 ft  |
For M5|Adr   261|KD1     TP62  TP4         1   1|Rb          4.453 ft  |HD         252.56 ft
|                    |
For M5|Adr   262|KD1     TP63  TP3         1   1|Rf          4.705 ft  |HD         264.76 ft
|                    |
For M5|Adr   263|KD1     TP63  TP3             1|                    |
|Z          6.826 ft  |
For M5|Adr   264|KD1     TP63  TP3         1   1|Rb          5.295 ft  |HD         258.53 ft
|                    |
For M5|Adr   265|KD1     TP64  TP2         1   1|Rf          5.301 ft  |HD         237.04 ft
|                    |
For M5|Adr   266|KD1     TP64  TP2             1|                    |
|Z          6.821 ft  |
For M5|Adr   267|KD1     TP64  TP2         1   1|Rb          5.191 ft  |HD         252.76 ft
|                    |
For M5|Adr   268|KD1     TP65  TP1         1   1|Rf          5.343 ft  |HD         260.47 ft
|                    |
For M5|Adr   269|KD1     TP65  TP1             1|                    |
|Z          6.669 ft  |
For M5|Adr   270|KD1     TP65  TP1         1   1|Rb          5.946 ft  |HD         214.89 ft
|                    |
For M5|Adr   271|KD1    PR32A PR32         1   1|Rf          2.043 ft  |HD         228.31 ft
|                    |
For M5|Adr   272|KD1    PR32A PR32             1|                    |
|Z         10.572 ft  |
For M5|Adr   273|KD1    PR32A PR32             1|Sh          0.012 ft  |dz          -0.012 ft
|Z         10.560 ft  |
For M5|Adr   274|KD2    PR32A PR32  66         1|Db      16083.89 ft   |Df       16559.71 ft
|Z         10.572 ft  |
For M5|Adr   275|TO  End-Line                   1|                    |
|                    |
```

O LUNA
L. BALLESTEROS
C. SOUCHET
S. FEDOROVICH
3/05/18

BEC #03-86078
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
KROME AV / SW 184 ST
GT 157 AIR WELL SURVEY LOCATION
AND BENCHMARK ESTABLISHMENT (NAD 88)

STA	BS	HI	DIST	FS	DIST
PR 32	2.362	12.922	201.44		
TP #1				6.266	247.47
SHAKE	5.588	12.244	245.77		
TP #2				5.435	267.09
SHAKE	5.343	12.153	254.36		
TP #3				5.339	243.50'
SHAKE	4.738	11.551	253.71		
TP #4				4.490	263.65'
SHAKE	4.981	12.042	251.25'		
TP #5				4.942	268.83
SHAKE	5.002	12.102	254.33		

ELEVATION	BM ELEV	DESCRIPTION
	10.56	FND ALUMINUM DISC, STAMPED PR 32 1975, LOCATED IN THE NE CORNER OF THE BRIDGE (CANAL L-31N), ± 19.2' NORTH OF C/L OF SW 168 ST. EL = 10.56' NAVD-88
6.656		ON NORTH EP OF SW 168 ST. SET CNL & TT ± 447' EAST FROM BM PR 32
6.809		SET CUT NL & TT, ON EP OF SW 168 ST, ± 510' ~~SO~~ EAST FROM TP #1
6.813		SET CNL & TT ON NORTH EP OF SW 168 ST ± 496' EAST FROM TP #2
7.060		SET CUT NL & TT ON NORTH EP OF SW 168 ST ± 515' EAST FROM TP #3
7.100		SET CUT NL & TT ON NORTH EP OF SW 168 ST. ± 520' EAST FROM TP #4

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KROME AV / SW 184 ST.
GT 757 AR WELL SURVEY LOCATION AND
BENCHMARK ESTABLISHMENT (NAVD-88

STA	BS	HI	DIST	FS	DIST	ELEVATION	BM ELEV.	DESCRIPTION
		12.102						
TP # 6				5.381	279.53	6.721		SET CUT NAIL & TT ON NORTH EP OF SW 168 ST, ± 531.50' EAST FROM TP # 5
SHAKE	5.499	12.220	253.64					
TP # 7				5.375	261.58	6.845		SET CUT NAIL & TT ON NORTH EP OF SW 168 ST ± 513' EAST FROM TP # 6
SHAKE	5.060	11.904	256.50					
TP # 8				5.172	250.72	6.732		SET CUT NAIL & TT ON NORTH EP OF SW 168 ST ± 505' EAST FROM TP # 7
SHAKE	5.04	11.772	258.50					
TP # 9				4.862	249.05	6.91		SET CUT NAIL & TT ON NORTH EP OF SW 168 ST ± 505' EAST FROM TP # 8
SHAKE	4.905	11.816	251.31					
TP # 10				4.648	235.50	7.167		SET CUT NAIL & TT ON NORTH EP OF SW 168 ST ± 485' EAST FROM TP # 9
SHAKE	4.726	11.893	238.35					
TP # 11				5.02	255.81	6.873		SET CUT NAIL & TT ON NORTH EP OF SW 168 ST ± 492.5' EAST FROM TP # 10
SHAKE	5.466	12.339	257.41					

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KROME AV / SW 184 ST.
GT 757 AR WELL SURVEY LOCATION AND
BENCHMARK ESTABLISHMENT (NAD-88)

STA	BS	HI	DIST	FS	DIST	ELEVATION	BM ELEV.	DESCRIPTION
		12.339						
TP#12				5.240	249.84	7.099		SET CUTNL&TT. ON NORTH EP OF SW 163 ST, ±505. EAST FROM TP # 11
SHAKE	5.271	12.37	245.14					
TP#13				4.942	256.43	7.428		SET CUTNL&TT. ON NORTH EP OF SW 163 ST ± 500' EAST FROM TP # 12
SHAKE	5.006	12.434	247.24					
TP#14				5.008	261.78	7.426		SET CUTNL&TT. ON NORTH EP OF SW 163 ST ±507.5' EAST FROM TP #13
SHAKE	4.891	12.317	247.60					
TP#15				4.882	243.04	7.435		SET CUTNL&TT ON NORTH EP OF SW 163 ST ±488.5' EAST FROM TP #14
SHAKE	4.810	12.246	249.31					
TP#16				4.84	259.94	7.405		SET CUTNL&TT ON NORTH EP OF SW 163 ST ± 507.0' EAST FROM TP #15
SHAKE	5.391	12797	262.66					
TP#17				5.354	256.95	7.443		SET CUTNL&TT ON NORTH EP OF SW 163 ST ±518' EAST FROM TP #16
SHAKE	4.998	12.440	258.00					

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KROME AVE / SW 184 ST.
GT 757 AR WELLSURVEY LOCATION AND
BENCHMARK ESTABLISHMENT (NAVD-88).

STA	BS	HI	DIST.	FS	DIST.	ELEVATION	BM ELEV	DESCRIPTION
		12.440						
TP #18				4.862	249.28	7.578		

* NOTE: CONTINUE IN PAGE N. 50

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SOUTH FLORIDA WATER MANAGEMENT DISTRICT
KROME AV / SW 184 ST.
C-T-757 AIR WELL SURVEY LOCATION AND BENCHMARK ESTABLISHMENT (NAVD-88)

STA	BS	HI	DIST	FS	DIST
Z503	5.865	15.645	244.68		
TP 100				5.245	257.45
SHAKE	4.597	14.997	247.74		
TP # 101				4.737	239.66
SHAKE	5.714	15.975	247.83		
TP 102				6.179	250.13
SHAKE	6.415	16.210	249.41		
TP 103				6.090	252.62
SHAKE	5.496	15.616	248.26		
TP 104				5.942	251.25
SHAKE	6.019	15.693	249.21		

ELEVATION	BM ELEV.	DESCRIPTION
	9.78	FND BRASS DISC, SET IN CONC. MON LOCATED 35.5' EAST-SE OF MILE MK N. 17 ± 215' E-SE OF THE APROX ℄ OF THE LEVEE RD. ELEV = 9.78 NAVD-88
10.40		SET 60D SPK ON EAST SIDE OF THE LEVEE RD ± 502' NORTH OF THE BM Z503
10.261		SET 60D SPK ON EAST SIDE OF THE LEVEE RD, ± 487.4' NORTH OF TP # 100
9.795		SET 60D ON EAST SIDE OF THE LEVEE RD. ± 498' NORTH OF THE TP # 101,
10.121		SET 60D ON EAST SIDE OF THE LEVEE RD. ± 502' NORTH OF THE TP # 102
9.674		SET 60D SPK ON EAST SIDE OF THE LEVEE RD ± 499.50' NORTH OF THE TP # 103

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KROME AVE / SW 184 ST
QT 757 AR WELL SURVEY LOCATION AND
BENCHMARK ESTABLISHMENT (NAVD-88)

STA	BS	HI	DIST	FS	DIST
		15.693			
TP # 105				5.87	238.71
SHAKE	5.702	15.525	245.14		
TP # 106				6.065	257.05
SHAKE	6.241	15.702	251.67		
TP # 107				5.641	252.69
SHAKE	6.003	16.064	239.34		
TP # 108				6.057	236.97
SHAKE	5.088	15.095	79.92		
BM PR 32				4.535	111.22

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ELEVATION	BM ELEV.	DESCRIPTION
9.823		SET 60D SPK, EAST SIDE OF THE LEVEE RD ± 487.92' NORTH OF THE TP # 104
9.461		SET 60D SPK, EAST SIDE OF THE LEVEE RD, ± 502.19' NORTH OF THE TP # 105
10.061		SET 60D SPK, EAST SIDE OF THE LEVEE RD ± 504.36' NORTH OF THE TP # 106
10.007		SET 60D SPK, EAST SIDE OF THE LEVEE RD ± 476.31' NORTH OF THE TP # 107
10.56	10.56	FND ALUMINUM DISC, STAMPED. PR 32 1975, LOCATED IN THE NE CORNER OF THE BRIDGE (CANAL L-31N) ± 19.2' NORTH OF C/L OF SW 168 ST
SH →	0.00	
DB →	2303.21'	EL. 10.56 NAVD-88
DP →	2347.76'	

03-05-14
J. BUXTON
J. ACEVEDO

BEC #05-86078
G757AR WELL BENCHMARK
SR997 @ SW 184 ST
CLIENT: SFWMD
FILE NAME: 86078GPS

BASE
π 2 (Z503)
HT. 5.50'

→ 1 PR32 @6.652'/2.0m FND: SFWMD BDIC "PR-32 BM"
3 MIN OBS.

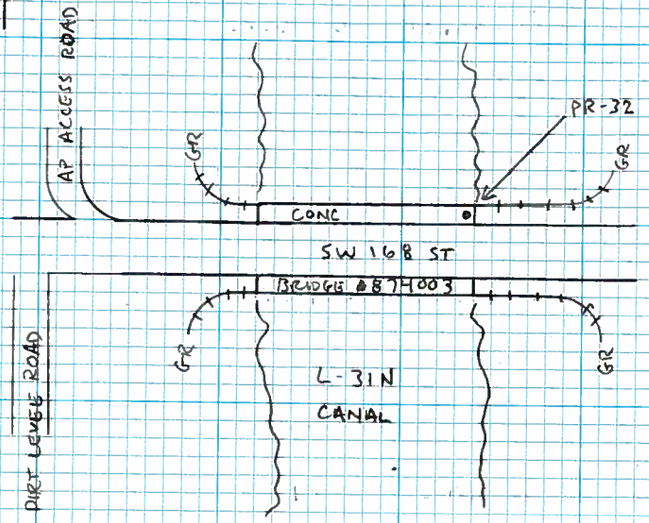
→ 1 PR32 @6.652'/2.0m 3 MIN 2ND OBS.

→ 3 A504 @6.652'/2.0m FND: FDEP BDIC "A504 2000"
3 MIN OBS.

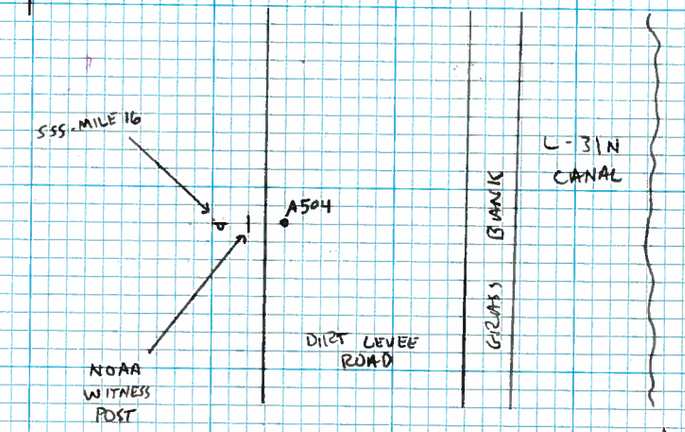
→ 1 PR32 @6.652'/2.0m 3 MIN 3RD OBS.

75°
PT. CLOUDY
LT. WIND

SKETCH: PR-32



SKETCH: A504



* A504 IS APPROX 2.7' EAST OF WITNESS POST

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SOUTH FLORIDA WATER MANAGEMENT DISTRICT
KROME AVE / SW 184 ST.
@ 157 AR WELL SURVEY LOCATION AND
BENCHMARK ESTABLISHMENT (NAVD-88)

STA	BS	HI	DIST	FS	DIST
TP #18	5.089	12.668	261.97		
TP # 19				4.723	263.25
SHAKE	4.761	12.706	261.81		
TP # 20				4.773	259.02
SHAKE	5.010	12.942	259.97		
TP # 21				4.418	237.43
SHAKE	5.011	13.535	234.32		
TP # 22				4.695	201.54
SHAKE	4.588	13.438	250.62		
TP # 23				4.667	257.68
SHAKE	4.519	13.284	256.13		
TP # 24				4.520	248.92
SHAKE	4.666	13.430	251.38		

* MATCH WITH PAGE No. 46

ELEVATION	BM DIS	DESCRIPTION
	7.578	CNL & TT (FROM PAGE 46) EL = 7.578 NAVD-88
7.944		SET CUT NL & TT, ON NORTH EP OF SW 168 ST ± 523.50' EAST FROM TP # 18
7.932		SET CUT NL & TT ON NORTH EP OF SW 168 ST, ± 520' EAST FROM TP # 19
8.524		SET CUT NL & TT ON NORTH EP OF SW 168 ST ± 497' EAST FROM TP # 20
8.850		SET CUT NL & TT ON EAST SHOULDER OF KROME AVE, ± 165' SOUTH OF C/L SW 168 ST
8.771		SET CUT NL & TT ON EAST SHOULDER OF KROME AVE, ± 508.30' SOUTH FROM TP # 22
8.765		SET CUT NL & TT ON EAST SHOULDER OF KROME AVE, ± 505.05 SOUTH FROM TP # 23

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KROME AVE / SW 184 ST
G 757 AR WELL SURVEY LOCATION AND BENCHMARK ESTABLISHMENT (NAVD-88)

STA	BS	HI	DIST.	FS	DIST	ELEVATION	BM ELEV.	DESCRIPTION
		13.431						
TP # 25				4.489	259.68	8.942		SET CUT NL & TT ON EAST SHOULDER OF KROME AVE, ± 511.0' SOUTH FROM TP # 24
SHAKE	4.250	13.192	255.31					
TP # 26				4.235	242.91	8.956		SET CUT NL & TT ON EAST SHOULDER OF KROME AVE, ± 498.20' SOUTH FROM TP # 25
SHAKE	3.535	12.489	247.34					
TP # 27				3.673	235.24	8.817		END MNLW BEC 0129 ON E. SHOULDER OF KROME AVE, ± 482.60' SOUTH FROM TP # 26
SHAKE	4.075	12.891	246.62					
TP # 28				4.089	246.23	8.803		SET CUT NL & TT ON EAST SHOULDER OF KROME AV, ± 492.9' SOUTH OF TP # 27
SHAKE	4.109	12.911	254.20					
TP # 29				4.189	252.16	8.722		SET CUT NL & TT ON EAST SHOULDER OF KROME AVE, ± 506.4' SOUTH OF TP # 28
SHAKE	4.062	12.784	254.99					
TP # 30				4.549	247.15	8.236		SET CUT NL & TT ON EAST SHOULDER OF KROME AVE, ± 502.10' SOUTH OF TP # 29
SHAKE	4.957	13.192	246.98					

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SOUTH FLORIDA WATER MANAGEMENT DISTRICT
KROME AVE / SW 184 ST
GPS 757 AIR WELL SURVEY LOCATION AND
BENCHMARK ESTABLISHMENT (NAD-88)

SET	BS	HI	DIST.	FS	DIST.	ELEVATION	BM ELEV.	DESCRIPTION
		13.192						
TP # 31				4.933	265.55	8.259		
SHAKE	4.628	12.887	254.03					
TP 32 = TBM 1				4.899	283.69	7.988		SET MNLW BEL 0129, ON NE CORNER OF THE INTERSECT. SW 184 ST & KROME AVE, ON CONC. SLAB
SHAKE	4.776	12.764	83.04					
TP 33 = TBM 2				3.167	119.88	9.597		SET MNLW BEL 0129, SET ON CONC. SLAB (SERVICE CABINET), SW CORNER OF KROME AV / SW 184 ST.
SHAKE	3.007	12.604	120.31					
TP 34 = TBM 1				4.613	83.07	7.99		TBM 1 = TP # 34
SHAKE	4.997	12.988	256.40					
TP # 35				4.724	280.31	8.263		TP # 31
SHAKE	4.780	13.043	245.60					
TP # 36				4.803	268.21	8.24		TP # 30
SHAKE	4.479	12.719	244.49					

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BEC # 03.86078
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
KROME AVE / SW 184 ST
G-757 A2 WELL SURVEY LOCATION AND
BENCHMARK ESTABLISHMENT (NAVD-88)

STA	BS	HI	DIST	FS	DIST	ELEVATION	BM ELEV	DESCRIPTION
		12.719						
TP # 37				3.992	260.54	8.727		TP # 29
SHAKE	4.318	13.045	250.36					
TP # 38				4.243	254.92	8.802		TP # 28
SHAKE	4.161	12.963	243.93					
TP # 39				4.146	248.39	8.817		TP # 27
SHAKE	3.584	12.401	246.10					
TP # 40				3.447	235.92	8.954		TP # 26
SHAKE	4.587	13.541	246.42					
TP # 41				4.596	249.64	8.946		TP # 25
SHAKE	3.809	12.755	246.65					
TP # 42				3.995	266.96	8.760		TP # 24
SHAKE	4.472	13.232	250.29					

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SOUTH FLORIDA WATER MANAGEMENT DIST.
KROME AVE / SW 184 ST
G 757 AR WELL SURVEY LOCATION AND
BENCHMARK ESTABLISHMENT (NAVD-88)

STA	BS	HI	DIST	FS	DIST	ELEVATION	BM ELEV.	DESCRIPTION
		13.232						
TP # 43				4.464	255.18	8.768		TP # 23
SHAKE	4.848	13.166	214.37					
TP # 44				4.763	293.77	8.853		TP # 22

* NOTE: STOP BENCH RUN FOR RAIN, CONTINUE IN PAGE N. 55 (3/08/18)

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SOUTH FLORIDA WATER MANAGEMENT DISTRICT
KROME AVE. / SW 184 ST
4 757 AIR WELL SURVEY LOCATION AND
BENCHMAR ESTABLISHMENT (NAVD 88)

2913-55

STA	BS	HI	DIST.	FS	DIST	ELEVATION	BM ELEV.	DESCRIPTION
							8.853	TP #22
TP 44	4.712	13.565	194.36					
						8.530		TP #21
TP 45				5.035	248.36			
						7.937		TP #20
SHAKE	4.550	13.080	238.19					
						7.946		TP #19
TP 46				5.144	257.48			
						7.581		TP #18
SHAKE	5.106	13.042	234.28					
						7.439		TP #17
TP 47				5.096	285.14			
						7.405		TP #16
SHAKE	5.138	13.084	242.32					
TP 48				5.503	279.10			
SHAKE	5.026	12.608	249.47					
TP 49				5.168	258.07			
SHAKE	5.183	12.622	242.22					
TP # 50				5.217	277.23			
SHAKE	5.271	12.676	246.39					

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SOUTH FLORIDA WATER MANAGEMENT DIST.
KROME AVE / SW 184 ST
G. 1ST AIR WELL SURVEY LOCATION AND
BENCHMARK ESTABLISHMENT (NAVD-88)

STA	BS	HI	DIST	FS	DIST	ELEVATION	BM ELEV	DESCRIPTION
TP# 51				5.237	257.35	7.439		TP # 15
SHAKE	4.917	12.357	250.20					
TP# 52				4.926	240.42	7.430		TP # 14
SHAKE	5.094	12.525	253.12					
TP 53				5.082	258.46	7.442		TP # 13
SHAKE	4.940	12.383	241.31					
TP# 54				5.268	259.84	7.114		TP # 12
SHAKE	5.535	12.649	258.27					
TP # 55				~~5.954~~ 5.765	~~250.13~~ 249.70	~~6.890~~ 6.884		TP # 11
SHAKE	5.417	12.301	253.71					
TP # 56				5.125	240.91	7.176		TP # 10
SHAKE	5.220	12.396	258.27					

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KROME AVE / SW 184 ST
G 1511 AR WELL SURVEY LOCATION AND
BENCHMARK ESTABLISHMENT

STA	BS	HI	DIST	FS	DIST	ELEV.	BM ELEV	DESCRIPTION
TP #57				5.476	225.36	6.920		TP # 9
SHAKE	4.779	11.699	257.22					
TP# 58				4.953	251.71	6.746		TP # 8
SHAKE	5.262	12.008	246.69					
TP # 59				5.145	259.05	6.863		TP # 7
SHAKE	5.426	12.289	250.33					
TP # 60				5.553	265.32	6.736		TP # 6
SHAKE	5.181	11.918	268.67					
TP # 61				4.800	266.14	7.118		TP # 5
SHAKE	5.130	12.249	249.97					
TP # 62				5.169	271.85	7.078		TP # 4
SHAKE	4.453	11.531	252.56					

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KROME AVE / SW 184 ST
G757 AR WELL SURVEY LOCATION AND
BENCHMARK ESTABLISHMENT (NAVD-88).

STA	BS	HI	DIST	FS	DIST	ELEV	BM ELEV	DESCRIPTION
TP # 63				4.705	264.76	6.826		TP # 3
SHAKE	5.295	12.121	258.53					
TP # 64				5.301	227.04	6.821		TP # 2
SHAKE	5.191	12.012	252.76					
TP # 65				5.343	260.47	6.669		TP # 1
SHAKE	5.946	12.615	214.89					
PR 32 A				2.043	228.31	10.572	10.56	PR 32 (NAVD-88) EL= 10.56' SEE FULL DESC. IN PAGE 43

SH: 0 012
DB 16083. 89
PB 165 59 71

O. LUNA
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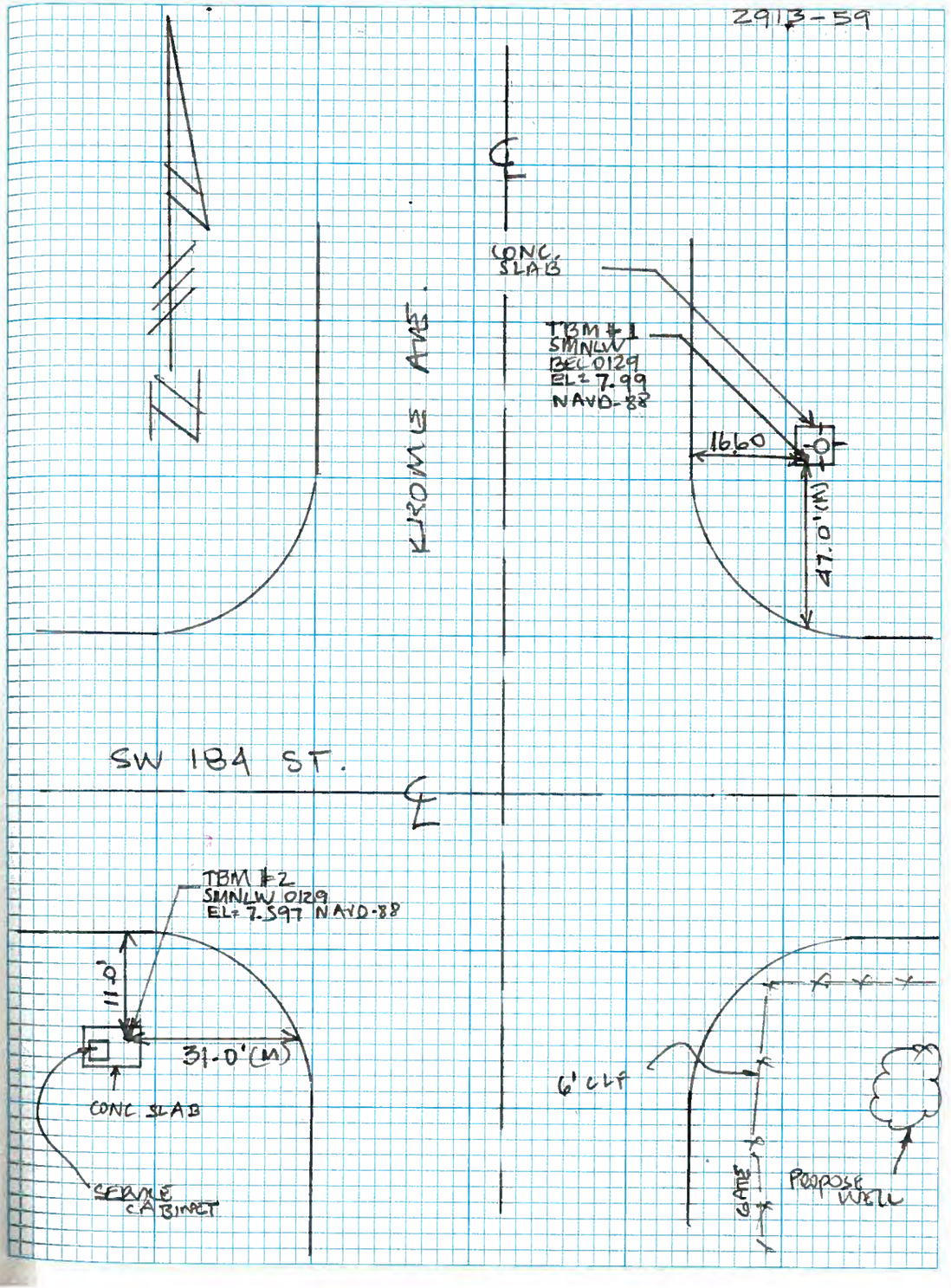
3/08/2018

BEC # 03.86078
SOUTH FLORIDA WATER MANAG. DISTRICT
KROME AV / SW 184 ST
G 757 A & WELL SURVEY LOCATION AND BENCHMARK ESTABLISHMENT (NAVD-88)

2913-59



O. LUNA
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C. SOUCHET
3/22/18

BEZ # 03-86078
S. F. W. M. D.
Ep 757 A2 WELL
WELL LOCATION (TOTAL STATION)

FS	∠@	HORZ ∠	HORZ DIST	BS	DESC.
	PT 1010	00°00'00"	72.089	1011	
1012		260°37'25"	42.755		℄ WELL 4"

" VBer

2913-60

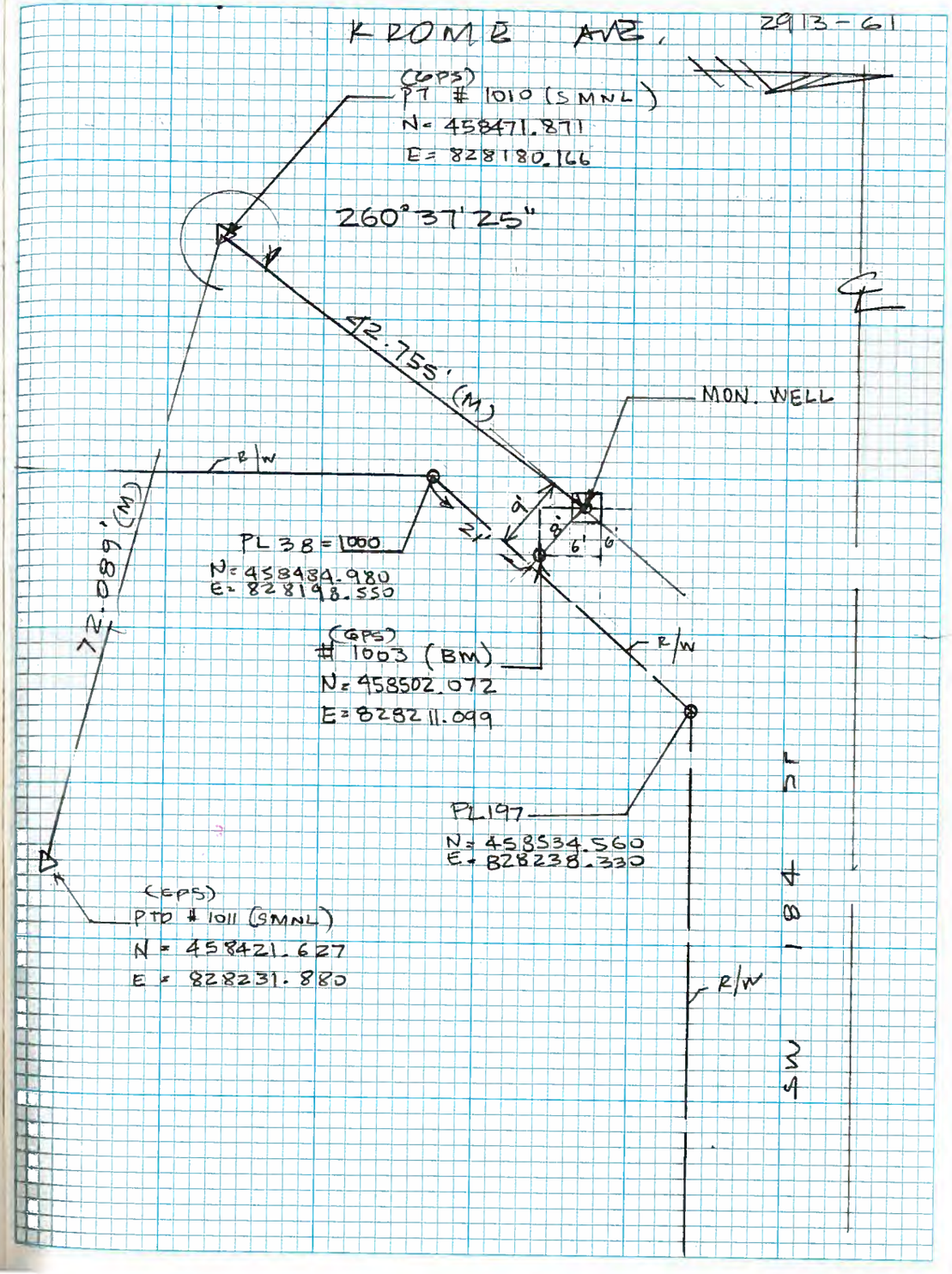
SEC
TWP
RGE

CREW: O. LUNA
L. BALLESTEROS
C. SOUCHET

3/22/2018

REC # 03-86073
S. F. W. M. D.

PROPOSED SFWMD/USCOS MONITORING WELL



O. LUNA
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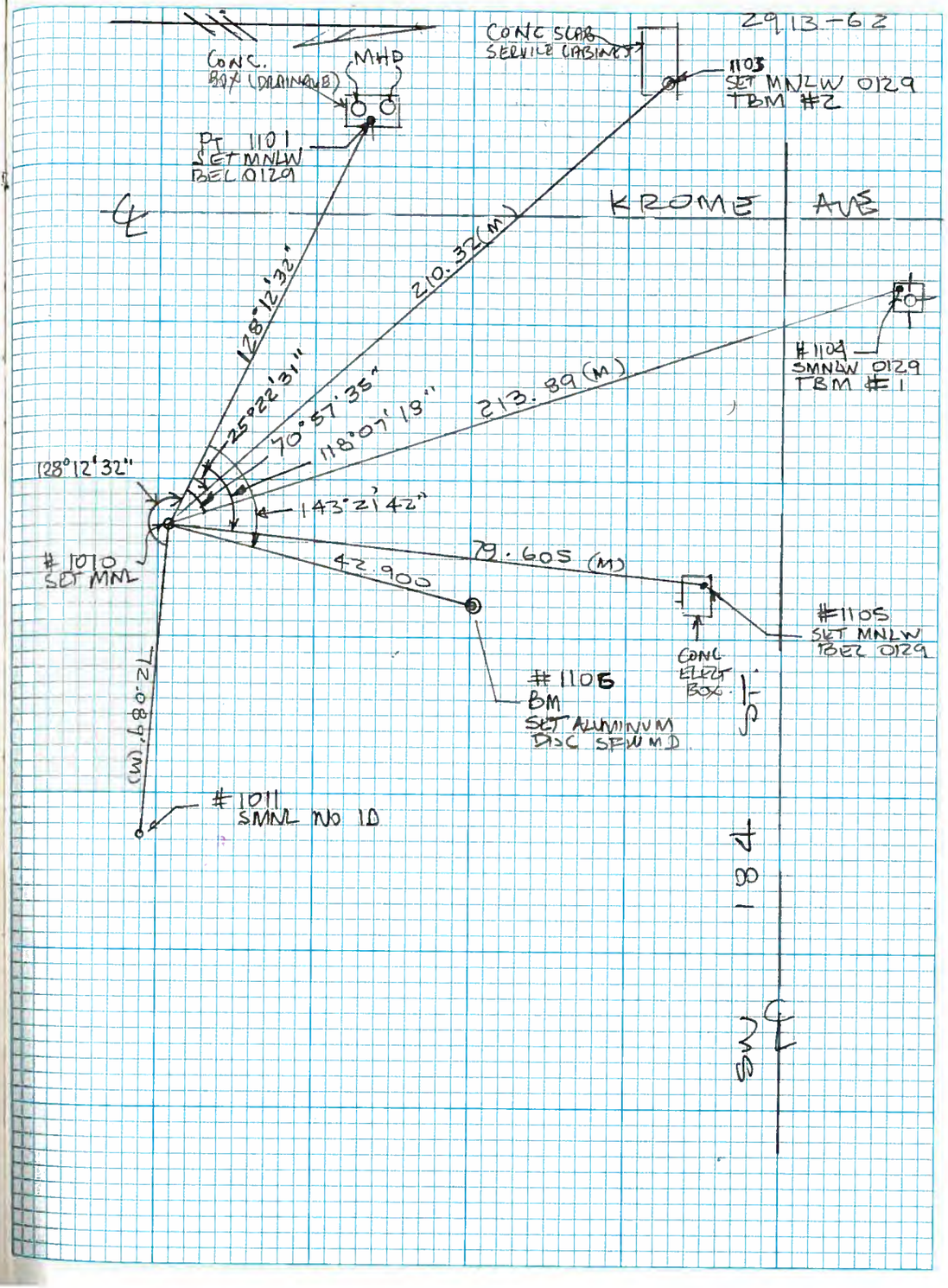
C. SOUCHET
3/23/18
8607811
TOPCON (RGM)

BEL #03-86078
S. F. W. M. D.
KROME AVE. AND SW 184 ST
G-757AR WELL SURVEY AND BENCHMARK ESTABLISHMENT.

FS	AT @	HORIZ ∠	HORIZ DIST	BS	DESC.
	PT 1010 (5.14)	00°00'00"	72.089	1100 = 1011 (4.95)	
1101 (5.18)		128°12'32"	182.248		SMNLW 0129
	PT 1010 (5.14)	00°00'00"	182.254	1102 = 1101 (5.18)	
1103 = TBM 2 (5.25)		25°22'31"	210.32		TBM 2
1104 = TBM 1 (5.19)		70°57'35"	213.89		TBM 1
1105 (4.94)		118°07'18"	79.605		SET BM
1106 (4.62)		143°21'42"	42.900		



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3/27/2018

BEC #03-86078
S. F. W. M. D.
G-757 AR WELL SURVEY & BENCHMARK ESTABLISH
ESTABLISH ELEVATIONS.

SET	BS	MEAN	HI	FS	MEAN	ELEV	BM ELEV	DESCRIPTION
TBM 1	5.71 5.10 4.49	5.10	13.088			7.988		MNLW BEC 0129 ON SW COR OF THE CONC SLAB (LP) LOCATED IN THE NE CORNER OF THE INTER. KLONKE AV / SW 184 ST. EL=7.988 NAVD88 SEE PAGE N.52
PT 1105				5.15 4.65 4.15	4.65	8.438		
SHAKE	4.64 4.28 3.92	4.28	12.718					
GND (N)				4.80		7.918		(WELL)
GND (S)				5.045		7.673		"
CONC (NE)				4.06		8.653		"
CONC (NW)				4.05		8.668		"
CONC (SW)				4.11		8.608		"
CONC (SE)				4.105		8.613		"
WELL				1.365 1.20 1.035	1.20	11.518		TOP OF PIPE (3 3/4" PVC PIPE)
SHAKE	1.48 1.32 1.16	1.32	12.838					

O. LUNA
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3/27/2018

BEC #03-86078
S.F.W.M.D.
Φ-757-AR WELL SURVEY & BENCHMARK ESTABLISH
ESTABLISH ELEVATIONS

SET	BS	MEAN	HI	FS	MEAN	ELEVAT	IBM ELEV	DESCRIPTION
			12.838					
BM				5.325				
				5.18	5.178	7.66		
				5.03				
SHAKE	6.215							
	5.685	5.687	13.346					
	5.16							
PT # 1101				3.63				
				3.065	3.065	10.281		
				2.50				
SHAKE	3.425							
	2.865	2.863	13.144					
	2.30							
TBM 2				4.12				
				3.55	355	9.594	9.597	MAG NAIL BEC 0129, SET ON NE COR OF A CONC SLAB (SERVICE CABINET) LOCATED IN THE SW CORNER OF THE INTERSECT. OF KROME AV / SW 184 ST, EL = 9.597' NAVD-88, SEE PAGE 52
				2.98		ERROR =	-0.003	

O LUNA
L. BALLESTEROS
C. SOUCHET

3/27/2018

BEC # 03-86078
S. F. W. M. D.
G-757-AR WELL

ESTABLISH ELEVATIONS NAVD-88 ON BM.

SET	BS	MEAN	HI	FS	MEAN	ELEVATION	BM ELEV.	DESCRIPTION
TBM 2	4.22						9.597	SEE FULL DESC. IN PAGE 64. MNLW BEC 0129, ELE 9.597 NAVD-88 SEE PAGE 52
	3.655	3.655	13.252					
	3.09							
PT # 1101				3.53				SEE PAGE 62 (REF) MNLW 0129
				2.97	2.968	10.284		
				2.405				
SHAKE	3.60							
	3.04	3.048	13.322					
	2.475							
BM				6.185				MONUMENT (SET ALUMINUM DISC IN CONC)
				5.66	5.66	7.662		
				5.135				
SHAKE	5.17							
	5.00	5.00	12.662					
	4.83							
WELL				1.34				ON TOP OF PIPE (WEST SIDE)
				~~1.045~~ 1.145		11.517		
				0.95				
SHAKE	1.965							
	1.85	1.85	13.367					
	1.735							

2913-65

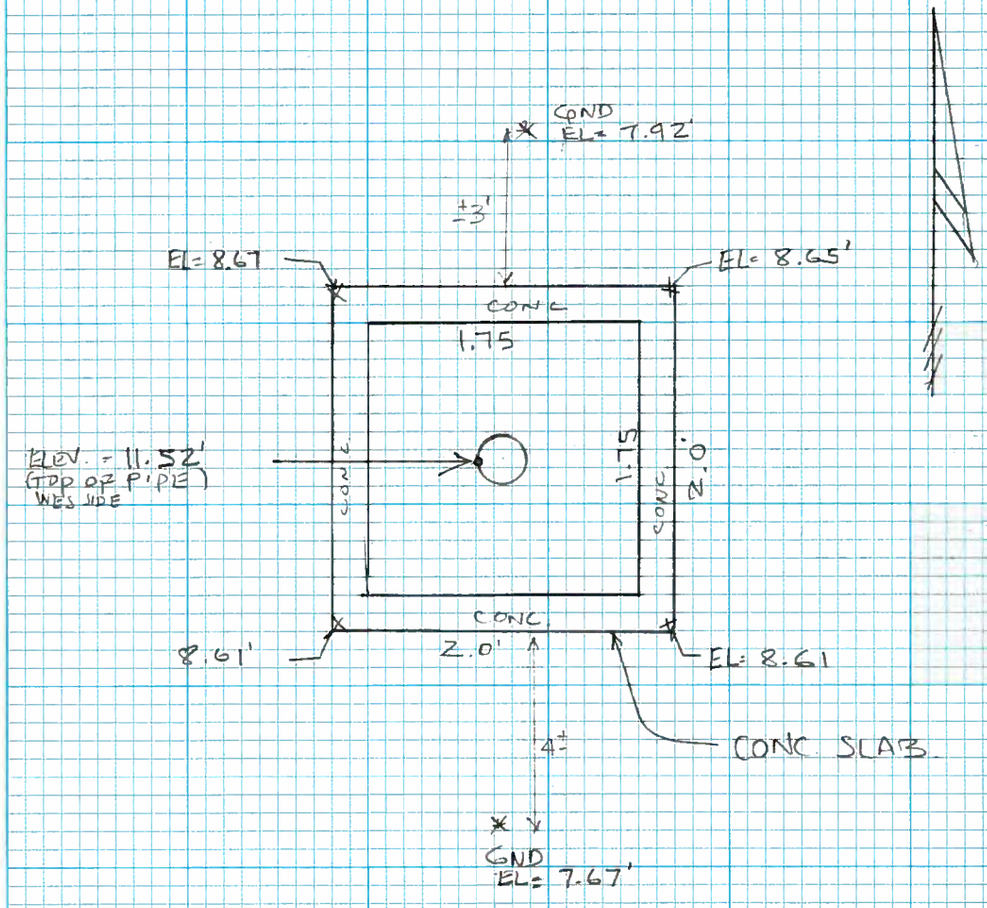
O. LUNA
L. BALLESTEROS
C. SOUCHET
3/27/18

BEC # 03-86078
S. F. W. M. D.
G-757-AR WELL
ESTABLISH ELEVATIONS

SET	BS	MEAN	HI	FS	MEAN	ELEVATION	BM ELEV.	DESCRIPTION
			13.367					
PT # 1105				5.095				
				4.93	4.93			
				4.765				
						8.437		
SHALE	5.29							
	4.83	4.83	13.267					
	4.37							
TBM # 1				5.895				
				5.28	5.28			
				4.665				
						7.987	7.988	MNLW BEC 0129, EL = 7.988 NAVD-88
								SEE PAGE 52
						EZ2.02 = -0.001		

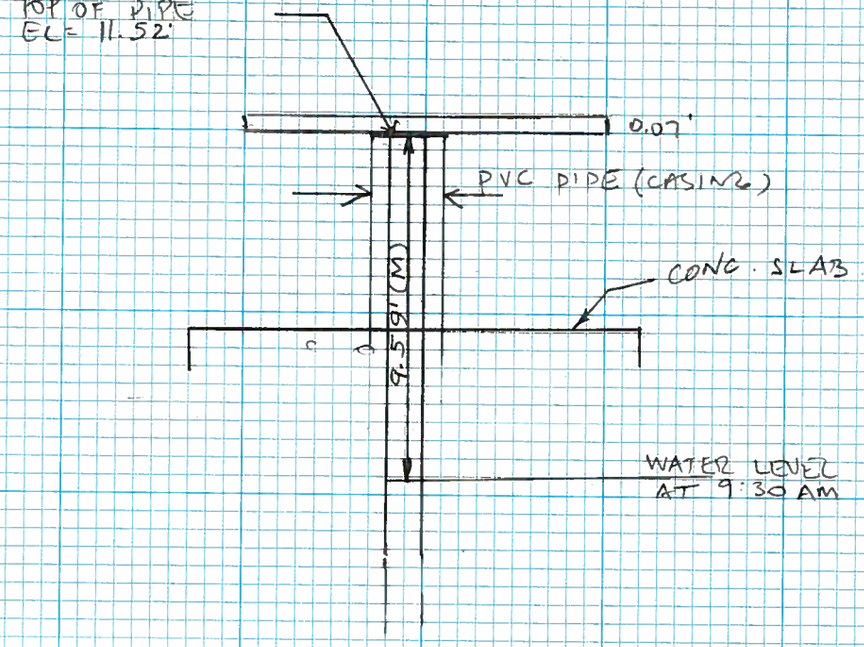
O LUNA
L. BALLESTEROS
C. SOUCHET
3-27-2018

BEC #03-86078
S. F. W. M. D.
KROME AVE / SW 184 ST
G-757-AR WELL & BENCHMARK ESTABLISHMENT



2913-67

LOOKING NORTH



J. MUCKERMAN
3-28-18
PARTLY CLOUDY
75° F

BEC # 86078
S.F.W.M.D.
KROME AVE & SW 184 ST
G-757-AR WELL
STATIC GPS OBSERVATION
OF NEW BENCHMARK SET
BY B.E.C.

EQUPMENT USED: TRIMBLE R-8S GPS HEAD
SERIAL # 5625R06118
MOUNTED ON A STANDARD 2 METER
FIXED GPS ROD.

BEGIN COLLECTING DATA WITH R-8s INTERNAL MEMORY
@ 9:52 AM

STOPPED COLLECTING DATA @ 12:01

2913-68

The NGS Data Sheet

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

```
PROGRAM = datasheet95, VERSION = 8.12.4.1
1        National Geodetic Survey,   Retrieval Date = MARCH 28, 2018
 AJ8383 ***********************************************************************
 AJ8383  DESIGNATION -  Z 503
 AJ8383  PID         -  AJ8383
 AJ8383  STATE/COUNTY-  FL/MIAMI-DADE
 AJ8383  COUNTRY     -  US
 AJ8383  USGS QUAD   -  GROSSMAN HAMMOCK (1973)
 AJ8383
 AJ8383                        *CURRENT SURVEY CONTROL
 AJ8383  ______________________________________________________________________
 AJ8383* NAD 83(1986) POSITION- 25 35 58.     (N) 080 31 21.     (W)   SCALED
 AJ8383* NAVD 88 ORTHO HEIGHT -     2.981 (meters)        9.78  (feet) ADJUSTED
 AJ8383  ______________________________________________________________________
 AJ8383  GEOID HEIGHT    -        -24.685 (meters)                     GEOID12B
 AJ8383  DYNAMIC HEIGHT  -          2.976 (meters)        9.76  (feet) COMP
 AJ8383  MODELED GRAVITY -    979,002.6   (mgal)                       NAVD 88
 AJ8383
 AJ8383  VERT ORDER      -  FIRST     CLASS II
 AJ8383
 AJ8383.The horizontal coordinates were scaled from a topographic map and have
 AJ8383.an estimated accuracy of +/- 6 seconds.
 AJ8383.
 AJ8383.The orthometric height was determined by differential leveling and
 AJ8383.adjusted by the NATIONAL GEODETIC SURVEY
 AJ8383.in June 2002.
 AJ8383
 AJ8383.Significant digits in the geoid height do not necessarily reflect accuracy.
 AJ8383.GEOID12B height accuracy estimate available here.
 AJ8383
 AJ8383.The dynamic height is computed by dividing the NAVD 88
 AJ8383.geopotential number by the normal gravity value computed on the
 AJ8383.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AJ8383.degrees latitude (g = 980.6199 gals.).
 AJ8383
 AJ8383.The modeled gravity was interpolated from observed gravity values.
 AJ8383
 AJ8383;                    North         East     Units  Estimated Accuracy
 AJ8383;SPC FL E     -   140,330.      247,970.      MT  (+/- 180 meters Scaled)
 AJ8383
 AJ8383_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ479314(NAD 83)
 AJ8383
 AJ8383                           SUPERSEDED SURVEY CONTROL
 AJ8383
 AJ8383.No superseded survey control is available for this station.
 AJ8383
 AJ8383_MARKER: DD = SURVEY DISK
 AJ8383_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 AJ8383_STAMPING: Z 503 2000
 AJ8383_MARK LOGO: FLDEP
 AJ8383_MAGNETIC: B = BAR MAGNET IMBEDDED IN MONUMENT
```

```
AJ8383_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AJ8383+STABILITY: SURFACE MOTION
AJ8383_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AJ8383+SATELLITE: SATELLITE OBSERVATIONS - February 12, 2007
AJ8383
AJ8383  HISTORY     - Date     Condition        Report By
AJ8383  HISTORY     - 2000     MONUMENTED       FLDEP
AJ8383  HISTORY     - 20070212 GOOD             DCPWD
AJ8383  HISTORY     - 20091209 GOOD             DCPWD
AJ8383
AJ8383                          STATION DESCRIPTION
AJ8383
AJ8383'DESCRIBED BY FL DEPT OF ENV PRO 2000 (JLM)
AJ8383'THE MARK IS ABOUT 10.5 MI (16.9 KM) SOUTHWEST OF KENDALL, 4.5 MI (7.2
AJ8383'KM) NORTH OF HOMESTEAD, IN ESTIMATED SECTION 34, TOWNSHIP 55 SOUTH,
AJ8383'RANGE 38 EAST. TO REACH THE MARK FROM THE JUNCTION OF STATE ROAD 997
AJ8383'(KROME AVENUE SW 177 AVENUE) AND U.S.  HIGHWAY 41 (TAMIAMI TRAIL SW
AJ8383'8TH ST) ABOUT 10.0 MI (16.1 KM) SOUTHWEST OF HIALEAH, GO WEST ON U.S.
AJ8383'HIGHWAY 41 (TAMIAMI TRAIL SW 8TH ST) FOR 1.0 MI (1.6 KM) T0 THE WEST
AJ8383'END OF BRIDGE NUMBER 8705851979 AND THE JUNCTION OF A LEVEE ROAD
AJ8383'(L-31N) ON THE WEST SIDE OF THE CANAL, TURN LEFT AND GO SOUTH ON LEVEE
AJ8383'ROAD (L-31N) FOR 8.6 MI (13.8 KM) TO THE JUNCTION OF SW 136 ST,
AJ8383'CONTINUE SOUTH ON THE WEST SIDE OF LEVEE ROAD (L-31N) FOR 2.4 MI (3.9
AJ8383'KM) TO THE JUNCTION OF SW 168 ST (RICHMOND DRIVE) , CONTINUE SOUTH ON
AJ8383'THE WEST SIDE OF THE LEVEE ROAD (L-31N) FOR 0.9 MI (1.4 KM) TO MILE
AJ8383'MARKER NUMBER 17 ON THE RIGHT AND THE MARK ON THE LEFT, SET IN THE TOP
AJ8383'OF A ROUND CONCRETE MONUMENT FLUSH WITH THE GROUND AND LEVEL WITH THE
AJ8383'LEVEE ROAD. LOCATED 35.5 FT (10.8 M) EAST-SOUTHEAST OF MILE MARKER
AJ8383'NUMBER 17, 21.5 FT (6.6 M) EAST-SOUTHEAST OF THE APPROXIMATE
AJ8383'CENTERLINE OF THE LEVEE ROAD, 4.0 FT (1.2 M) NORTH-NORTHWEST OF THE
AJ8383'APPROXIMATE EDGE OF THE CANAL AND 1.5 FT (0.5 M) NORTH-NORTHWEST OF A
AJ8383'CARSONITE WITNESS POST. NOTE A BAR MAGNET WAS INBEDDED ON THE SOUTH
AJ8383'SIDE OF THE MONUMENT. NOTE FOR KEY CONTACT SOUTH FLORIDA WATER
AJ8383'MANAGEMENT DISTRICT AT 2195 NORTHEAST 8TH STREET HOMESTEAD, FL 33033,
AJ8383'PHONE 305-242-5955.
AJ8383
AJ8383                          STATION RECOVERY (2007)
AJ8383
AJ8383'RECOVERY NOTE BY DADE COUNTY PUBLIC WORKS DEPARTMENT 2007 (MJW)
AJ8383'RECOVERED AS DESCRIBED
AJ8383
AJ8383                          STATION RECOVERY (2009)
AJ8383
AJ8383'RECOVERY NOTE BY DADE COUNTY PUBLIC WORKS DEPARTMENT 2009 (MJW)
AJ8383'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:02
```

The NGS Data Sheet

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

```
PROGRAM = datasheet95, VERSION = 8.12.4.1
1        National Geodetic Survey,   Retrieval Date = MARCH 28, 2018
 AJ8382 ***********************************************************************
 AJ8382  DESIGNATION -  PR 32
 AJ8382  PID         -  AJ8382
 AJ8382  STATE/COUNTY-  FL/MIAMI-DADE
 AJ8382  COUNTRY     -  US
 AJ8382  USGS QUAD   -  GROSSMAN HAMMOCK (1973)
 AJ8382
 AJ8382                        *CURRENT SURVEY CONTROL
 AJ8382  ______________________________________________________________________
 AJ8382* NAD 83(1986) POSITION- 25 36 31.     (N) 080 30 42.     (W)   SCALED
 AJ8382* NAVD 88 ORTHO HEIGHT -     3.219 (meters)       10.56  (feet) ADJUSTED
 AJ8382  ______________________________________________________________________
 AJ8382  GEOID HEIGHT    -        -24.709 (meters)                     GEOID12B
 AJ8382  DYNAMIC HEIGHT  -          3.214 (meters)       10.54  (feet) COMP
 AJ8382  MODELED GRAVITY -    979,004.0   (mgal)                       NAVD 88
 AJ8382
 AJ8382  VERT ORDER      -  FIRST     CLASS II
 AJ8382
 AJ8382.The horizontal coordinates were scaled from a topographic map and have
 AJ8382.an estimated accuracy of +/- 6 seconds.
 AJ8382.
 AJ8382.The orthometric height was determined by differential leveling and
 AJ8382.adjusted by the NATIONAL GEODETIC SURVEY
 AJ8382.in June 2002.
 AJ8382
 AJ8382.Significant digits in the geoid height do not necessarily reflect accuracy.
 AJ8382.GEOID12B height accuracy estimate available here.
 AJ8382
 AJ8382.The dynamic height is computed by dividing the NAVD 88
 AJ8382.geopotential number by the normal gravity value computed on the
 AJ8382.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AJ8382.degrees latitude (g = 980.6199 gals.).
 AJ8382
 AJ8382.The modeled gravity was interpolated from observed gravity values.
 AJ8382
 AJ8382;                    North         East     Units  Estimated Accuracy
 AJ8382;SPC FL E     -   141,350.      249,050.      MT  (+/- 180 meters Scaled)
 AJ8382
 AJ8382_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNJ490324(NAD 83)
 AJ8382
 AJ8382                           SUPERSEDED SURVEY CONTROL
 AJ8382
 AJ8382.No superseded survey control is available for this station.
 AJ8382
 AJ8382_MARKER: DD = SURVEY DISK
 AJ8382_SETTING: 36 = SET IN A MASSIVE STRUCTURE
 AJ8382_SP_SET: BRIDGE
 AJ8382_STAMPING: PR 32 1975
 AJ8382_MARK LOGO: SFLWMD
```

AJ8382_MAGNETIC: N = NO MAGNETIC MATERIAL
AJ8382_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
AJ8382_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AJ8382+SATELLITE: SATELLITE OBSERVATIONS - February 12, 2007
AJ8382
AJ8382 HISTORY - Date Condition Report By
AJ8382 HISTORY - 1975 MONUMENTED SFLWMD
AJ8382 HISTORY - 20010103 GOOD FLDEP
AJ8382 HISTORY - 20070212 GOOD DCPWD
AJ8382 HISTORY - 20091209 GOOD DCPWD
AJ8382
AJ8382 STATION DESCRIPTION
AJ8382
AJ8382'DESCRIBED BY FL DEPT OF ENV PRO 2001 (JLM)
AJ8382'THE MARK IS ABOUT 9.5 MI (15.3 KM) SOUTHWEST OF KENDALL, 4.5 MI (7.2
AJ8382'KM) NORTH OF HOMESTEAD, IN ESTIMATED SECTION 27, TOWNSHIP 55 SOUTH,
AJ8382'RANGE 38 EAST. TO REACH THE MARK FROM THE JUNCTION OF STATE ROAD 997
AJ8382'(KROME AVENUE SW 177 AVENUE) AND U.S. HIGHWAY 41 (TAMIAMI TRAIL SW
AJ8382'8TH ST) ABOUT 10.0 MI (16.1 KM) SOUTHWEST OF HIALEAH, GO WEST ON U.S.
AJ8382'HIGHWAY 41 (TAMIAMI TRAIL SW 8TH ST) FOR 1.0 MI (1.6 KM) T0 THE WEST
AJ8382'END OF BRIDGE NUMBER 8705851979 AND THE JUNCTION OF A LEVEE ROAD
AJ8382'(L-31N) ON THE WEST SIDE OF THE CANAL, TURN LEFT ON LEVEE ROAD (L-31N)
AJ8382'AND GO SOUTH FOR 8.6 MI (13.8 KM) TO THE JUNCTION OF SW 136 ST,
AJ8382'CONTINUE SOUTH ON THE WEST SIDE OF LEVEE ROAD (L-31N) FOR 2.4 MI (3.9
AJ8382'KM) TO THE JUNCTION OF SW 168 ST (RICHMOND DRIVE) AND THE MARK ON THE
AJ8382'LEFT, SET IN THE NORTHEAST END OF THE BRIDGE FOUNDATION 1.0 FT (0.3 M)
AJ8382'ABOVE THE LEVEL OF SOUTHWEST 168 ST. LOCATED 19.2 FT (5.9 M) NORTH OF
AJ8382'THE APPROXIMATE CENTERLINE OF SOUTHWEST 168TH STREET, 2.6 FT (0.8 M)
AJ8382'WEST OF THE NORTHEAST END OF THE BRIDGE, 2.2 FT (0.7 M) WEST OF A
AJ8382'CARSONITE WITNESS POST AND 0.9 FT (27.4 CM) SOUTH OF THE WEST END OF
AJ8382'THE GUARDRAIL. NOTE FOR KEY CONTACT SOUTH FLORIDA WATER MANAGEMENT
AJ8382'DISTRICT AT 2195 NORTHEAST 8TH STREET HOMESTEAD, FL 33033, PHONE
AJ8382'305-242-5955.
AJ8382
AJ8382 STATION RECOVERY (2007)
AJ8382
AJ8382'RECOVERY NOTE BY DADE COUNTY PUBLIC WORKS DEPARTMENT 2007 (MJW)
AJ8382'RECOVERED AS DESCRIBED
AJ8382
AJ8382 STATION RECOVERY (2009)
AJ8382
AJ8382'RECOVERY NOTE BY DADE COUNTY PUBLIC WORKS DEPARTMENT 2009 (MJW)
AJ8382'RECOVERED IN GOOD CONDITION.

*** retrieval complete.
Elapsed Time = 00:00:02