

**PALM BEACH COUNTY  
BOARD OF COUNTY COMMISSIONERS**

**AGENDA ITEM SUMMARY**

Meeting Date: **October 17, 2006**                      Consent ☒ [ X ]                      Regular ☐ [ ]  
Public Hearing ☐ [ ]

Submitted By: **Water Utilities Department**  
Submitted For: **Water Utilities Department**

**I. EXECUTIVE BRIEF**

**Motion and Title:** Staff recommends motion to approve: Change Order No. 4 to the contract with Cardinal Contractors, Inc. d/b/a Widell, Inc. for the Mecca Utility Site Project (R2005-1893) increasing the contract price by \$123,777 and providing a 30-day time extension.

**Summary:** This change order authorizes the contractor to perform mechanical improvements relating to a crane and civil improvements relating to underground utility piping. The bridge crane inside the new pump station will be extended to improve access for pump maintenance. The on-site potable water and wastewater pipelines need to be connected to the Department's existing off-site pipelines. The segment of the water and wastewater pipelines located between the southeast corner of the Mecca property and the Utility site were intended to be constructed by the Scripps Infrastructure Team, under the Construction Contract with Catalfumo. Since the Catalfumo contract has been suspended, it is necessary for the Utility Site contractor to connect these pipelines into the Department's system. Total change orders to date, excluding the \$2,039,397.92 sales tax recovery program change order, equal \$196,495.57 (2.21% increase). The Small Business Enterprise (SBE) participation goal established by the SBE Ordinance is 15.0% overall. This Change Order includes zero overall SBE participation. The contractor's cumulative SBE participation, including this Change Order, is 15.93% overall.


(WUD Project No. 05-018)                      District 6                      (JM)

**Background and Justification:** The County has been progressing with proving utility infrastructure needed to provide water and wastewater service to the Mecca Site, Beeline Community Development District (which serves the Pratt & Whitney complex), and Seacoast Utility Authority. On February 15, 2005 the Board approved a Utility Service Area Agreement with Beeline Community Development District (R2005-0366). On September 13, 2005 the Board approved an Interlocal Agreement with Seacoast Utility Authority (R2005-1769). On September 27, 2005, the Board approved a contract with Widell (R2005-1893), for construction of the Utility Site Project in the amount of \$8,895,000. Change Order No. 4 will authorize the Contractor to complete modifications to the pump station bridge crane and potable water and wastewater piping systems.

**Attachments:**

1. Location Map
2. Two (2) Original Change Order No. 4

Recommended By:                       9/27/06  
Department Director                      Date

Approved By:                       10-6-06  
Assistant County Administrator                      Date

## II. FISCAL IMPACT ANALYSIS

### A. Five Year Summary of Fiscal Impact:

Fiscal Years	2007	2008	2009	2010	2011
Capital Expenditures	<u>\$123,777</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
External Revenues	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Program Income	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(County)					
In-Kind Match County	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
NET FISCAL IMPACT	<u>\$123,777</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
# ADDITIONAL FTE					
POSITIONS	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(Cumulative)					

**Budget Account No.:** Fund 4011 Dept 721 Unit W006 Object 6543 ( 50% )

**Budget Account No.:** Fund 4011 Dept 721 Unit W006 Object 6547 ( 50% )

Is Item Included in Current Budget?      Yes   X        No       

Reporting Category **N/A**


**B. Recommended Sources of Funds/Summary of Fiscal Impact:**

One time capital expenditure from Water Utilities Department user fees, connection fees and balance brought forward.

**C. Department Fiscal Review:**

### III. REVIEW COMMENTS

**A. OFMB Fiscal and/or Contract Development and Control Comments:**

 10-07-06  
 \_\_\_\_\_  
 OFMB  
 a/v 10-30-06  
 (10/30/06)  
 9-29-06  
 Legal Sufficiency:

In - J. Jacoby 10/14/06  
Contract Development and Control  
6. Jan 10/14/06

**B. Legal Sufficiency:**

**Legal Sufficiency:**

*[Signature]* 10/6/06

Assistant County Attorney

**This item complies with current County policies.**

**C. Other Department Review:**

Department Director

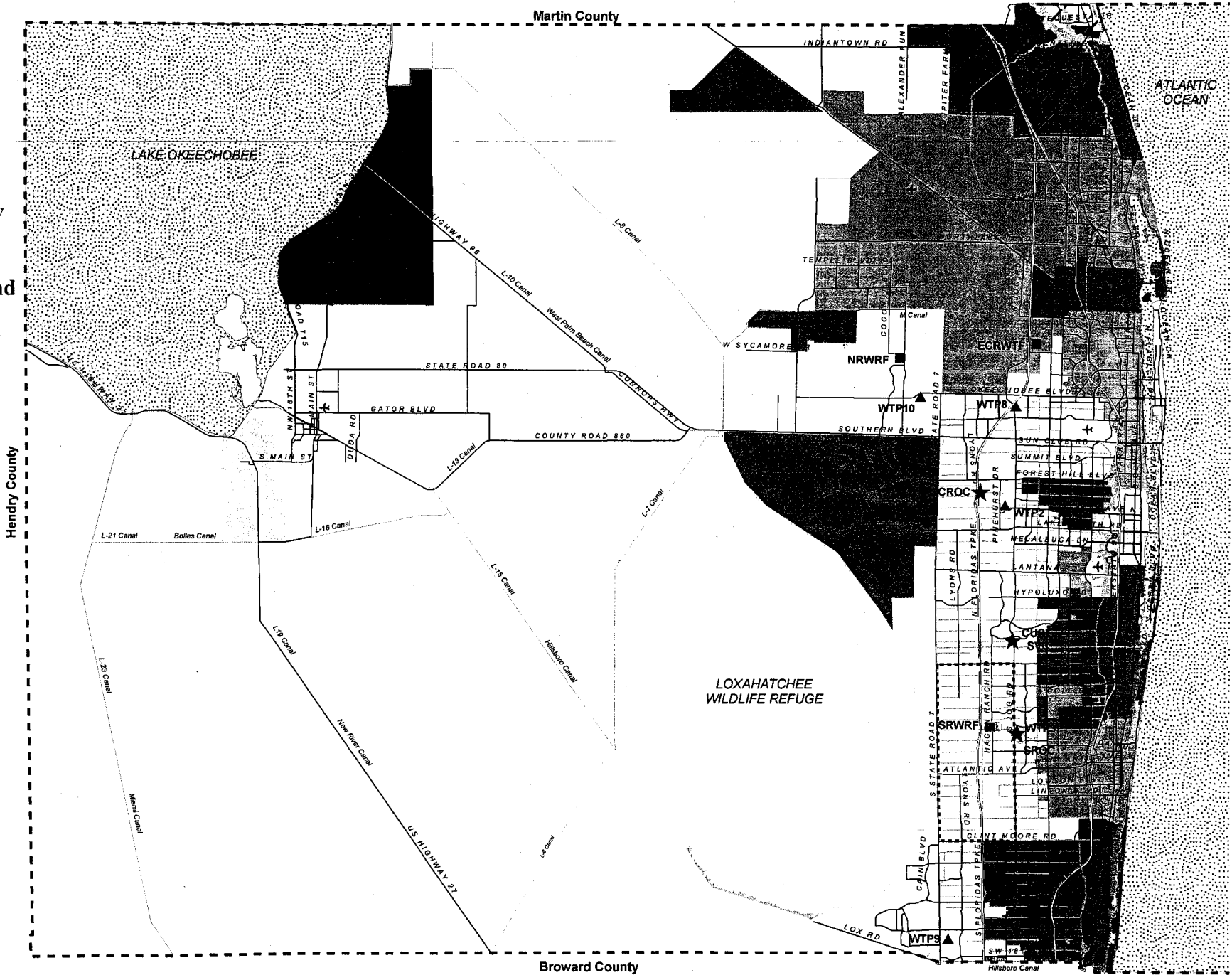
**This summary is not to be used as a basis for payment.**



Palm Beach County  
Water Utilities  
Department  
Service Area (SA) and  
Major Facilities

Attachment 1

- Legend
- P.B.C.W.U.D. SA
  - Mandatory Reclaimed SA
  - Palm Beach County Limits
  - Administration
  - Water Reclamation Facility
  - Water Treatment Facility
  - Wetlands



CHANGE ORDER

PROJECT: BRP Utility Site

WATER UTILITIES DEPARTMENT

CHANGE ORDER NO.: 4 (Four)

PROJECT NO. : WUD 05-018

TO:

Hal Myrah

Widell, Inc.

5365 Stirling Rd.

Ft. Lauderdale, FL 33314

DOCUMENT NO. R2005-1893

CONTRACT DATE: September 27, 2005

NOTICE TO PROCEED: December 12, 2005

BUDGET LINE FUND: 4011-721-W006-6543(50%)

4011-721-W006-6547(50%)

DISTRICT 6

You are directed to make the following changes in this contract:

- |   |                     |
|---|---------------------|
| 1. Provide all labor, material and equipment necessary to add additional forcemain and watermain, deletions and revisions to the driveway and site lighting and fencing, and related changes as completely described in RFP No. 4 dated January 21, 2006 and modified by Mathews Consulting Memorandum dated August 18, 2006, for and increase in Contract amount of \$107,988, and an increase in Contract time of 30 calendar days. | \$107,988.00        |
| 2. Provide all labor, material and equipment necessary to extend the bridge crane in the pump station, as completely described in RFP 05, for the increase in Contract amount of \$15,789.00, and no change in Contract time.   | \$15,789.00         |
| <b>Total</b>  | <b>\$123,777.00</b> |

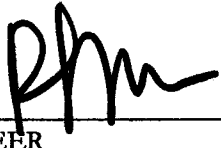
NOT VALID UNTIL SIGNED BY BOTH OWNER AND ENGINEER. SIGNATURE OF THE CONTRACTOR INDICATES HIS CONTRACT HERewith INCLUDING ANY ADJUSTMENT IN THE CONTRACT SUM OR CONTRACT TIME, AND NO ADDITIONAL COST OR TIME INDICATED HEREIN WILL BE RELATED TO THIS CHANGE

The Original Contract Sum was .....	<u>\$8,895,000.00</u>
Net Change by previous Change Orders .....	<u>\$(1,842,902.35)</u>
The Contract Sum prior to this Change Order was .....	<u>\$7,052,097.65</u>
The Contract Sum will be increased by this Change Order.....	<u>\$123,777.00</u>
The New Contract Sum including this Change Order will be .....	<u>\$7,175,874.65</u>
The Contract Time will be increased by 30 days .....	<u>30 Days</u>
The Date of Substantial Completion (S.C.) including this Change Order: .....	<u>Dec. 22, 2006</u>
The Date of Final Completion .....	<u>Jan. 21, 2007</u>

Execution of this change order acknowledges final settlement of, and releases, all claims for costs and time associated, directly or indirectly, with the above stated modification(s), including all claims for cumulative delays or disruptions resulting from, caused by, or incident to such modification(s), and including any claim that the above stated modification(s) constitutes, in whole or part, a cardinal change to the contract.

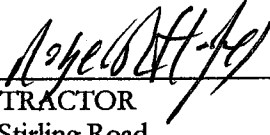
BRP UTILITY SITE  
PROJECT NO. : WUD 05-018  
DISTRICT = 6  
Contract No. R2005-1893  
CHANGE ORDER NO.: 4 (Four)

Mathews Consulting, Inc.

BY   
ENGINEER  
1475 Centrepark Blvd. Ste. 250  
Address  
West Palm Beach, FL 33401


DATE 8-31-06  
APPROVED AS TO FORM AND  
LEGAL SUFFICIENCY:

Widell, Inc.

BY   
CONTRACTOR  
5365 Stirling Road  
Address  
Ft. Lauderdale, Fl, 33314

DATE 8/29/06

Palm Beach County Board of  
County Commissioners

BY   
Chairman, Tony Masilotti, chairman  
P.O Box 16097  
Address  
West Palm Beach, FL 33416

DATE \_\_\_\_\_  
ATTEST:  
Sharon R. Bock,  
Clerk and Comptroller

\_\_\_\_\_  
County Attorney

(Corporate Seal)

\_\_\_\_\_  
Deputy Clerk

## CHANGE ORDER CATEGORIZATION

QUANTITY OVERRUNS/ UNDER-RUNS

REQUEST BY ANOTHER  
AGENCY/OUTSIDE

### A. REIMBURSIBLE

### B. NON-REIMBURSIBLE

BRP UTILITY SITE  
PROJECT NO. : WUD 05-018  
DISTRICT = 6  
Contract No. R2005-1893  
CHANGE ORDER NO.: 4 (Four)

SCOPE OF WORK

1. Provide all labor, material and equipment necessary to add additional forcemain and watermain, deletions and revisions to the driveway and site lighting and fencing, and related changes as completely described in RFP 04 dated January 21, 2006 and modified by Mathews Consulting Memorandum dated August 18, 2006, for and increase in Contract amount of \$107,988.00, and an increase in Contract time of 30 calendar days.

These change items are necessary for two reasons related to the judicial decision to limit the development of the Scripps/Mecca Farms project: a.) University Drive will not be built, so the full length of the driveway to it will not be needed. b.) the 20" forcemain and the 24" watermain was originally to be constructed by the Scripps Infrastructure Team under the Construction Management at Risk Contract with Catalfumo. Since that Contract was suspended, the pipelines need to be connected to the existing lines at the southeast property corner under this Contract for the system to function.

2. Provide all labor, material and equipment necessary to extend the bridge crane in the pump station, as completely described in RFP 05, for the increase in Contract amount of \$15,789.00, and no change in Contract time.

This change item is necessary because of a design error. The bridge crane, used for maintenance of the water pumps, covered only the three original pumps. The rails were too short to serve the fourth (future) pump.

August 24, 2005

Hal Myrah  
Widell, Inc.  
5365 Stirling Rd.  
Ft. Lauderdale, FL 33314

*Palm Beach County Project No. WUD 05-018*  
*Mecca Farms Pump Site*  
**Subject: RFP 04 Agreement**

Dear Mr. Myrah:

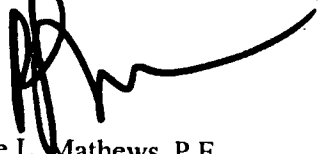
This letter confirms our agreement regarding your proposal for RFP 04 as modified by our memorandum dated August 18, 2006. We have agreed to the cost and time issues as follows:

1. We agree with your 8/24/06 price proposal of \$107,988.00
2. As negotiated, we agreed to extend the contract completion date by 30 calendar days.

We will prepare the Change Order accordingly and send it to you for signatures as soon as possible.

Sincerely,

**MATHEWS CONSULTING, INC.**



Rene L. Mathews, P.E.  
Project Manager

*Enclosure*

c: File- 1338/Corr/Widdel  
PBC- Joe Tanacredi



**WIDELL, INC.**

(954) 587-0520

FAX 587-6653

State Certified

Sewage Treatment Works  
Water Treatment Works  
Substructure Construction*Engineering Construction*5365 STIRLING ROAD  
FT LAUDERDALE, FL 33314

August 22, 2006

**Via Fax and U. S. Mail**Mathews Consulting Inc.  
1475 Centrepark Blvd, Ste 250  
West Palm Beach, FL 33401

Attn: Rene L. Mathews, P.E.

Re: Palm Beach County, Florida  
Water Utilities Department  
BRP Utility Site  
Project WUD 05-018, WI Job 680  
Road Alignment and Piping Modifications  
**Mathews RFP #4, WI Proposal No. 06B**

Dear Ms. Mathews:

✓ We hereby submit our revised Proposal to perform additional pipe work as requested by your letter dated August 18, 2006 and revised drawings issued on May 1, 2006.

1 Lot Additional Piping Work..... Lump Sum..... \$124,295.00

Please review the attached breakdown. Please prepare a Change Order in the amount of \$124,295.00 with sixty (60) additional days of Contract Time. This Proposal is valid for thirty (30) days. We reserve all of our rights and request appropriate consideration concerning unknown time and cost relative to the impact on our original contract work. If you have any questions, please do not hesitate to call.

Very truly yours,

\$107,988

WIDELL, INC

*Hal H. Myrah*Hal H. Myrah  
Project Manager**Attachment**cc: File w/attachments  
Field Chrono  
Acctg: SRP

REF/jlg.Proposal680 06B

SAFETY PAYS

AN EQUAL OPPORTUNITY EMPLOYER

FINAL REVISED PROPOSAL

DESCRIPTION	QTY	UNIT	1. MATERIAL		2. S.C. 3. E.R.		5. LABOR	
			U.P.	PRICE	NO.	4. OTHER	U.P.	AMOUNT
Balance Forward				\$13,307.00		(\$10,610.00)		\$3,428.00
<u>Wastewater Force Main</u>								
24" MJ 45 Bends - On Site	2	EA		\$0			(144)	(\$288)
24" MJ Cap	1	EA	777	\$777.00			72	\$72
24" MJ 90 Bend - On Site	1	EA		\$0			(144)	(\$144)
24" x 20" MJ Rdcr	1	EA	1,575	\$1,575			144	\$144
20" C-905 DR 25 PVC Pipe- Green	140	LF	43	\$6,020			36	\$5,040
20" PVC Bell Restraints	6	EA	508	\$3,048			72	\$432
20" TR FLEX Class 50 DIP	18	LF	103	\$1,854			144	\$2,592
20" Tyton Joint Class 50 DIP	18	LF	82	\$1,476			144	\$2,592
20" PVC Uniflange	1	EA	507	\$507			72	\$72
20" MJ Gate Valve - No Gear	1	EA	7,365	\$7,365			144	\$144
Valve Box	1	EA	140	\$140			24	\$24
20" MJ 22-1/2 Bends	2	EA		\$0			144	\$288
20" DIP Megalugs - New Pipe	5	EA	244	\$1,220			48	\$240
Track Hoe	1.5	WK	2,000	\$3,000				\$0
Loader	1.5	WK	1,500	\$2,250				\$0
Compactor	1.5	WK	300	\$450				\$0
Testing	1	LS	250	\$250			576	\$576
<u>Water Main</u>								
30" MJ BFV	1	EA	7,250	\$7,250			144	\$144
30" MJ Megalugs	2	EA	504	\$1,008			36	\$72
24" TR FLEX Class 250 DIP - C/L	126	LF	95	\$11,970			36	\$4,536
24" MJ BFV	1	EA	2,845	\$2,845			144	\$144
Valve Box	1	EA	140	\$140			24	\$24
24" MJ 22-1/2 Bend	2	EA	1,546	\$3,092			144	\$288
24" DIP Megalugs - New Pipe	4	EA	297	\$1,188			56	\$224
Track Hoe	1.5	WK	2,000	\$3,000				\$0
Loader	1.5	WK	1,500	\$2,250				\$0
Compactor	1.5	WK	300	\$450				\$0
Disinfection & Bacteriological Testing	1	LS	500	\$500			1,152	\$1,152
Overhead Door Color Change	1	LS		\$0		\$1,330		
Electrical Credit	1	LS		\$0		(\$14,015)		
Subtotal				\$76,932.00		(\$23,295.00)		21,796.00
Mat. taxes & labor burden			6%	4,615.92			50%	\$10,898.00
Material & Equipment				\$81,547.92		(\$23,295.00)		\$32,694.00
Subcontract				← 23,295.00				
Labor				← 32,694.00				
Overhead on Subcontract			5%	-1,164.75				
Overhead on Labor & Material			15%	17,136.29				
Subtotal				106,918.46				
Bond			1%	1069.18				
Total				\$107,987.64				

FINAL REVISED PROPOSAL

WI Request for Proposal #6A				BRP UTILITY SITE PALM BEACH COUNTY Widell, Inc. Job 680				8/22/2006	
				Page 1 of 2					
	DESCRIPTION	QTY	UNIT	1. MATERIAL		2. S.C. 3. E.R.		5. LABOR	
				U.P.	PRICE	NO.	4. OTHER	U.P.	AMOUNT
	<b>CHANGE ORDER No. 2</b>								
1	<u>Roadway Revisions</u> Delete Pavement	972	SY			2	(\$19,440.00)		
2	Add Header Curb	40	LF			2	\$1,400.00		
3	Add Bollards	3	EA	12	\$210.00	3	Auger \$200.00	48	144.00
	Encasement Concrete	1	CY	3	\$110.00			96	96.00
	Fill Concrete	1/2	CY	6	\$55.00			36	18.00
	Bollard Paint	1	LS			2	\$100.00		
4	Survey Crew	32	HRS			2	\$2,880.00		
5	Dewatering					2	\$3,200.00		
	Sockdrain for Piping on Site	140	LF						
	8" Centrifical Pump w/ Hose	2	WKS	1,400	\$2,800.00			336	672.00
	Fuel	336	Gal.	3	\$1,008.00				
	Well Point System (ARV Vaults)	80	LF						
	Jet Pump w/ Hose	1	EA		800.00				
	Well Point Punch	1	EA		200.00				
	Install & Remove Points	32	EA	30	\$860.00			18	576.00
	Small Crane	2	Days	800	\$1,200.00				
	8" Centrifical Pump w/ Hose	2	WKS	1,400	\$2,800.00			336	672.00
	Fuel	336	Gal.	3	\$1,008.00				
6	<u>ARV Vaults</u>								
	ARV Manholes	2	EA	1,600	\$3,200.00			768	1,536.00
	Crane	2	Days	800	\$1,600.00				
	57 Stone	1	LS	400	\$400.00			50	50.00
	2" ARVs	2	EA	1,104	\$2,208.00			96	192.00
	2" x 24" SS Tapping Saddle	1	EA	360	\$360.00			48	48.00
	2" x 20" SS Tapping Saddle	1	EA	320	\$320.00			48	48.00
	2" Taps	2	EA	80	\$160.00			192	384.00
	2" Gate Valve & Nipples	2	EA	100	\$200.00			48	96.00
	Brick & Grout	1	LS	240	\$240.00			384	384.00
7	<u>2" Blowoff</u>								
	Concrete Thrust Block	1	EA	100	\$100.00			96	96.00
	2" PVC Piping	1	LS	40	\$40.00			48	48.00
	2" Nipple & Cap	1	LS	20	\$20.00			24	24.00
	Valve Box	1	EA	140	\$140.00			24	24.00
	Concrete Collar	1	EA	100	\$100.00			96	96.00
8	<u>Silt Fence</u>	350	LF			2	\$1,050.00		
	<b>Subtotals</b>				\$20,239.00		(\$10,610.00)		\$5,204.00

WI Request for Proposal #6A

BRP UTILITY SITE  
PALM BEACH COUNTY  
Widell, Inc. Job 680

Page2 of 2

	DESCRIPTION	QTY	UNIT	1. MATERIAL		2. S.C. 3. E.R.		5. LABOR	
				U.P.	PRICE	NO.	4. OTHER	U.P.	AMOUNT
9	Wastewater Force Main				\$20,239.00		(\$10,610.00)		\$8,204.00
	24" MJ 45 Bends - On Site	2	EA		\$0				
	24" MJ Cap	1	EA	777	\$777.00			(144)	(\$288)
	24" MJ 90 Bend - On Site	1	EA		\$0			72	\$72
	24" x 20" MJ Rdcr	1	EA	1,575	\$1,575			(144)	(\$144)
	20" C-905 DR 25 PVC Pipe- Green	140	LF	43	\$6,020			144	\$144
	20" PVC Bell Restraints	8	EA	508	\$3,048			36	\$5,040
	20" TR FLEX Class 50 DIP	18	LF	103	\$1,854			72	\$432
	20" Tyton Joint Class 50 DIP	18	LF	82	\$1,476			144	\$2,592
	20" PVC Uniflange	1	EA	507	\$507			144	\$2,592
	20" MJ Gate Valve - No Gear	1	EA	7,385	\$7,365			72	\$72
	Valve Box	1	EA	140	\$140			144	\$144
	20" MJ 22-1/2 Bends	2	EA		\$0			24	\$24
	20" DIP Megalugs - New Pipe	5	EA	244	\$1,220			144	\$288
	Track Hoe	2	WK	2,000	\$4,000			48	\$240
	Loader	2	WK	1,500	\$3,000				\$0
	Compactor	2	WK	300	\$600				\$0
	Testing	1	LS	250	\$250			576	\$576
10	Water Main								
	30" MJ BFV	1	EA	7,250	\$7,250			144	\$144
	30" MJ Megalugs	2	EA	504	\$1,008			36	\$72
	24" TR FLEX Class 250 DIP - C/L	126	LF	95	\$11,970			36	\$4,536
	24" MJ BFV	1	EA	2,845	\$2,845			144	\$144
	Valve Box	1	EA	140	\$140			24	\$24
	24" MJ 22-1/2 Bend	2	EA	1,546	\$3,092			144	\$288
	24" DIP Megalugs - New Pipe	4	EA	297	\$1,188			56	\$224
	Track Hoe	2	WK	2,000	\$4,000				\$0
	Loader	2	WK	1,500	\$3,000				\$0
	Compactor	2	WK	300	\$600				\$0
	Disinfection & Bacteriological Testing	1	LS	500	\$500			1,152	\$1,152
11	Overhead Door Color Change	1	LS		\$0		\$1,330		
12	Electrical Credit	1	LS		\$0		(\$14,015)		
	Subtotal				\$87,664.00		(\$23,295.00)		23,572.00
	Mat. taxes & labor burden			6%	5,259.84			50%	\$11,786.00
	Material & Equipment				\$92,923.84		(\$23,295.00)		\$35,358.00
	Subcontract				23,295.00				
	Labor				35,358.00				
	Overhead on Subcontract			5%	-1,164.75				
	Overhead on Labor & Material			15%	19,242.28				
	Subtotal				123,064.37				
	Bond			1%	1230.64				
	Total				\$124,295.01				

**TO:** Hal Myrah  
**FROM:** Rene Mathews  
**DATE:** August 18, 2006  
**SUBJECT:** Request for Proposal #4 Revised  
Road Alignment and Piping Modifications

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*Prepare a revised quote based on deleting the directional drill from the original scope. Widell's scope will begin with the installation of the 22.5° bends on the 24" WM and on the 20" FM on the north end of the HDPE installed by directional drill by others. The drilled pipe will be left exposed above grade with caps to be removed and lowered to grade. Widell's scope will include the two north side gate valves and the ARV in manhole on the 20" FM. See mark up of drawings M-5B and M-5C. The remainder of the scope issued in January remains unchanged.*

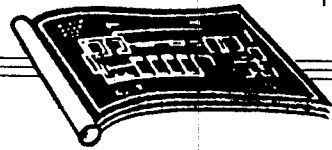
Please provide a proposal to make the following changes to the BRP Utility Site project as detailed on attached revised Drawings C-3, C-5, C-6, C-8, C-9, C-10, C-12, M-2, M-5, M-5A, **M-5B**, **M-5C**, M-6, M-7, M-8, M-9, M-10, E-4, E-7, E-8, E-9, E-10, E-11, and E-12 and new Specification 02345 (attached):

1. Shift site entrance drive approximately 20-feet to the west.
2. Shift motorized gate and fencing (including electrical components) and add three (3) new pipe bollards.
3. Connect site driveway to existing dirt access road. Delete approx. 400 feet of road and paving. Relocate Site Entrance Sign (including lighting for sign).
4. Shift the watermain and forcemain piping approx. 20-feet to the west as shown on the attached drawings.
5. Install approx. 300 feet of 20-inch forcemain and 24-inch watermain piping, valves and appurtenances from Utility Site southeast property corner south to southeast corner of Mecca Farms. ~~Approx. 100 feet of the piping shall be installed by means of Horizontal direction drill methods (refer to attached Spec. 02345).~~

6. Shift FPL and Bellsouth conduits & wire into the south side of the site to avoid conflict with new piping locations. Delete the FPL switch cabinet on Dwg. E-4.
7. Delete FPL conduit from entrance gate north to Proposed University Drive.
8. Delete site lighting from new access road north to Proposed University Drive.
9. Landscaping modifications shall be submitted at a later date.

Thank you.

c: Joe Tanecredi, PBCWUD  
Bruce Wundrack, MC  
Rebecca Travis, MC  
Lillian Reyes, EDA  
File



State Certified

Sewage Treatment Works  
Water Treatment Works  
Substructure Construction

*Engineering Construction*

5365 STIRLING ROAD  
FT. LAUDERDALE, FL 33314

August 17, 2006

**Via Fax and U. S. Mail**

Mathews Consulting Inc.  
1475 Centrepark Blvd, Ste 250  
West Palm Beach, FL 33401

Attn: Rene L. Mathews, P.E.

Re: Palm Beach County, Florida  
Water Utilities Department  
BRP Utility Site  
Project WUD 05-018, WI Job 680  
**WI Proposal No. 08B**

Dear Ms. Mathews:

As requested, we are revising our proposal to perform the crane rail modifications dated June 27, 2006, as follows:

1 Lot	Crane Rail Modifications .....	Lump Sum .....	\$15,789.47
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Please review the attached breakdown. We request a Change Order in the amount of \$15,259.41 with forty-five (45) additional days of Contract Time. If you have any questions, please do not hesitate to contact us.

Very truly yours,

WIDELL, INC.

Hal H. Myrah  
Project Manager

cc: File w/attachments  
Field  
Chrono

REH/jlg:Proposal680 08B

SAFETY PAYS

AN EQUAL OPPORTUNITY EMPLOYER



Crane Rail Modifications		PN-X		BRP UTILITY SITE				8/16/2006	
				PALM BEACH COUNTY					
				Widell, Inc. Job 680					
				Page				1 of 1	
DESCRIPTION		QTY	UNIT	1. MATERIAL		2. S.C. 3. E.R.		5. LABOR	
				U.P.	PRICE	NO.	4. OTHER	U.P.	AMOUNT
1	Proposal from MHS - Mat. w/ Tax	1	LS			2	\$4,936.42	✓	
	Proposal from MHS - Labor w/ Tax	1	LS			2	\$8,840.40	✓	
2	Add # 6 Reinforcing Steel	6	EA	20	\$120.00			30	180.00
3	Add Corbels	2	EA	150	\$300.00			100	200.00
Subtotal					\$420.00		\$13,776.82		✓ 380.00
Mat. taxes & labor burden				6%	25.20			50%	\$190.00
Material					445.20		13776.82		✓ \$570.00
Subcont., Equip. Rental or Other					13,776.82				
Labor					570.00				
Subtotal					14,792.02				
Overhead on Subcontract				5%	688.84				
Overhead on Labor & Material				15%	152.28				
Subtotal					15,633.14				
Bond				1%	156.33				
TOTAL					\$15,789.47				
Page Totals									

# Material Handling Systems Inc.

MHS

Quote RF 1041-06  
June 17, 2006

Attn: Hal Myrah

SUBJECT: BRP Crane modification

NOTE: We are now a SBA 8(a) certified Small Disadvantaged Minority business. We still have the same ownership and will continue to provide the best prices and service but can now help you meet the Minority participation goals.

1. Add extra runways sized for 23' support spacing (existing runways are sized for 19')
2. Add runway rail.
3. Supply embed plates
4. Paint per specification.
5. Add additional electrification
6. Install and test.
7. Pick up beams and deliver.

Your net cost for the above-listed including installation is:

Material \$4,657.00  
Labor \$8,340.00

+ 6% Tax = 493.00  
= \$8,833.00

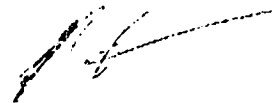
for MHS

Price does not include modification to the building structure.

Should you desire further information or clarification of this quotation please do not hesitate to call on us.

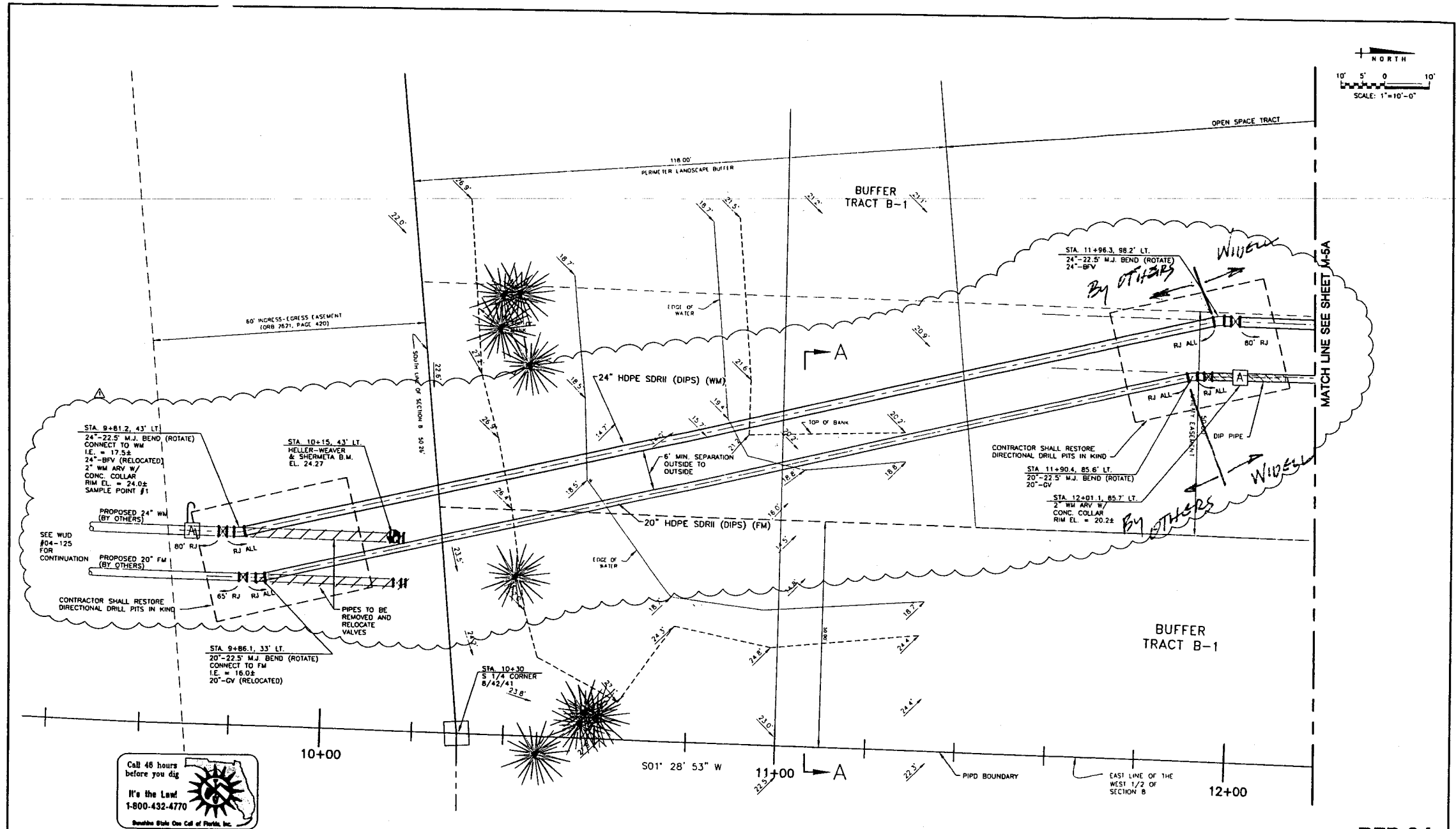
Very truly yours,

MATERIAL HANDLING SYSTEMS INC.



Ronald Fontes  
President

720 SW 4TH CT Dania FL 33004 • (954) 921-1171 • Fax (954) 921-7117  
TOLL FREE 1 888 4 A HOIST 1 888 424-6478



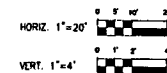
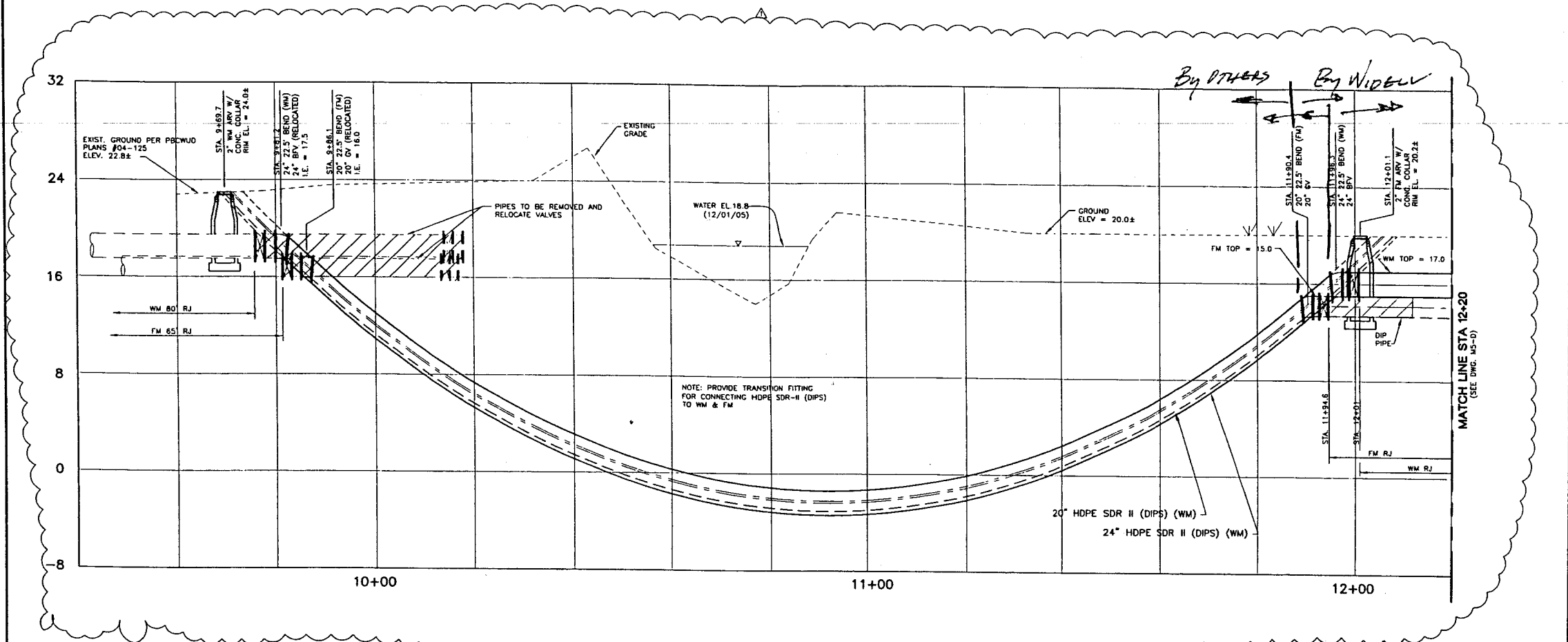
NO.	DATE	ISSUED FOR	APPROVED BY	DESIGNED:	R.L.M.	ENGINEER NO.:	1282	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE	DATE: JANUARY, 2006
1	4/27/06	RFP No. 4	G.T.D.	DRAWN:	T.A.F.	CLIENT	WUD		SHEET: 53 of 126
				CHECKED:		PROJECT NO.:	05-018		DRAWING: M-5B
				APPROVED:		CAD REF.:	1282M05B	SOUTHEAST CORNER	

S:\Projects\PBC\1282\Cadd\RFP No. 04\1282M05A,B.dwg, 5/24/2006 2:26:36 PM, HP Color LaserJet 5500 PCL 6

**MATHEWS CONSULTING INC.**  
Civil and Environmental Engineers  
1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401  
TEL (561) 748-7961 LICENSE NO. EB-0007929

VERIFY SCALE  
1" = 10'  
BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

**RFP 04**



NO.	DATE	ISSUED FOR	APRVD BY
1	4/27/06	RFP No. 4	G.T.D.

DESIGNED: R.L.M.  
 DRAWN: T.A.F.  
 CHECKED: \_\_\_\_\_  
 APPROVED: \_\_\_\_\_  
 RENE L. MATHEWS, P.E.  
 NO. 49298

**MATHEWS CONSULTING INC.**  
 Civil and Environmental Engineers  
 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401  
 TEL: (561) 478-7961 LICENSE NO. E 6-0007929

VERIFY SCALE  
 1"  
 BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

ENGINEER NO.: 1282  
 CLIENT: WUD  
 PROJECT NO.: 05-018  
 CAD REF.: 1282M05C.D

PALM BEACH COUNTY  
 WATER UTILITIES DEPARTMENT  
 BRP UTILITY SITE  
 SOUTHEAST CORNER -- PROFILE

DATE: APRIL, 2006  
 SHEET: 53 of 126  
 DRAWING: M-5C

**TO:** Hal Myrah  
**FROM:** Rene Mathews  
**DATE:** January 31, 2006  
**SUBJECT:** Request for Proposal #4  
Road Alignment and Piping Modifications

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Please provide a proposal to make the following changes to the BRP Utility Site project as detailed on attached revised Drawings C-3, C-5, C-6, C-8, C-9, C-10, C-12, M-2, M-5, M-5A, M-5B, M-5C, M-6, M-7, M-8, M-9, M-10, E-4, E-7, E-8, E-9, E-10, E-11, and E-12 and new Specification 02345 (attached):

1. Shift site entrance drive approximately 20-feet to the west.
2. Shift motorized gate and fencing (including electrical components) and add three (3) new pipe bollards.
3. Connect site driveway to existing dirt access road. Delete approx. 400 feet of road and paving. Relocate Site Entrance Sign (including lighting for sign).
4. Shift the watermain and forcemain piping approx. 20-feet to the west as shown on the attached drawings.
5. Install approx. 300 feet of 20-inch forcemain and 24-inch watermain piping, valves and appurtenances from Utility Site southeast property corner south to southeast corner of Mecca Farms. Approx. 100 feet of the piping shall be installed by means of Horizontal direction drill methods (refer to attached Spec. 02345).
6. Shift FPL and Bellsouth conduits & wire into the south side of the site to avoid conflict with new piping locations. Delete the FPL switch cabinet on Dwg. E-4.
7. Delete FPL conduit from entrance gate north to Proposed University Drive.
8. Delete site lighting from new access road north to Proposed University Drive.

9. Landscaping modifications shall be submitted at a later date.

Thank you.

c: Joe Tanecredi, PBCWUD  
Bruce Wundrack, MC  
Rebecca Travis, MC  
Lillian Reyes, EDA  
File

## **SECTION 02345**

### **HORIZONTAL DIRECTIONAL DRILLING AND PIPE INSTALLATION**

#### **PART 1 - GENERAL**

##### **1.01 SECTION INCLUDES**

- A. This section covers the work necessary for the furnishing and installation of pipe by horizontal directional drilling as described herein and as shown on the Drawings.
- B. The directional drill shall be accomplished by first drilling a pilot hole to design standards, then enlarging (reaming) the pilot hole to accommodate the pull back of high density polyethelene (HDPE) pipe and then pulling the HDPE pipe through the enlarged hole. Pushing of the pipe is not permitted.
- C. Coordination of any additional soil borings as required for certain subsurface conditions are the responsibility of the Contractor. Refer to Section 02010 Subsurface Exploration.
- D. The Contractor shall not construct any entrance or exit pits in locations that would impact wetlands, above ground structures, or heavily landscaped areas. The Contractor shall obtain the approval of the Owner prior to locating any entrance or exit pits.
- E. All drilling operations shall be performed in the presence of the Owner or Engineer. The Contractor is responsible for notifying these parties a minimum of 3 days in advance of drilling operations.
- F. Notify County (48 hours) prior to any tie-ins to existing utilities.

##### **1.02 SUBMITTALS**

- A. Shop Drawings:
  - 1. Description of how pilot hole drill will be steered and of how position and inclination of bore head will be monitored.
  - 2. Installation plan, including detailed plan and profile of bore plotted at scale no smaller than 1 inch equals 20 feet horizontal and 1 inch equals 2 feet vertical.
  - 3. Record drawing plan and profile showing "as constructed" position of pipeline.

4. Information on the pipe and fittings including, but not limited to, catalog and Engineering information, hydrostatic test reports, sustained pressure reports, and burst strength test reports.
5. Chemical composition of the drilling fluids.

### 1.03 QUALITY ASSURANCE

- A. Provide key personnel with at least 5 years experience in directional drilling and associated pipe installation, including pipe at least as large as 24 inches in diameter. Key personnel include field supervisor and operators of directional drilling equipment, including position monitoring and steering equipment.

## **PART 2 - PRODUCTS**

### 2.01 GENERAL

- A. The directional drilling equipment shall consist of a directional drilling rig of sufficient capacity to perform the bore and the pull back, a drilling fluid mixing, delivery and recovery system, a magnetic guidance system or walk over system to accurately guide boring operations, a vacuum truck of sufficient capacity to handle the drilling fluid volume, a mud motor and hole opener for any rock conditions, and experienced personnel to operate the system.

### 2.02 DRILLING RIG

- A. The drilling rig shall consist of a hydraulically powered system to rotate, push, and pull hollow drill pipe into the ground at a variable angle while delivering a pressurized fluid mixture to guidable drill head. The rig shall be anchored to the ground to withstand the pulling, pushing, and rotating pressure required to complete the installation. The hydraulic power system shall be self contained with sufficient pressure and volume to power the drilling operations. Hydraulic system shall be free of leaks. Rig shall have a system to monitor and record maximum pull-back pressure during pull-back.

### 2.03 HDPE PIPE

- A. The pipe shall be extruded from a polyethylene compound which conforms to ASTM D1248 and which possesses the following properties:
  1. The polyethylene shall be obtained by polymerization of no less than 85 percent ethylene and no less than 95 percent of total olefins by weight.
  2. The polyethylene resin shall be classified as a Type III, Grade P34, Class C, Category 5 with a density of 0.955 g/cm<sup>3</sup> and have a minimum ASTM D3350 cell classification of 335434C and a designation of PE 3408 by the Plastic Pipe Institute.



3. Environmental Stress: Greater than 192 hours: Crack resistance. ASTM D1693 Condition C.
4. Minimum Hydrostatic: 1,600 psi. Design basis at 73.4° F, ASTM D2837.
5. The polyethylene compound shall be suitably protected against degradation by ultraviolet light by means of carbon black, well dispersed by precompounding in a concentration of not less than 2 percent.
6. The maximum allowable hoop stress shall be 800 psi at 73.4° F.
7. The pipe manufacturer shall be listed with the Plastic Pipe Institute as meeting the recipe and mixing requirements of the resin manufacturer for the resin used to manufacture the pipe for this project.
8. Pipe sizes shall conform to ASTM F714.
9. The pipe shall conform to the following schedule:

<u>Nominal Pipe Size</u>	<u>Piping System and/or Location</u>	<u>SDR</u>	<u>PSI</u>
20 Inches (DIPS)	As Shown on the Drawings	11	160
24 Inches (DIPS)	As Shown on the Drawings	11	160

10. The pipe shall contain no recycled compound except that generated in the manufacturer's own plant from resin of the same specification from the same raw material. The pipe shall be homogenous throughout and free of visible cracks, holes, foreign inclusions, or other deleterious defects, and shall be identical in color, density, melt index, and other physical properties. The resin used for manufacture of the pipe shall be manufactured by the pipe manufacturer, this maintaining complete control of the pipe quality.
  11. The Engineer may request, as part of the quality control records submittal, certification that the pipe produced is represented by the quality assurance testing. Additionally, test results from manufacturer's testing or random sampling by the Engineer that do not meet appropriate ASTM Standards or manufacturer's representations may be cause for rejection of pipe represented by the testing. These tests may include density and flow rate measurements from samples taken as selected locations within the pipe wall and thermal stability determinations according to ASTM D3350, 10.1.9.
- B. Pipe Design: The pipe shall be designed according to the ISO modified formula ASTM D3035. The design pressure rating shall be expressed in terms of the static working pressure in psi for water at 73.4° F according to ASTM D2837. The minimum allowable pressure rating for the pipe shall be 160 psi except as noted on the Drawings.

- C. Pipe Manufacturer: Refer to Section 01015 for acceptable pipe Manufacturers. HDPE piping for sewer service suitable for direction drilling, sewer green color identifier, water blue color identifier.

#### 2.04 FITTINGS

- A. Polyethylene fittings shall be manufactured by molding or fabrication from polyethylene pipe using thermal butt-fusion. All polyethylene fittings shall have the same or higher pressure rating, inside diameter, and composition, and same manufacturer as the pipe.
- B. Fabricated pipe fittings shall be joined to the polyethylene pipe by using flanges, butt-fused to the pipe unless otherwise specified. Backup flange rings, bolts, and nuts shall be Type 304 stainless steel. Gaskets shall be reinforced black rubber, asbestos-rubber compound, Buna-N, red rubber, or other material as approved by the Engineer and shall be made to fit the joint.
- C. Polyethylene pipe fittings shall meet the following minimum dimensional requirements:

<u>Nominal Pipe Size (Inches)</u>	<u>*SDR</u>	<u>PSI</u>
20	11 (DIPS)	160
24	11 (DIPS)	160

\*Standard Dimensional Ratio – Wall Thickness

#### 2.05 JOINTS

- A. Thermal butt-fusion, except where connecting to dissimilar pipe.

#### 2.06 FLANGES

- A. If required, flanges shall be ASTM A 240, Type 304 stainless steel backing flanges with 125-pound, ANSI B16.1 standard drilling. Flanges shall be supplied by the pipe manufacturer, complete. Flanges shall be complete with one-piece, molded polyethylene stub ends. Flanged connections shall have the same pressure rating as the pipe or greater.

#### 2.07 GASKETS

- A. Flat ring, full-face, 1/8-inch ethylene propylene rubber (EPR).

## 2.08 BOLTING

- A. Type 304 stainless steel, ASTM A193, Grade B8 hex head bolts; and ASTM A194, Grade 8 hex head nuts. Bolts shall be fabricated in accordance with ANSI B18.2 and provided with washers of the same material as bolts.

## PART 3 - EXECUTION

### 3.01 GENERAL

- A. Comply with provisions of the Florida Department of Environmental Protection and the Palm Beach County Engineering Department Permits.
- B. Provide freshwater, free of hazardous or toxic substances, for drilling and grouting purposes.

### 3.02 PREPARATIONS

- A. Located positions of entry and exit pits, establish elevation and horizontal datum for bore head control, and lay out pipe assembly area.
- B. Lay out and assemble pipe in manner that does not obstruct adjacent roads, and commercial or residential activities adjacent to construction easements. Elevate pipe over streets and driveways or provide gently sloping ramps as necessary to avoid disruption to traffic.
- C. Pipe shall be stored on level ground free of sharp objects which could damage pipe. Pipe shall not be dragged over sharp and cutting objects and hooks shall not be used. Ropes, fabric, slings, straps or rollers should be used when handling pipes.

### 3.03 DRILLING PILOT HOLE

- A. Drill pilot hole from entrance point to exit point following vertical and horizontal alignment shown.
- B. Provide an experienced operator to conduct a guided wireline or walkover while the pilot hole is advanced and plot actual horizontal and vertical alignment of pilot hole continuously. Provide Engineer with position or inclination of pilot bore upon request. Provide a full computer generated mapping of the bore log to the Engineer.
- C. Contractor shall provide and maintain instrumentation to accurately locate the pilot hole, measure drill string axial and torsional loads, and measure drilling fluid discharge rate and pressure. These readings shall be provided to the Engineer upon request.

- D. The pilot hole shall be drilled along the path shown on the DRAWINGS. However, right-of-way and utility conflicts take precedence over the alignment as shown on the Drawings.
- E. Alignment Requirements:
  - 1. Pilot hole exit point shall be within 1 foot horizontally of exit point location shown.
  - 2. Throughout its alignment, pilot hole shall be within 1 foot of horizontal alignment shown and no shallower than vertical alignment shown.
  - 3. Alignment shall have no intermediate high points that might trap air in pipe after installation.
  - 4. Curvature of completed pilot hole shall not exceed that which after pipe installation will result in pipe wall stresses greater than 0.50 of yield stress.
- F. Acceptance: If pilot hole alignment fails to conform to specified requirements, drill new pilot hole with alignment meeting specified requirements.

#### 3.04 REAMING PILOT HOLE AND PULLING PIPE

- A. The entire pull section shall be subjected to a 4-hour hydrostatic pretest prior to being installed in the hole. No leakage will be permitted during the pretest.
- B. Obtain Owner's approval to proceed before enlarging pilot hole and pulling pipe into position.
- C. While pulling pipe, enlarge pilot hole ahead of pipe to diameter sufficient for pulling pipe into position.
- D. While pulling pipe, handle pipe in manner that does not overstress pipe. Limit radius of curvature along length of pipe during installation to minimum radius as recommended by piping manufacturer. If pipe buckles or is otherwise damaged, remove damaged section and replace it with new pipe.
- E. Protect interior lining and exterior coating from damage.
- F. Pull pipe so that minimum of 10 feet of pipe is exposed at both ends of bore.

#### 3.05 CLEANING PIPE ENDS

- A. After pulling pipe, clean exposed ends for installation of fittings.

3.06 GROUTING

- A. Fill void around pipe with grout. Completely displace drilling mud and completely fill annular space between pipe and walls of borehole.

3.07 HANDLING AND DISPOSAL OF DRILLING MUD AND CUTTINGS

- A. Make adequate provisions for handling and containing muddy water, drilling mud, and cuttings during drilling operations. Do not discharge these contaminants into water ways.
- B. Construct mud pits at entry and exit points in manner that completely contains mud and prevents its escape.
- C. When onsite provisions for storing muddy water, drilling mud, or cuttings onsite are exceeded, haul contaminant away to suitable legal disposal site.
- D. Conduct directional drilling operation in such manner that drilling mud is not forced into areas when it might be objectionable.

3.08 JOINING PIPE SECTIONS

- A. Pipes shall be joined to one another, to the polyethylene fittings, and to the flange connections by means of thermal butt-fusion. Polyethylene pipe lengths, fittings, and flanged connection to be joined by thermal butt-fusion shall be of the same type, grade, and class of polyethylene compound and supplied from the same raw material supplier.
- B. Connection of the polyethylene pipe to dissimilar pipe shall be through transition connections provided by the HDPE supplier which shall consist of the following:
  - 1. A self restraining MJ adapter assembly kit that is butt-fused to the HDPE pipe.
  - 2. Adapter kit shall include a stainless steel insert to prevent deformation of the HDPE pipe end.
  - 3. Type 304 stainless steel bolts and nuts of sufficient length to show a minimum of three complete threads when the joint is made and tightened to the manufacturer's standard. Antigalling compound, as provided by the manufacturer, shall be applied before initial torquing of bolts. Retorque the nuts after 4 hours.
  - 4. Gaskets as specified shall be made by the manufacturer of the pipe to fit the joint.
- C. Butt-Fusion Joining: Butt-fusion of pipes and fittings shall be performed in accordance with ASTM D2657 and the pipe manufacturer's recommendations as to equipment and technique. The manufacturer's representative must be onsite to

certify the results are satisfactory. Depending on site conditions, butt-fusion joining shall be performed in or outside of the excavation at the Contractor's option.

- D. Fusion equipment shall be operated by technicians who have a minimum of 5 years experience and have been certified by a major public utility or by the fusion equipment suppliers.

### 3.09 END FITTINGS

- A. Fabricate and install flanged fittings at end of pipe for attachment of adjacent sections of pipe. Fitting angles shall correspond to field conditions and shall be as approved by Engineer. Coat and line fittings as specified for pipe.

### 3.10 PIPE LEAK TESTING – GENERAL

#### A. General

1. After pulling pipe into position and grouting, conduct pressure and leakage tests on newly installed pipelines and appurtenances, in accordance with reviewed testing plan.
2. Furnish necessary equipment and material and make taps in piping, as necessary for testing and as specified.
3. Engineer will observe the tests.
4. Provide 10 days advance written notice of start of testing to Engineer.
5. Test Pressures and Type of Test: 150 psi, hydrostatic.
6. Separately test pressure pipe sections that can be isolated by valves.
7. Test Records: Make records of each piping system during the test to document the following:
  - a. Date of test.
  - b. Description and identification of piping tested.
  - c. Test fluid.
  - d. Test pressure.
  - e. Remarks, including:
    - (1) Leaks (type, location).
    - (2) Repairs made on leaks.
  - f. Certification by Contractor and signed acknowledgement by Engineer that tests have been satisfactorily completed.

#### B. Testing New Pipe Connected to Existing Pipe:

1. Isolate new pipe.

2. Test Joint between new piping and existing piping by methods, approved by the Engineer, that do not place the entire existing system under test load.
- C. Buried Pressure Piping: Final Hydrostatic Acceptance Test: Conduct after pipe has been installed and trenches completely backfilled.
- D. Exposed Pressure Piping: Conduct tests after piping has been completely installed and inspected for proper installation including all supports, hangers, and anchors, but prior to installation of insulation.

### 3.11 HYDROSTATIC LEAK TESTING

#### A. Testing Equipment:

<u>Quantity</u>	<u>Equipment</u>
2	Graduated containers
2	Pressure gauge
As required	Suitable hose and suction pipe
1	Hydraulic force pump

#### B. Procedure:

1. Use water as the hydrostatic test fluid.
2. Provide clean test water of such quality to prevent corrosion of the materials in the piping system.
3. Maximum Velocity During Filling: 0.25 foot per second applied over full area of pipe.
4. Open vents at all high points of the piping system to purge air pockets while the piping system is filling.
5. Venting during filling may also be provided by loosening flanges with a minimum of four bolts or by the use of equipment vents.
6. Test all parts of the piping system at the test pressure specified.
7. Cover large sections of exposed piping with white clothes to minimize thermally induced pressure expansion.
8. Maintain hydrostatic test pressure continuously for 30 minutes minimum and for such additional time as necessary to conduct examinations for leakage.
9. Examine all joints and connections for leakage.
10. The piping system exclusive of possible localized instances at pump or valve packing, shall show no visual evidence of leaking.
11. Correct visible leakage and retest as required by Engineer.

12. Empty pipe of water prior to final cleaning or disinfection.

C. Buried Pressure Piping:

1. A limited amount of leakage is permissible according to the formula specified herein.
2. HDPE Pipe: Slowly fill test section with water and allow to stand for 24 hours under test pressure to allow for diametric expansion.
3. Expel all air from piping system prior to testing.
4. Apply and maintain specified test pressure with hydraulic force pump.
5. Valve off the piping system when test pressure is reached.
6. Maintain hydrostatic test pressure continuously for 2 hours minimum, reopening isolation valve only as necessary to restore test pressure.
7. Accurately measure amount of water required to maintain test pressure by placing pump suction in a barrel or similar device, or by metering.
8. No leakage of butt-fused joints is permitted. Maximum allowable allowance for expansion during 2-hour test period is 1 gallon per 100 feet of HDPE pipe.
9. Maximum allowable leakage for push-on joints in gallons per hour is

$$L = \frac{ND(P)^{1/2}}{7400}$$

L = Allowable leakage, in gallons per hour, which represents the quantity of water necessary to maintain the specified test pressure for the duration of the test period.

N = Number of joints test.

D = Nominal diameter of pipe, in inches.

P = Test pressure during the leakage test, in pounds per square inch.

Correct leakage greater than the allowable determined under this formula, and retest as required by Engineer.

### 3.12 FINAL CLEANING

A. Interim Cleaning:

1. Prevent accumulation of pipe cuttings, filings, gravel, cleaning rags, and other foreign material within piping sections during fabrication.
2. Examine piping to assure removal of these and other foreign objects prior to assembly and installation.



- B. Following assembly and testing, and prior to final acceptance, flush pipelines with water to remove accumulated construction debris and other foreign matter.
- C. Provide hoses, temporary pipes, ditches, and other items as required to properly dispose of flushing water without damage to adjacent properties.
- D. Minimum Flushing Velocity: 2.5 fps.

### 3.13 PIPE ABANDONMENT

- A. In event of failure to install pipe, retain possession of pipe and remove it from site. Completely fill borehole with grout or sand so as to prevent future settlement.
- B. If pipe cannot be withdrawn, cut pipe off at least 3 feet below ground surface and cap ends of pipe with blind flange. Fill annular space with grout.

END OF SECTION

SCHEDULE 1

PARTICIPATION BY M/WBE SUBCONTRACTORS

PROJECT NAME: BRP Utility Site PROJECT NO.: 05-018  
NAME OF PRIME CONTRACTOR: Widell Inc CHANGE ORDER NO. 4  
CONTACT PERSON: Hal Myrah PHONE NO: 561-791-7561 FAX NO. 561-791-7565  
BID DATE: 9/27/05 DEPARTMENT: WUD

Name, Address and Phone Number of M/WBE	Type of Work To Be Performed	Subcontract Amount			
		Black	Hispanic	Women	Other (Please Specify)
1.		_____	_____	_____	_____
2.		_____	_____	_____	_____
3.		_____	_____	_____	_____
4.		_____	_____	_____	_____
5.		_____	_____	_____	_____
6.		_____	_____	_____	_____
7.		_____	_____	_____	_____
8.		_____	_____	_____	_____
9.		_____	_____	_____	_____
10.		_____	_____	_____	_____
Totals		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

Original Contract Amount	<u>\$8,895,000.00</u>	Original Participation	<u>\$1,348,059.</u>	Percent Participation	<u>15.15</u>
Adjusted Contract Amount	<u>\$7,175,874.65</u>	Adjusted Participation	<u>\$1,348,059.</u>	Adjusted Percent Participation	<u>19.00</u>

M/WBE

## CHANGE ORDER ADDITIONS/DELETIONS SUMMARY

PROJECT: BRP Utility Site

APPROVAL LIMITS:

CONTRACTOR: Widell, Inc.

PROJECT NO.: 04-125

DEPARTMENT HEAD

CONTRACT REVIEW  
COMMITTEE

DEPARTMENT HEAD  
PLUS CONTRACT REVIEW  
COMMITTEE

RESOLUTION: R2005-1893

(Amount)

(Days)

(Amount)

(Days)

(Amount)

(Days)

DATE APPROVED: 9/25/05

INDIVIDUAL C.O.

\$10,000.00

40 Days

\$50,000.00

200 Days

\$60,000.00

240 Days

CONTRACT AMOUNT: 8,895,000.00

CUMMULATIVE C.O.

\$25,000.00

100 Days

\$75,000.00

300 Days

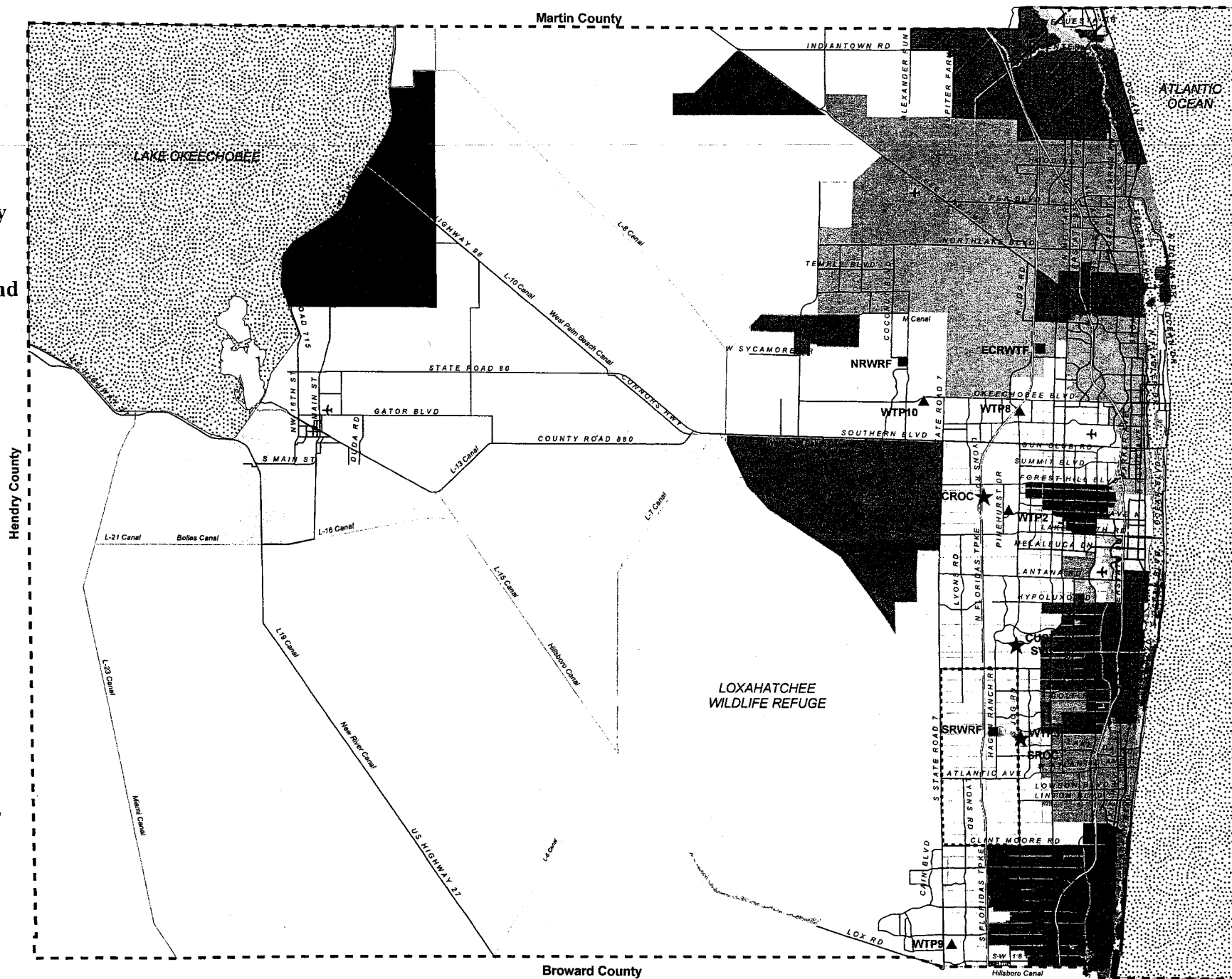
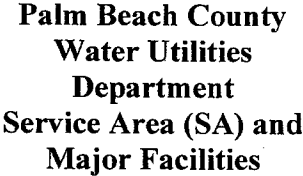
\$100,000.00

400 Days

C.O. #	DATE APPROVED	NET CHANGE	DEPARTMENT HEAD (ADDS PLUS DEDUCTS)		CONTRACT REVIEW COMMITTEE (ADDS PLUS DEDUCTS)		TOTAL DEPT. HEAD & CONTRACT REVIEW COMM. (ADDS PLUS DEDUCTS)		BOARD OF COUNTY COMMISSIONERS (ADDS PLUS DEDUCTS)		TOTALS
			AMOUNT	DAYS	AMOUNT	DAYS	AMOUNT	DAYS	AMOUNT	DAYS	
001	10/18/05	(2,039,397.92)	0	0	0	0	0	0	(2,039,397.92)	0	(2,039,397.92)
002	03/08/06	52,853.04	0	0	52,853.04	15	52,853.04	15	0	0	52,853.04
003	pending	143,642.53	0	0	0	0	0	0	143,642.53	0	143,642.53
004	pending	123,777.00	0	0	0	0	0	0	123,777.00	30	123,777.00
<b>TOTAL</b>			<b>\$(1,719,125.35)</b>	<b>0</b>	<b>52,853.04</b>	<b>15</b>	<b>52,853.04</b>	<b>15</b>	<b>(1,771,978.39)</b>	<b>30</b>	<b>(1,719,125.35)</b>

Notes:

1. Net Change reflects the net amount of additions plus deductions.
2. Adds plus Deducts reflects the net value of unrelated changes for use in determining the approval authority for the Change Order.
3. Liquidated Damages = \$3000 (Prior to Substantial Completion) and = \$ 1000 (After Substantial Completion).



**TO:** Hal Myrah  
**FROM:** Rene Mathews  
**DATE:** June 8, 2006  
**SUBJECT:** Request for Proposal #5  
Crane Rail Modifications

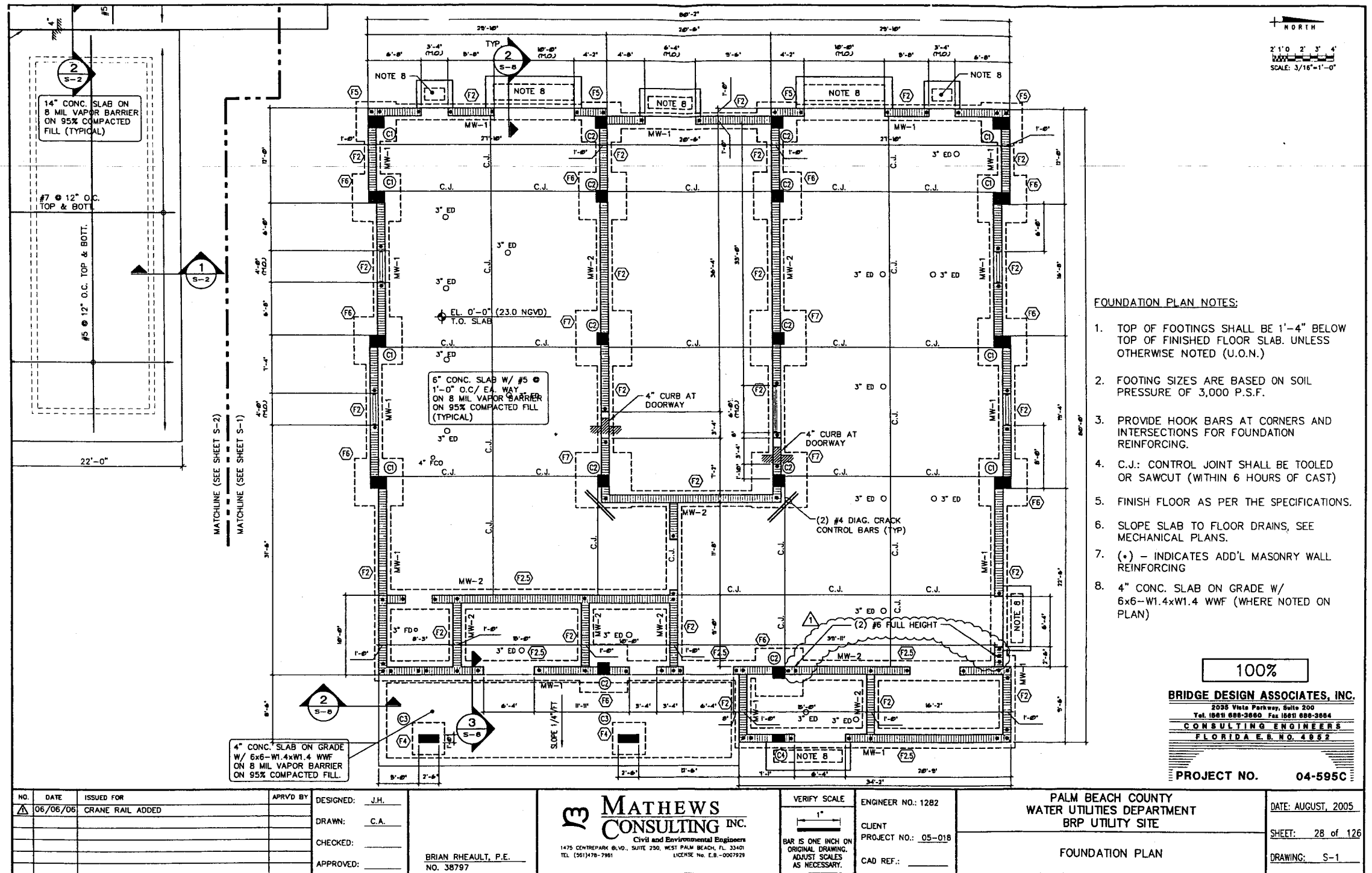
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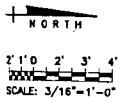
Please provide a proposal to make the following changes to the BRP Utility Site project as detailed on attached revised Drawings S-1, and S-3. The summary of the changes requested are:

1. Extend the crane support beam and crane rails to the full length of the pump room over the water pumps only. Additional sections can be added, rather than making them continuous.
2. Add #6 reinforcing bars to the east wall, in grouted cells.
3. Add corbels to columns at the east end.

Provide response by June 23, 2006, please.

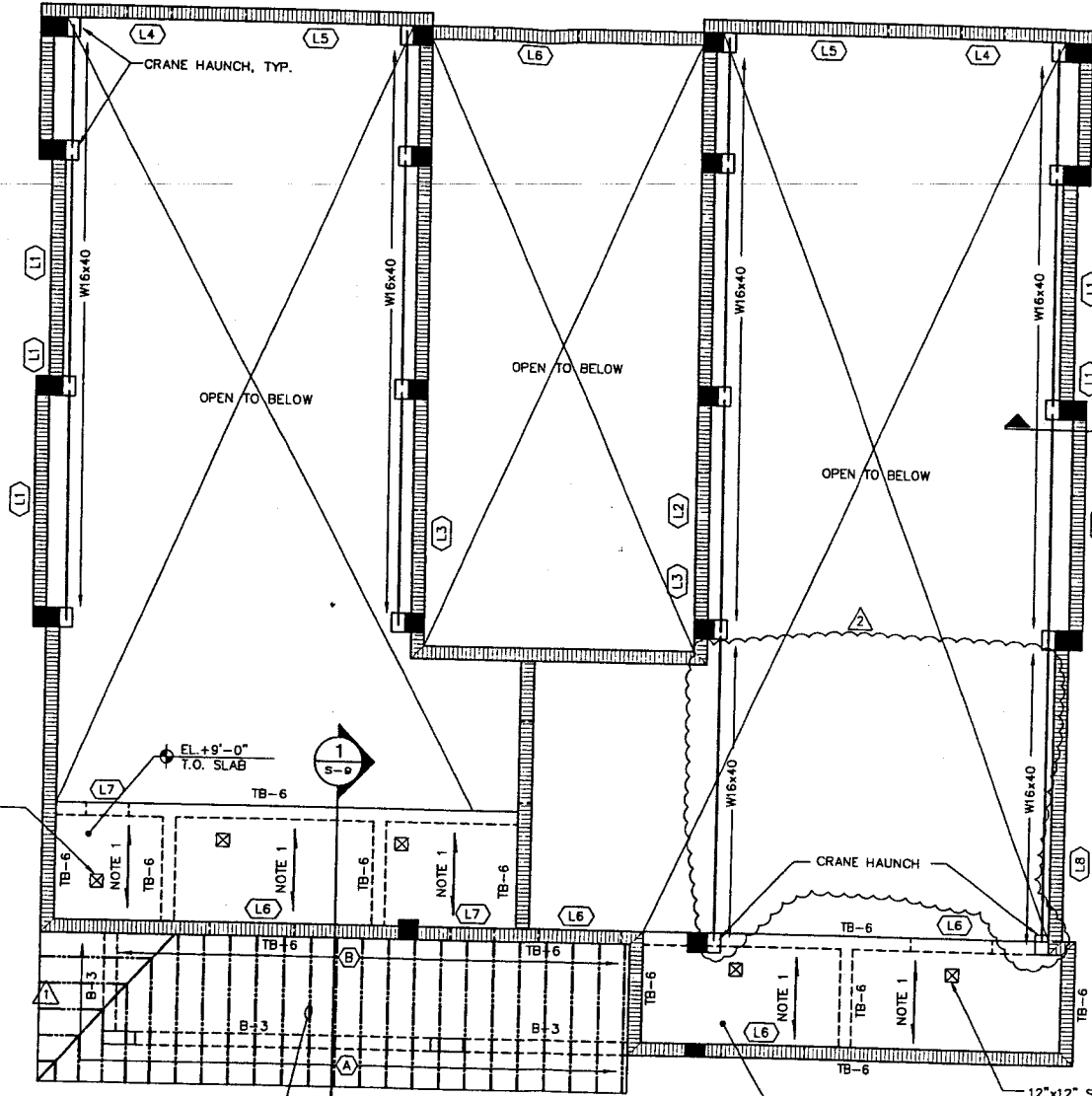
c: Joe Tanecredi, PBCWUD  
Bruce Wundrack, MC  
Brian Rheault, BDA  
File





**TRAVELING CRANE NOTES:**

1. 12'-0" CLEAR HEIGHT REQUIRED FROM TOP OF SLAB TO BOTTOM OF PROPOSED CRANE HOOK. ADJUST HAUNCH ELEVATION AS PER CRANE HOIST SHOP DRAWINGS.
2. MAXIMUM CRANE LOAD = 5 TONS



**MEZZANINE LOADS:**  
 LL = 200 PSF  
 DL = 20 PSF

**SUPERIMPOSED LOW ROOF LOADS:**  
 LL = 30 PSF  
 DL = 30 PSF

- MEZZANINE FRAMING NOTES:**
1. CONCRETE SLAB: 8" CONC. SLAB W/ #5 @ 1'-0" O.C. E.W.
  2. SEE SHEET S-5 FOR TRUSS CONNECTION (A) AND (B)

**"AS BID"**  
**BRIDGE DESIGN ASSOCIATES, INC.**  
 2036 Vista Parkway, Suite 200  
 Tel (561) 886-3660 Fax (561) 886-3884  
**CONSULTING ENGINEERS**  
 FLORIDA E.B.N.C. 4962  
**PROJECT NO. 04-595C**

NO.	DATE	ISSUED FOR	APRVD BY
09-30-05	09-30-05	"BUILDING PERMIT REVISION"	
06-06-06	06-06-06	CRANE RAIL ADDED	

DESIGNED: J.H.  
 DRAWN: C.A.  
 CHECKED:  
 APPROVED:

BRIAN RHEAULT, P.E.  
 NO. 38787

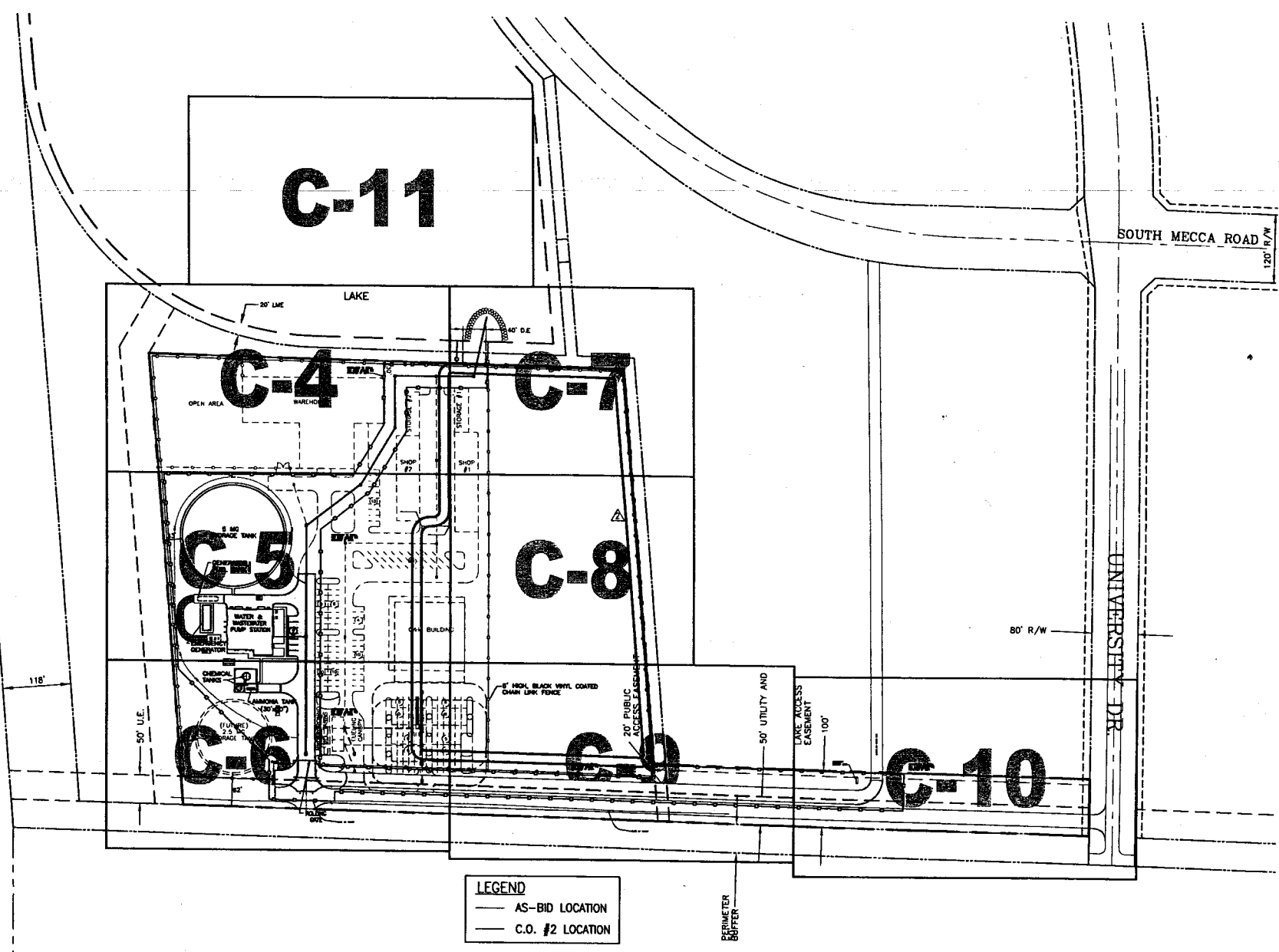
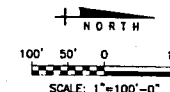
**MATHEWS CONSULTING INC.**  
 Civil and Environmental Engineers  
 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33411  
 TEL (561) 478-7981 LICENSE No. E.B.-0007929

VERIFY SCALE  
 1" = 1'-0"  
 BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

ENGINEER NO.: 1282  
 CLIENT PROJECT NO.: 05-018  
 CAD REF.:

PALM BEACH COUNTY  
 WATER UTILITIES DEPARTMENT  
 BRP UTILITY SITE  
 LOW ROOF, MEZZANINE  
 AND TRAVELING CRANE  
 FRAMING PLAN

DATE: AUGUST, 2005  
 SHEET: 30 of 126  
 DRAWING: S-3



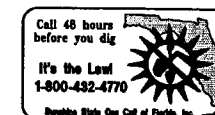
NOTE:  
1. SUITABLE FILL MATERIAL IS AVAILABLE TO THE CONTRACTOR WITHIN 2-MILE RADIUS OF THE SITE. CONTRACTOR SHALL COORDINATE FILL MATERIAL NEEDS WITH THE ENGINEER.

DRAINAGE STRUCTURE COORDINATES		
STRUCT. No.	N	E
S-1	906,518.364	894,339.829
S-2	906,518.284	894,125.836
S-3	906,518.284	893,927.370
S-4	906,613.231	893,856.247
S-5	906,674.731	893,755.076
S-6	906,674.731	893,664.076
S-7	906,745.731	893,664.076
S-8	906,810.088	893,664.076

# LEGEND:

- PHASE I IMPROVEMENTS
- FUTURE IMPROVEMENTS
- PROPOSED DRAINAGE INLET
- PROPOSED DRAINAGE M.H.
- PROPOSED FENCE
- EXISTING GRADE
- PROPOSED GRADE

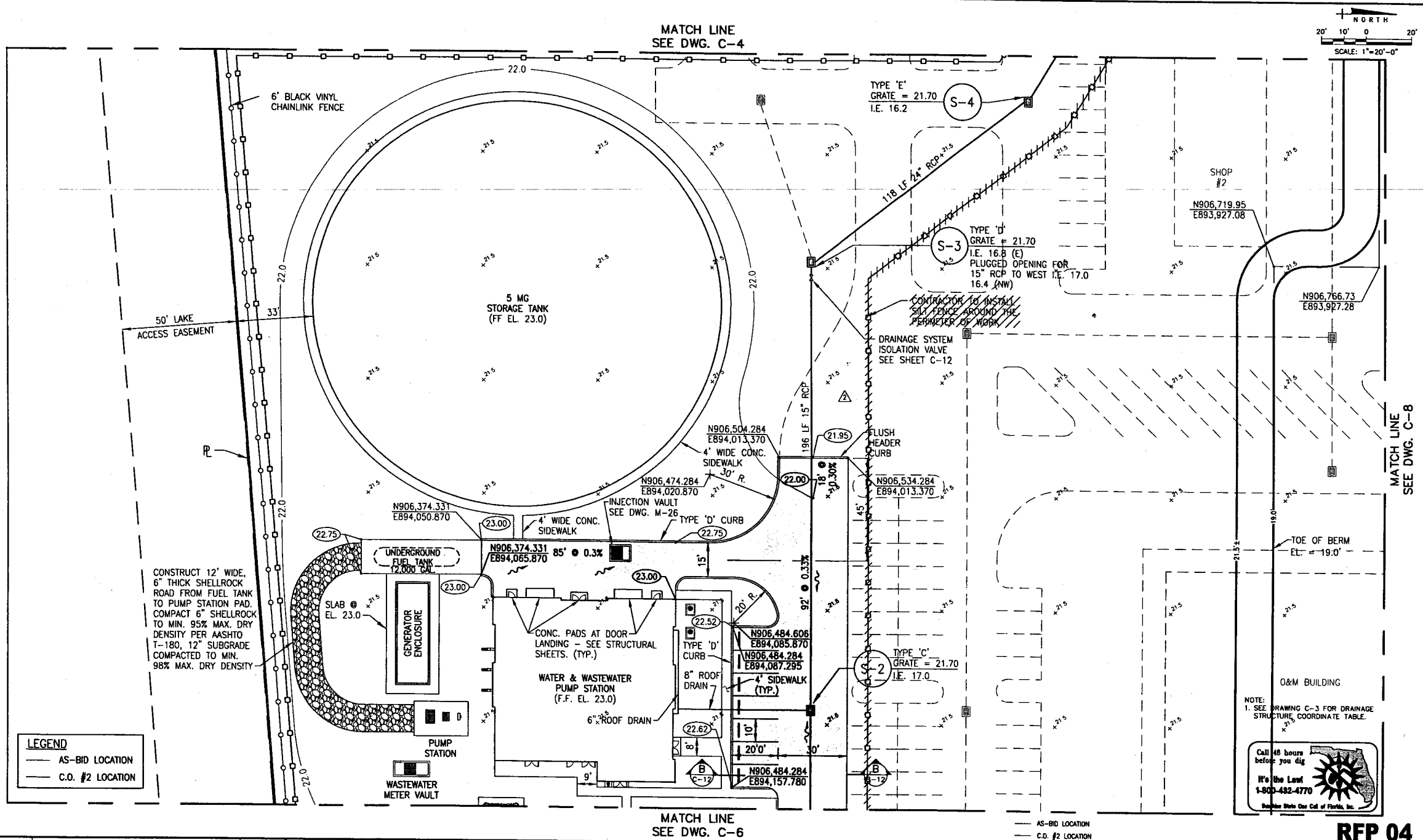
LEGEND	
<span style="border-bottom: 1px solid black; width: 50px; display: inline-block;"></span>	AS-BID LOCATION
<span style="border-bottom: 1px dashed black; width: 50px; display: inline-block;"></span>	C.O. #2 LOCATION



**RFP 04**

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED:	M.R.T.	<div> <p><b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401 TEL (561) 478-7961 LICENSE No. E.B. - 0007929</p> </div>	VERIFY SCALE	ENGINEER NO.: 1282	<div> <p>PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE</p> </div>		DATE: AUGUST, 2005
	12-1-05	C.O. No. 1	R.L.M.	DRAWN:	T.A.F.		1"	CLIENT WUD			SHEET: 6 of 126
	4-27-06	RFP No. 4	R.L.M.	CHECKED:			BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.	PROJECT NO.: 05-018			
				APPROVED:				CAD REF.: 1282C03	PAVING, GRADING & DRAINAGE KEY SHEET		DRAWING: C-3





NO.	DATE	ISSUED FOR	APR'D BY
12-1-05	C.O. No. 1		R.L.M.
4-27-06	RFP No. 4		R.L.M.

DESIGNED:	M.R.T.
DRAWN:	T.A.F.
CHECKED:	
APPROVED:	

M. REBECCA TRAVIS, P.E.  
NO. 40988

**MATHEWS CONSULTING INC.**  
Civil and Environmental Engineers  
1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL. 33401  
TEL (561) 747-7961 LICENSE NO. E.C. - 0007929

VERIFY SCALE

1" = 20'-0"  
BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

ENGINEER NO.: 1282

CLIENT: WUD  
PROJECT NO.: 05-018

CAD REF.: 1282C05

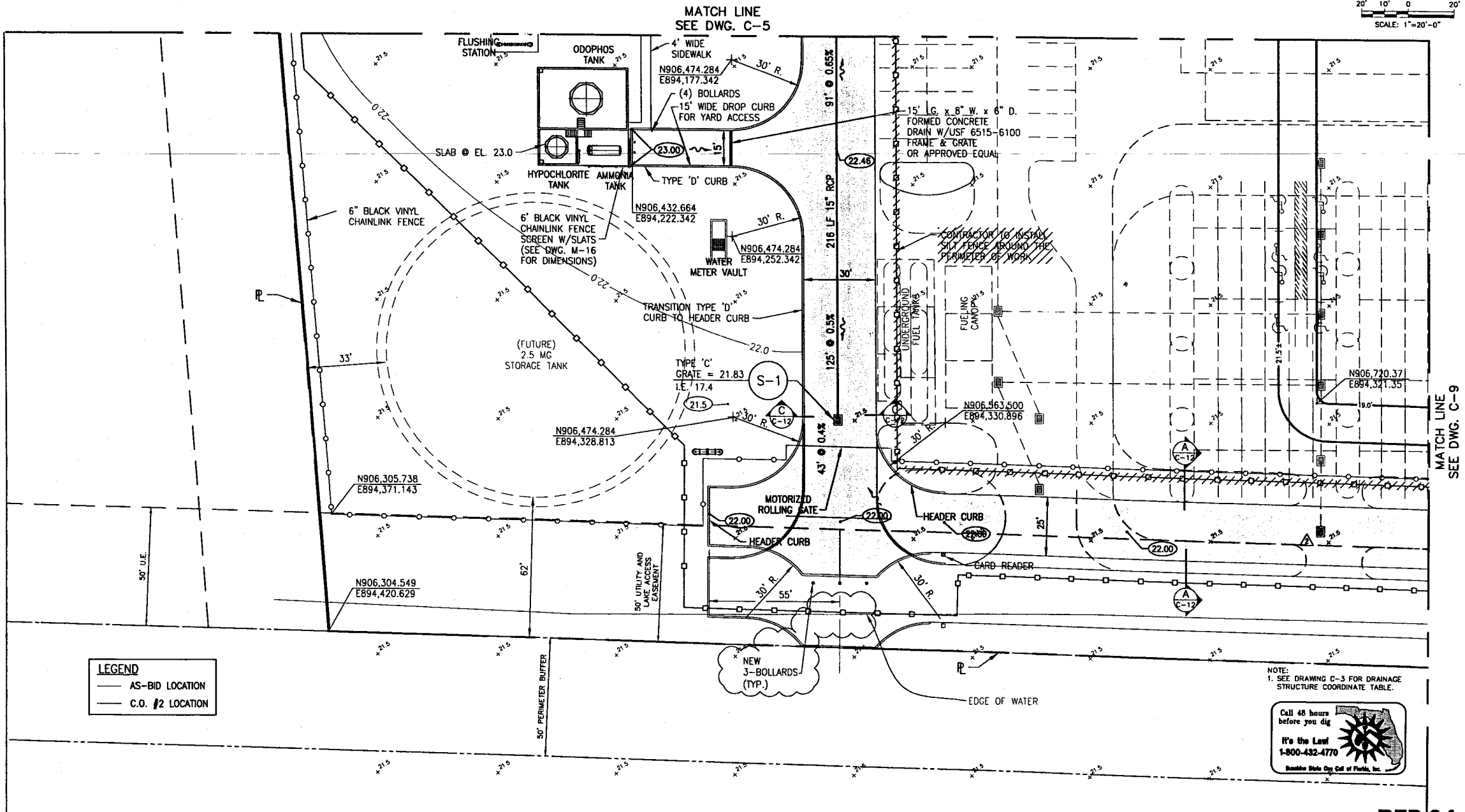
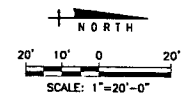
PALM BEACH COUNTY  
WATER UTILITIES DEPARTMENT  
BRP UTILITY SITE

PAVING, GRADING & DRAINAGE  
SHEET 2

DATE: AUGUST, 2005

SHEET: 8 of 126

DRAWING: C-5



**LEGEND**  
 --- AS-BID LOCATION  
 --- C.O. #2 LOCATION

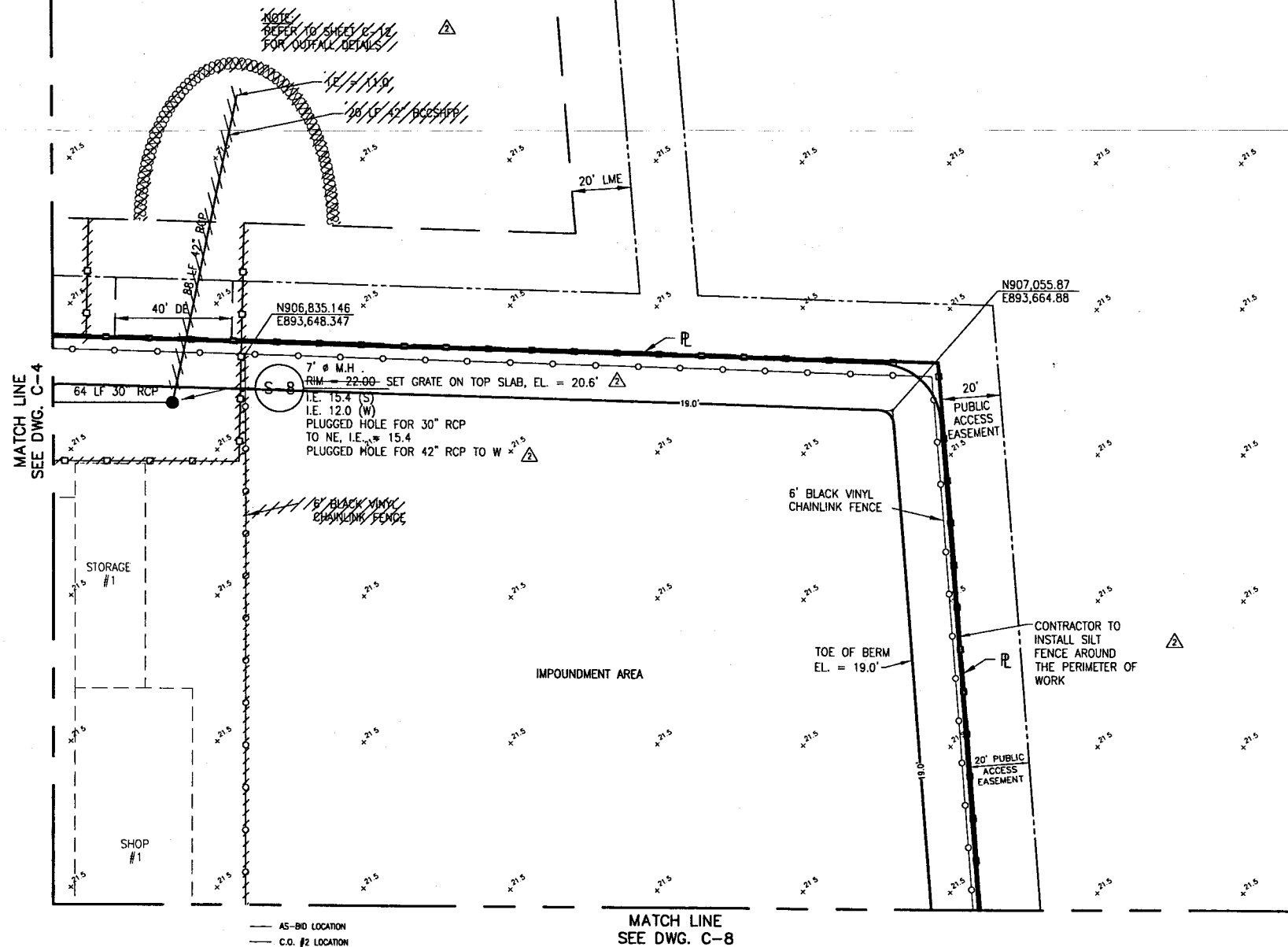
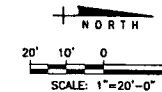
NOTE:  
 1. SEE DRAWING C-3 FOR DRAINAGE  
 STRUCTURE COORDINATE TABLE.

Call 48 hours  
 before you dig  
**It's the Law!**  
 1-800-432-4770  
 Sunshine State Call of Florida, Inc.

**RFP 04**

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED: M.R.T.	<b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401 TEL (561)478-7961 LICENSE NO. E.C. - 0007929	ENGINEER NO.: 1282	<b>PALM BEACH COUNTY</b> <b>WATER UTILITIES DEPARTMENT</b> <b>BRP UTILITY SITE</b>  <b>PAVING, GRADING &amp; DRAINAGE</b> <b>SHEET 3</b>	DATE: AUGUST, 2005
12-1-05	C.O. No. 1		RLM.	DRAWN: T.A.F.		CLIENT: WUD		SHEET: 9 of 126
4-27-06	RFP No. 4		RLM.	CHECKED:		PROJECT NO.: 05-018		DRAWING: C-6
				APPROVED:		CAD REF.: C06		
				M. REBECCA TRAVIS, P.E. NO. 40988				

REFER TO  
DWG. C-11



NOTE:  
1. SEE DRAWING C-3 FOR DRAINAGE  
STRUCTURE COORDINATE TABLE.



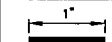
**RFP 04**

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED:	M.R.T.
12-1-05		C.O. No. 1	R.L.M.		
4-27-06		RFP No. 4	R.L.M.	DRAWN:	T.A.F.
				CHECKED:	
				APPROVED:	

M. REBECCA TRAVIS, P.E.  
NO. 40988

**MATHEWS CONSULTING INC.**  
Civil and Environmental Engineers  
1475 CENTREPARK BLVD., SUITE 250, WEST PALM BEACH, FL 33411  
TEL (561)478-7981 LICENSE No. E.B.-0007929

VERIFY SCALE



BAR IS ONE INCH ON  
ORIGINAL DRAWING.  
ADJUST SCALES  
AS NECESSARY.

ENGINEER NO.: 1282

CLIENT WJD  
PROJECT NO.: 05-018

CAD REF.: 1282C07

PALM BEACH COUNTY  
WATER UTILITIES DEPARTMENT  
BRP UTILITY SITE

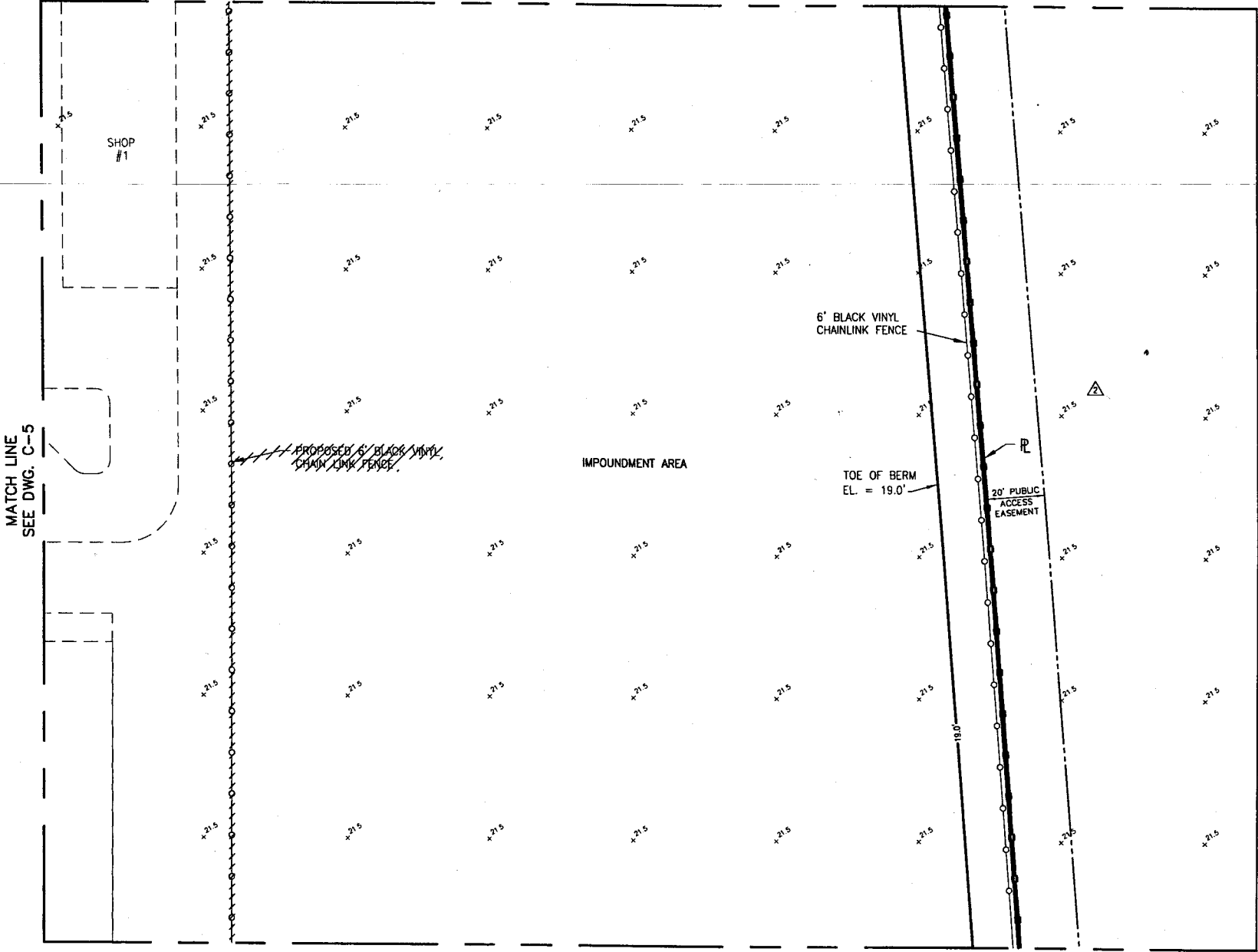
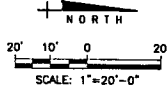
PAVING, GRADING & DRAINAGE  
SHEET 4

DATE: AUGUST, 2005

SHEET: 10 of 126

DRAWING: C-7

MATCH LINE  
SEE DWG. C-7



LEGEND	
—	AS-BID LOCATION
- - -	C.O. #2 LOCATION

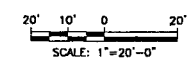
NOTE:  
1. SEE DRAWING C-3 FOR DRAINAGE  
STRUCTURE COORDINATE TABLE.

Call 48 hours  
before you dig  
  
It's the Law!  
1-800-432-4770  
Florida State One Call of Florida, Inc.

**RFP 04**

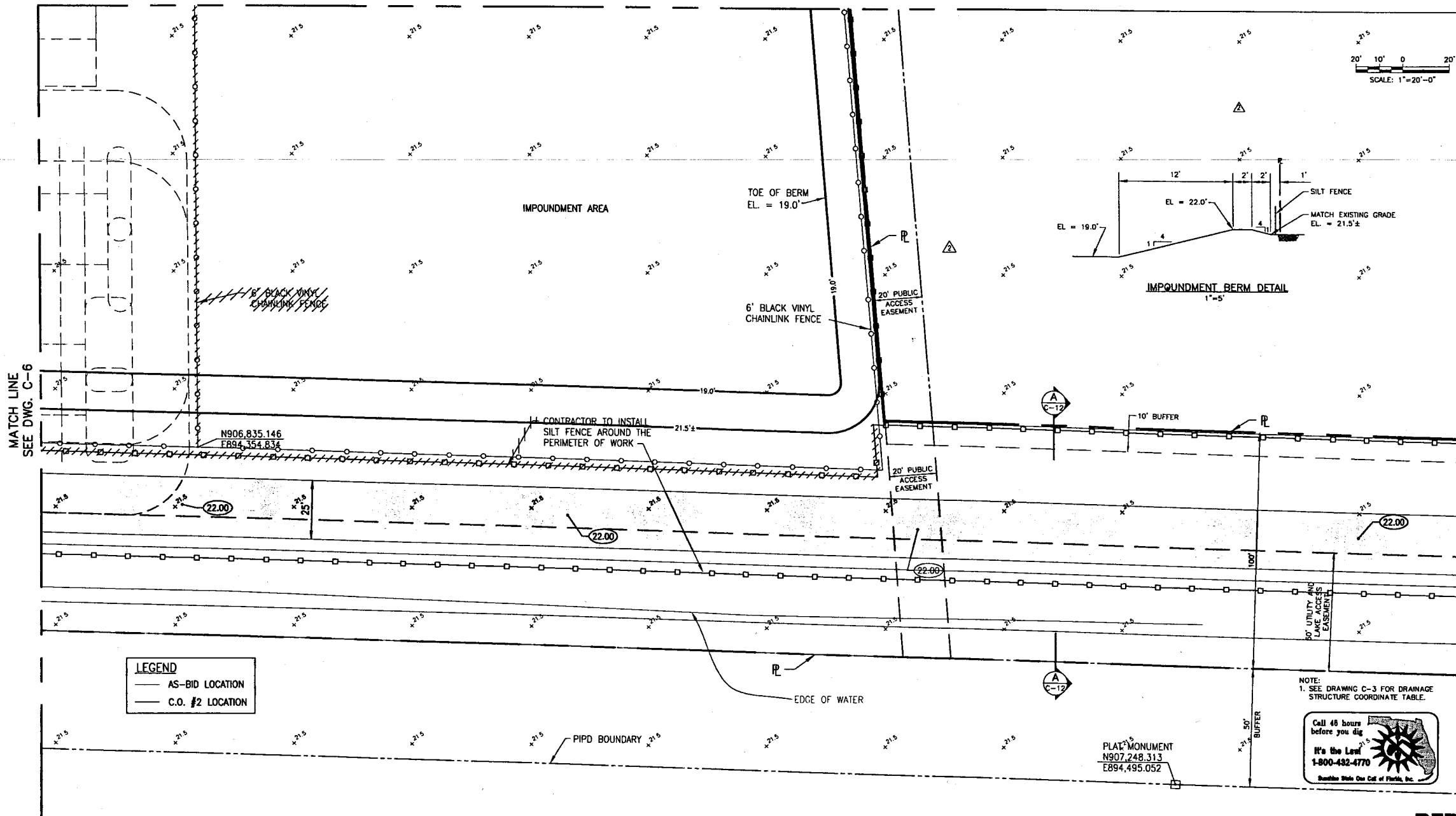
NO.		DATE	ISSUED FOR	APRVD. BY	DESIGNED: M.R.T.	<div><b>MATHEWS CONSULTING INC.</b> <small>Civil and Environmental Engineers</small> 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401 TEL (561) 478-7961 LICENSE No. E.B.-0007929</div>	<div>VERIFY SCALE  1" BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.</div>	ENGINEER NO.: 1282  CLIENT WUD PROJECT NO.: 05-018  CAD REF.: 1282C08	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE  PAVING, GRADING & DRAINAGE SHEET 5	DATE: AUGUST, 2005  SHEET: 11 of 126  DRAWING: C-8
12-1-05		C.O. No. 1		RLM.	DRAWN: T.A.F.					
4-27-06		RFP No. 4		RLM.	CHECKED:					
					APPROVED:					

MATCH LINE  
SEE DWG. C-8






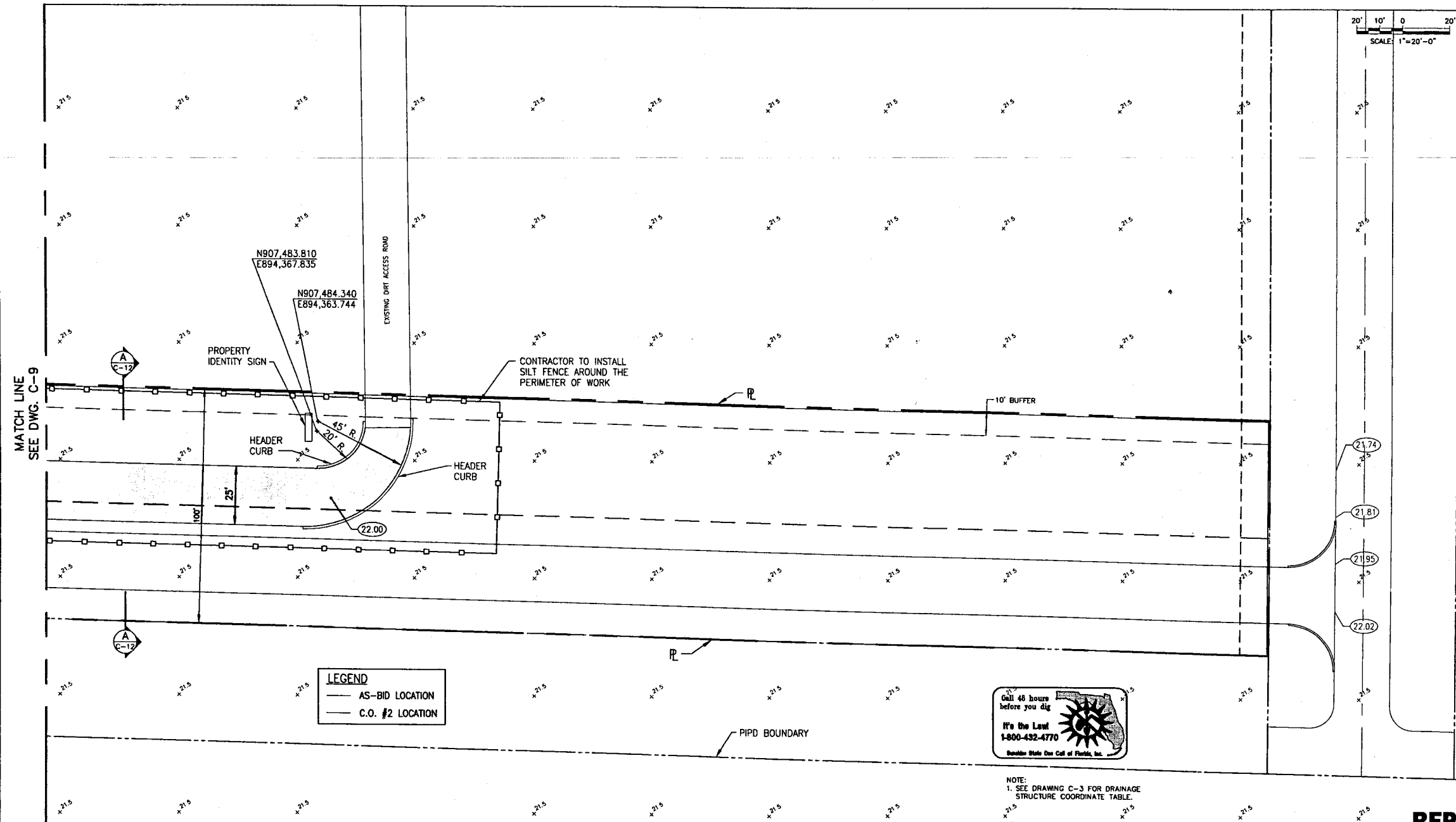
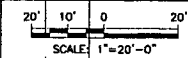
MATCH LINE  
SEE DWG. C-6

MATCH LINE  
SEE DWG. C-10



RFP 04

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED: M.R.T.	<div><div>MATHEWS CONSULTING INC. Civil and Environmental Engineers 1475 CENTREPARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401 TEL (561) 478-7961 LICENSE NO. E.C. - 0007829</div></div>	ENGINEER NO.: 1282	<div>PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE</div> <div>PAVING, GRADING &amp; DRAINAGE SHEET 6</div>	DATE: AUGUST, 2005
	12-1-05	C.O. No. 1	R.L.M.	DRAWN: T.A.F.		CLIENT WUD PROJECT NO.: 05-018		SHEET: 12 of 126
	4-27-06	RFP No. 4	R.L.M.	CHECKED:		CAD REF.: 1282C09		DRAWING: C-9
				APPROVED:				
				M.REBECCA TRAVIS, P.E. NO. 40988				




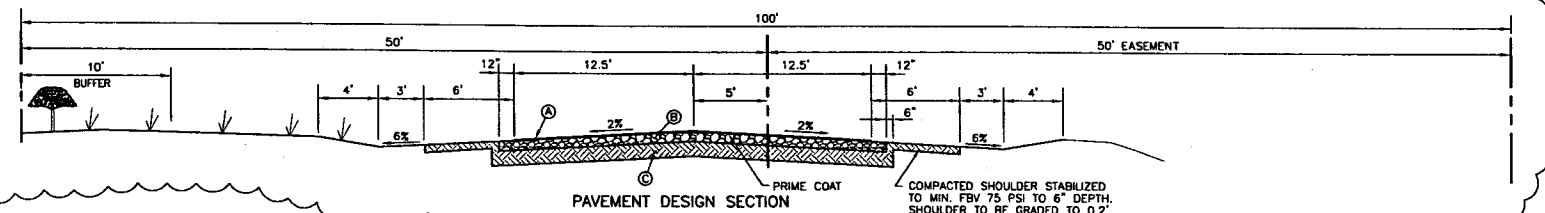
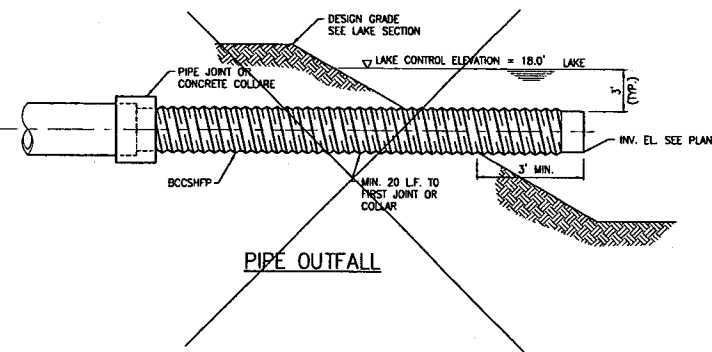
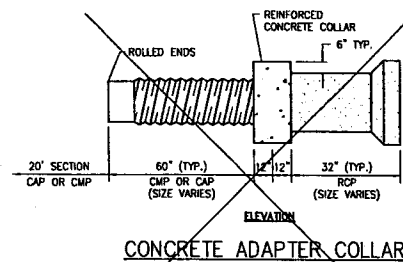
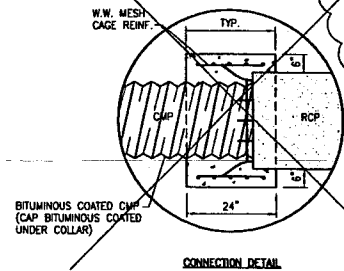
**LEGEND**  
— AS-BID LOCATION  
— C.O. #2 LOCATION



NOTE:  
1. SEE DRAWING C-3 FOR DRAINAGE  
STRUCTURE COORDINATE TABLE.

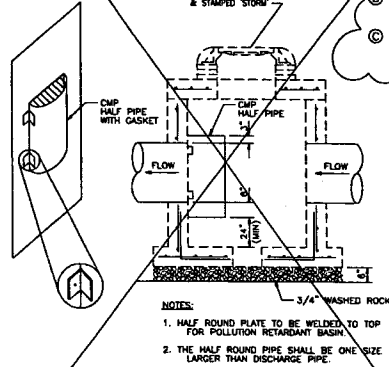
**RFP 04**

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED:	M.R.T.	 <b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401 TEL: (561) 478-7961 LICENSE NO. EB-0007929	VERIFY SCALE	ENGINEER NO.: 1282	<b>PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE</b>	DATE: JUNE, 2005
1	4-27-06	RFP No. 4	R.L.M.	DRAWN:	T.A.F.		BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.	CLIENT: WUD		SHEET: 13 of 126
2				CHECKED:			PROJECT NO.: 05-018			DRAWING: C-10
3				APPROVED:			CAD REF.: 1282C10			
4										
						M. REBECCA TRAVIS, P.E. NO. 40988			PAVING, GRADING & DRAINAGE SHEET 7	

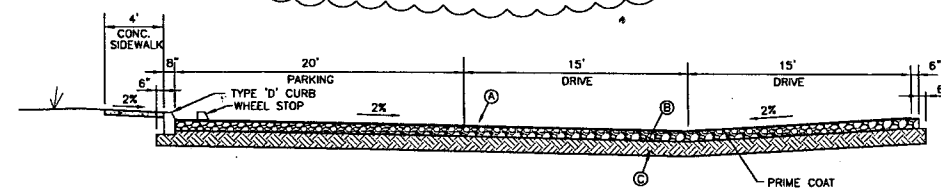


- ① 1" TYPE S-I OVER  
1-1/4" TYPE S-III ASPHALTIC CONCRETE  
ASPHALT CONCRETE OVERLAY W/ TACK COAT, RC-70 PRIME COAT  
AT 0.10 GAL/ SQ. YD. MIN.
- ② 8" LIMEROCK OR 10" SHELLROCK COMPACTED TO MIN. 98% MAX.  
DRY DENSITY PER AASHTO T-180, LBR 100.
- ③ 12" SUBGRADE COMPACTED TO MIN. 98% MAX. DRY DENSITY, LBR 40.

SECTION A  
1"=8'  
C-6/C-9  
C-10

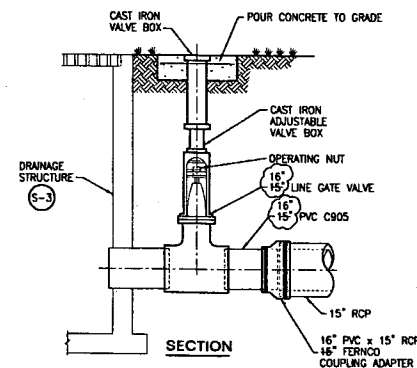


- NOTES:
1. HALF ROUND PLATE TO BE WELDED TO TOP FOR POLLUTION RETARDANT BASIN.
  2. THE HALF ROUND PIPE SHALL BE ONE SIZE LARGER THAN DISCHARGE PIPE.

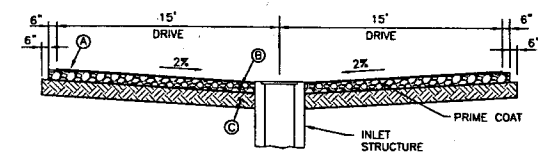


- ① 1" TYPE S-I OVER  
1-1/4" TYPE S-III ASPHALTIC CONCRETE  
ASPHALT CONCRETE OVERLAY W/ TACK COAT, RC-70 PRIME COAT  
AT 0.10 GAL/ SQ. YD. MIN.
- ② 8" LIMEROCK OR 10" SHELLROCK COMPACTED TO MIN. 98% MAX.  
DRY DENSITY PER AASHTO T-180, LBR 100.
- ③ 12" SUBGRADE COMPACTED TO MIN. 98% MAX. DRY DENSITY, LBR 40.

SECTION B  
1"=8'  
C-6



- NOTES:
1. CONTRACTOR SHALL USE EPOXY TO SEAL AND SECURE FERNCO COUPLING TO CMP. JOINTS SHALL BE WRAPPED WITH FOOT NON-WOVEN FILTER CLOTH.



- ① 1" TYPE S-I OVER  
1-1/4" TYPE S-III ASPHALTIC CONCRETE  
ASPHALT CONCRETE OVERLAY W/ TACK COAT, RC-70 PRIME COAT  
AT 0.10 GAL/ SQ. YD. MIN.
- ② 8" LIMEROCK OR 10" SHELLROCK COMPACTED TO MIN. 98% MAX.  
DRY DENSITY PER AASHTO T-180, LBR 100.
- ③ 12" SUBGRADE COMPACTED TO MIN. 98% MAX. DRY DENSITY, LBR 40.

SECTION C  
1"=8'  
C-6

NO.	DATE	ISSUED FOR	APRVD BY
7-21-05	ADDENDUM No. 1		R.L.M.
12-1-05	C.D. No. 1		R.L.M.
4-27-06	RFP No. 4		R.L.M.

DESIGNED:	M.R.T.
DRAWN:	T.A.F.
CHECKED:	
APPROVED:	

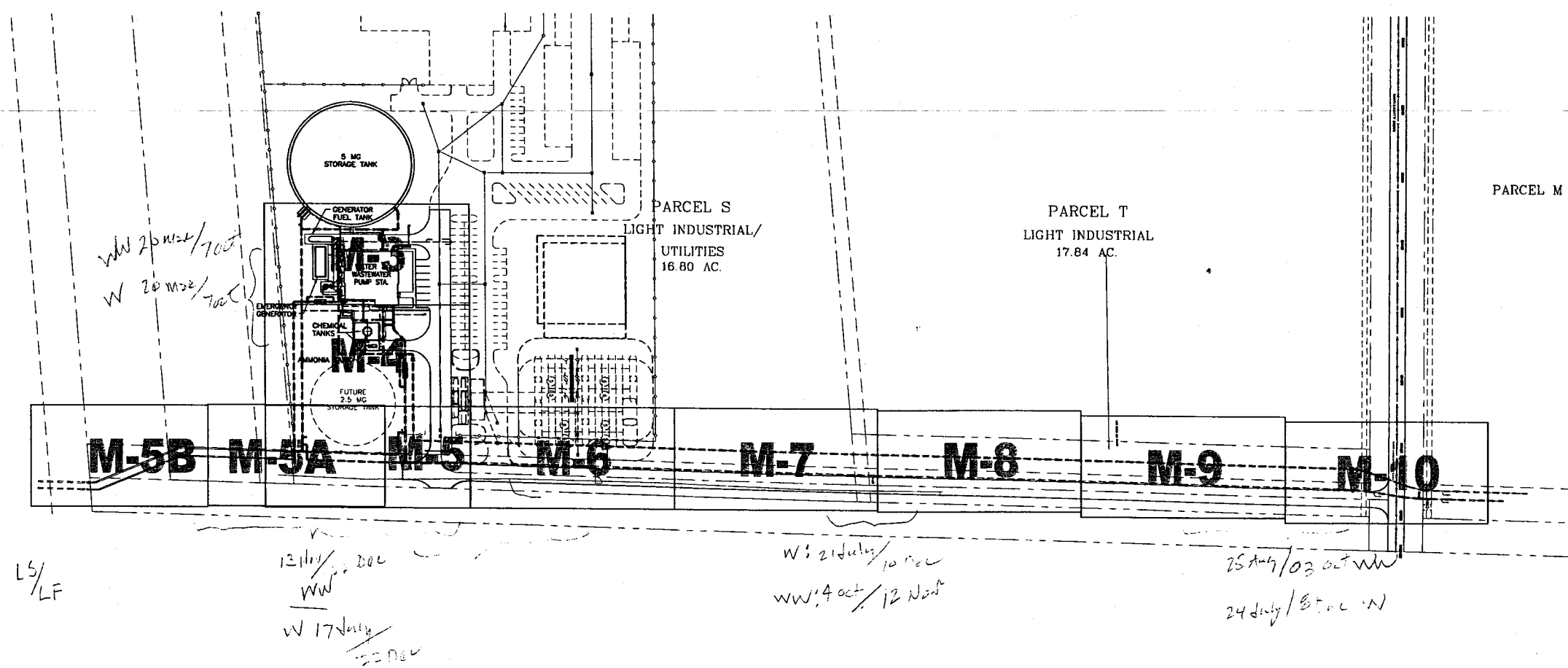
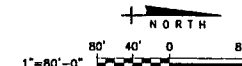
**MATHEWS CONSULTING INC.**  
Civil and Environmental Engineers  
1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401  
TEL (561) 478-7961 LICENSE No. E.B.-0007929

M. REBECCA TRAVIS, P.E.  
NO. 40988

VERIFY SCALE	ENGINEER NO.: 1282
1"	CLIENT WUD
BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.	PROJECT NO.: 05-018
	CAD REF.: 1282C12

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE
CIVIL DETAILS SHEET 1



RFP 04
DATE: AUGUST, 2005
SHEET: 15 of 126
DRAWING: C-12



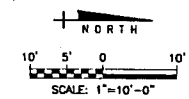
**LEGEND**  
— AS-BID LOCATION  
— C.O. #2 LOCATION

Call 48 hours before you dig  
It's the Law  
1-800-432-4770  
Sunshine State One Call of Florida, Inc.

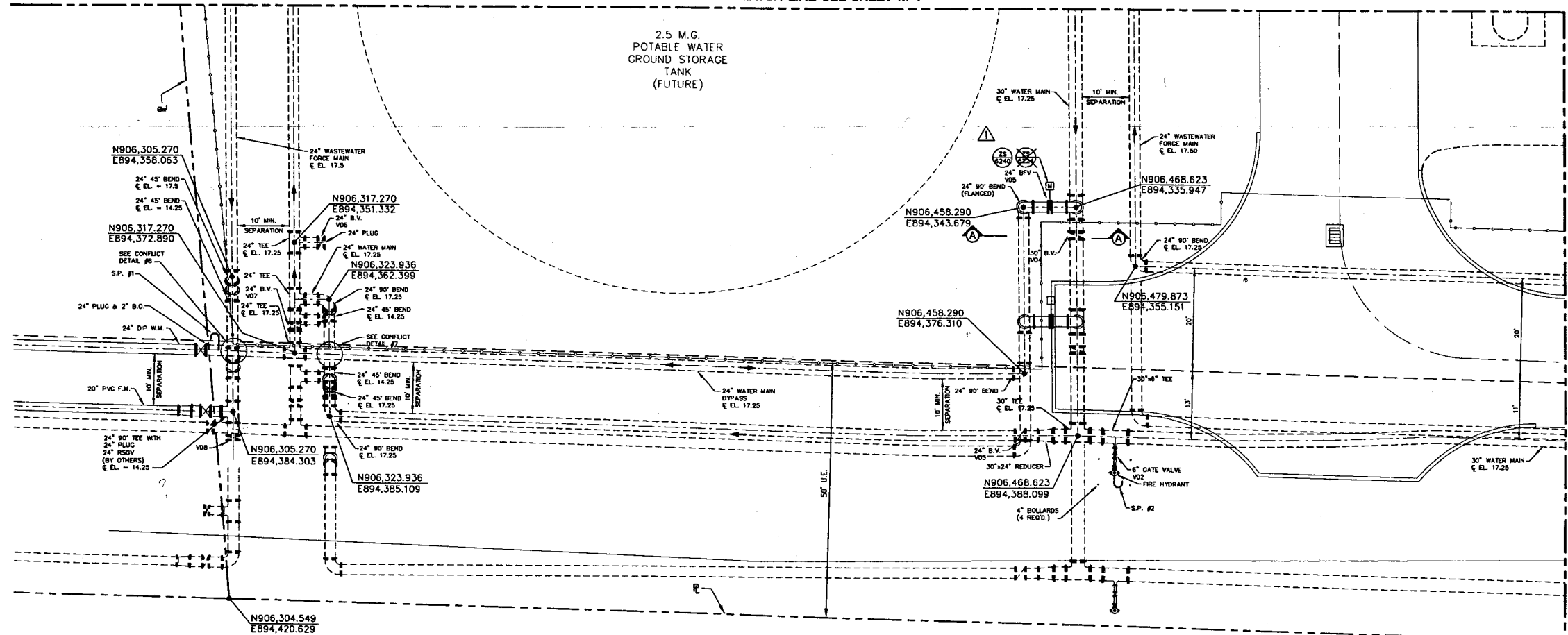
**RFP 04**

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED: R.L.M.	<div><b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401 TEL (561)478-7961 LICENSE No. E.B.-0007929</div> <div>RENE L. MATHEWS P.E. NO. 49298</div>	VERIFY SCALE <div></div> BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.	ENGINEER NO.: 1282 CLIENT WJD PROJECT NO.: 05-018 CAD REF.: 1282M02	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE  YARD PIPING KEY SHEET	DATE: JUNE, 2005 SHEET: 50 of 126 DRAWING: M-2
				DRAWN: T.A.F.					
				CHECKED:					
				APPROVED: R.L.M.					



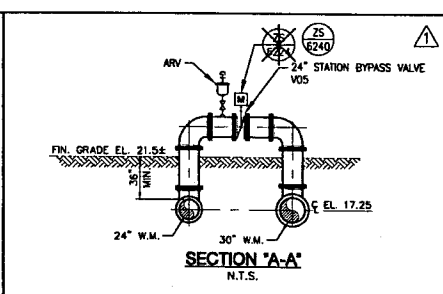
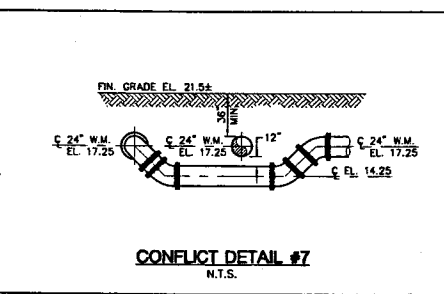
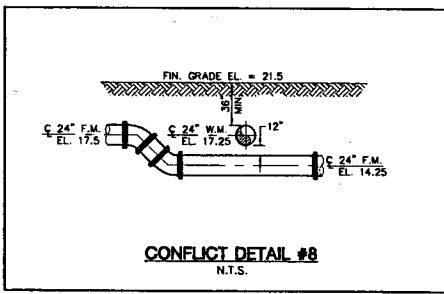


MATCH LINE SEE SHEET M-4



MATCH LINE SEE SHEET M-6

**LEGEND**  
— AS-BID LOCATION  
— C.O. #2 LOCATION



**RFP 04**

NO.	DATE	ISSUED FOR	APPR'D BY	DESIGNED:
1	7-21-05	ADDENDUM No. 1	R.L.M.	R.L.M.
2	4-27-06	RFP No. 4	R.L.M.	T.A.F.

RENE L. MATHEWS, P.E.  
NO. 49298

**MATHEWS CONSULTING INC.**  
Civil and Environmental Engineers  
1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401  
TEL (561)478-7961 LICENSE NO. E.B.-0007929

VERIFY SCALE  
1"  
BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

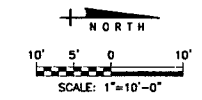
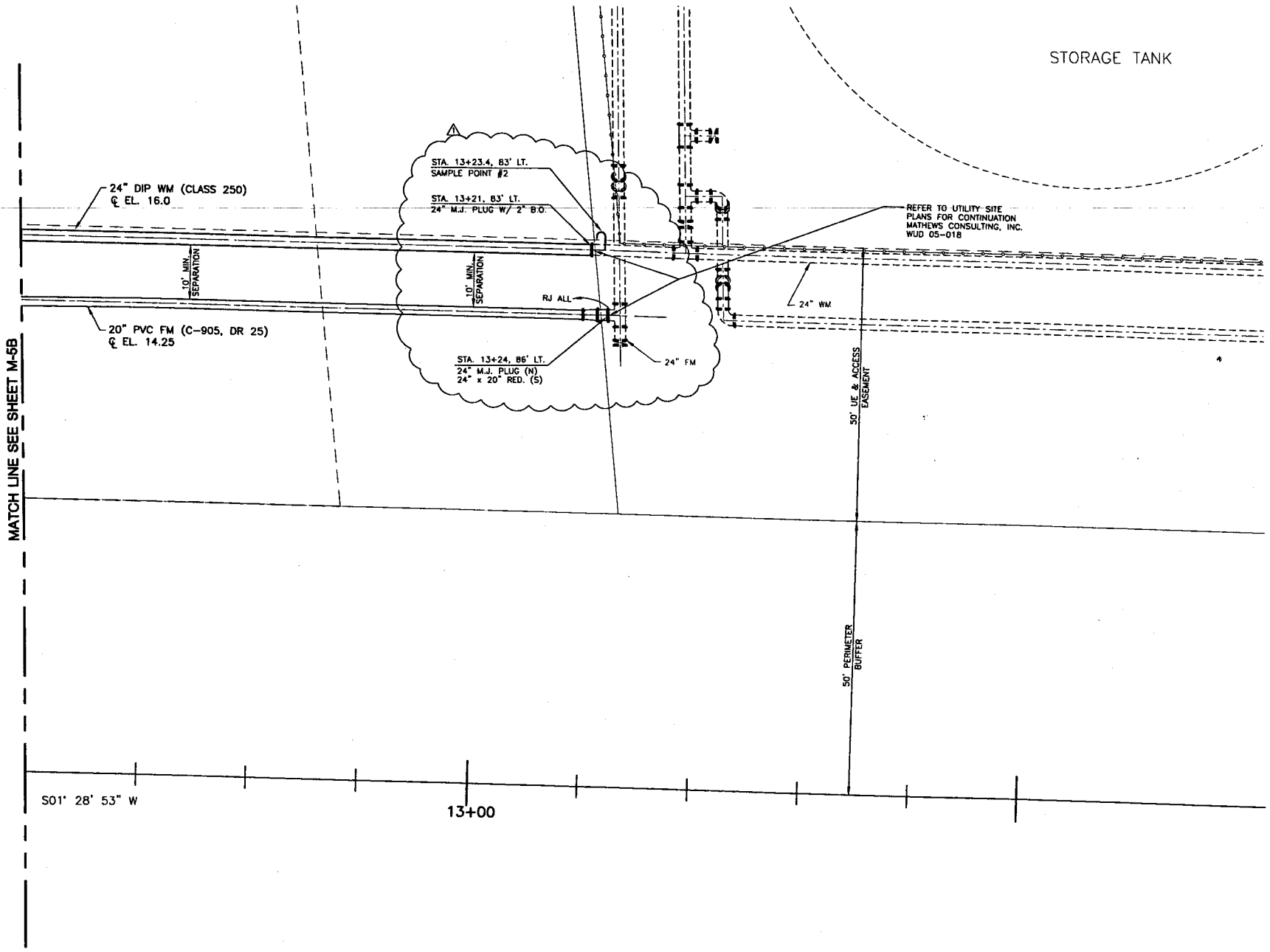
ENGINEER NO.: 1282  
CLIENT WUD  
PROJECT NO.: 05-018  
CAD REF.: 1282M05

PALM BEACH COUNTY  
WATER UTILITIES DEPARTMENT  
BRP UTILITY SITE

YARD PIPING  
SHEET 3

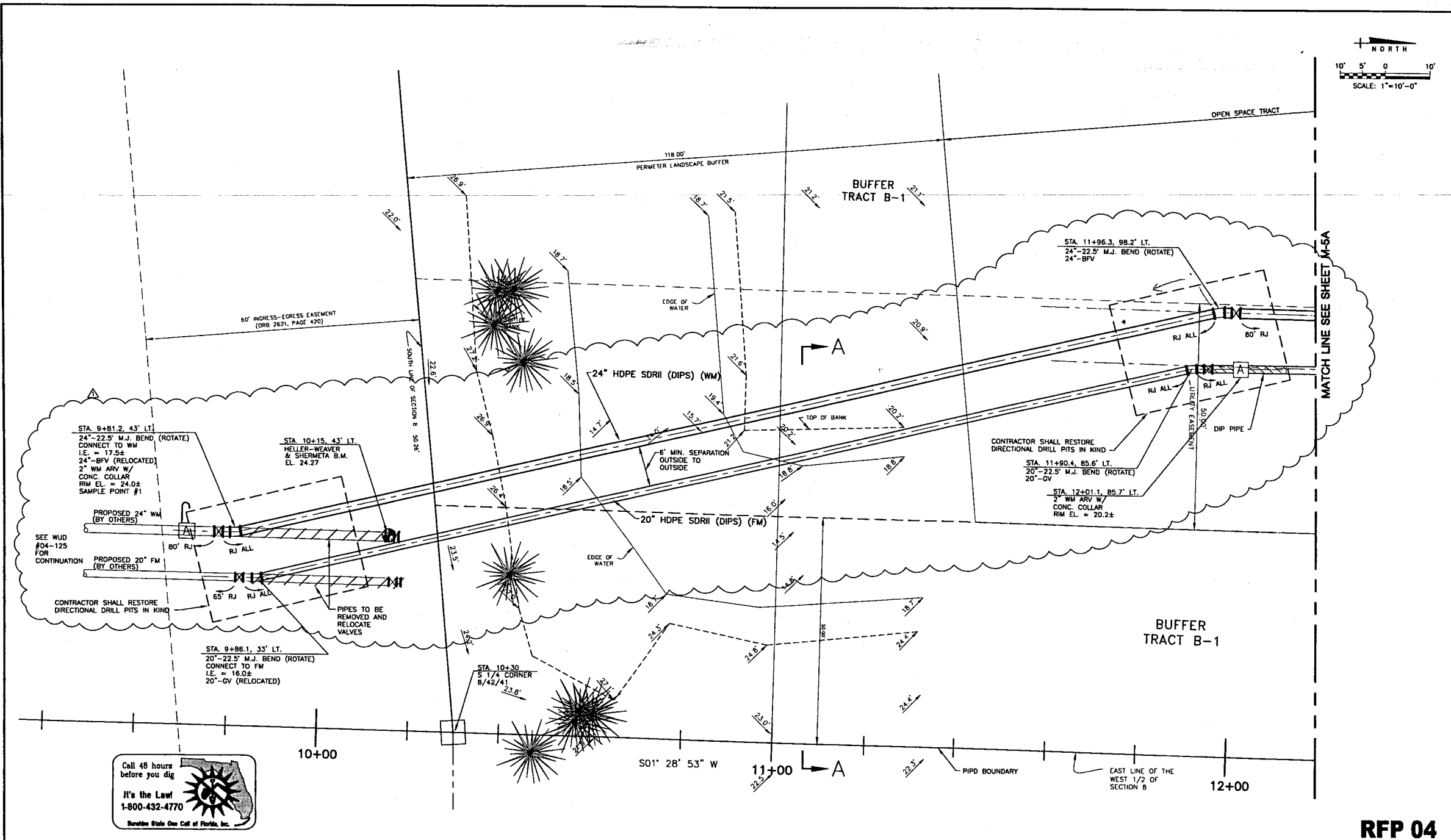
DATE: AUGUST, 2005  
SHEET: 53 of 126  
DRAWING: M-5

MATCH LINE SEE SHEET M-5B



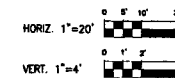
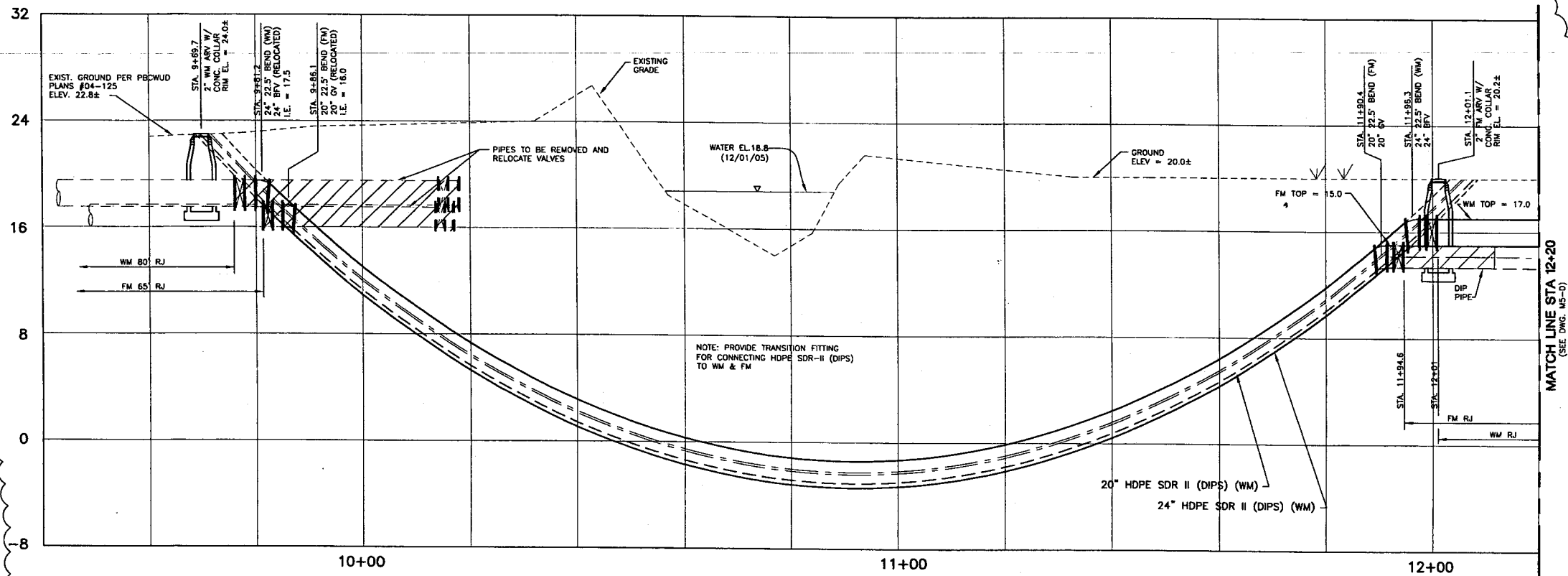
RFP 04

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED: R.L.M.	<b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL. 33401 TEL. (561) 478-7861 LICENSE No. E6-0007929	ENGINEER NO.: 1282	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE  SOUTHEAST CORNER	DATE: JANUARY, 2006
4/27/06	RFP No. 4		G.T.D.	DRAWN: T.A.F.		CLIENT: WUD		SHEET: 53 of 126
				CHECKED:		PROJECT NO.: 05-018		DRAWING: M-5A
				APPROVED:		CAD REF.: 1282M05A		
				RENE L. MATHEWS, P.E. NO. 49298				





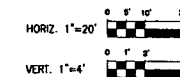
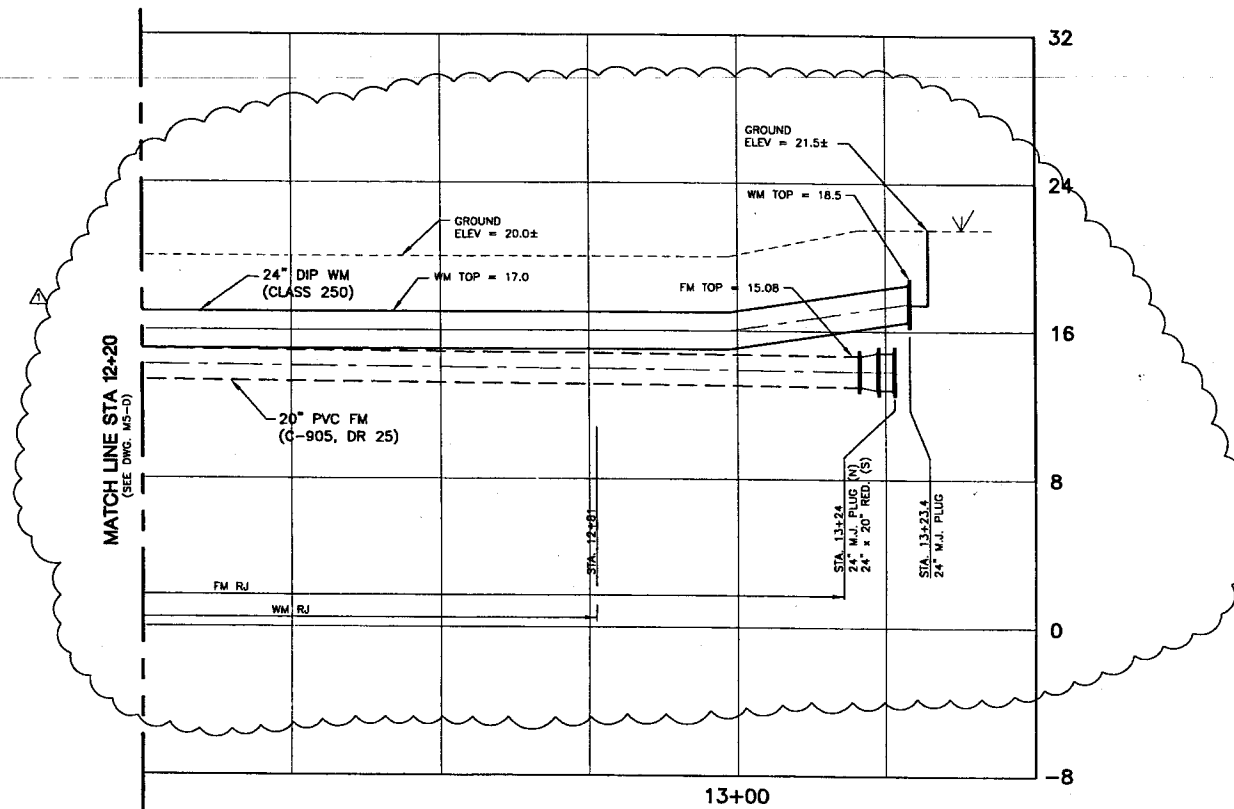
**RFP 04**

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED:	DRAWN:	CHECKED:	APPROVED:	RENE L. MATHEWS, P.E. NO. 49298	VERIFY SCALE	ENGINEER NO.: 1282	CLIENT PROJECT NO.: 05-018	CAD REF.: 1282M05B	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE	DATE: JANUARY, 2006
4	4/27/06	RFP No. 4	G.T.D.	R.L.M.	T.A.F.				1"		WUD		SOUTHEAST CORNER	SHEET: 53 of 126
									BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.					DRAWING: M-5B



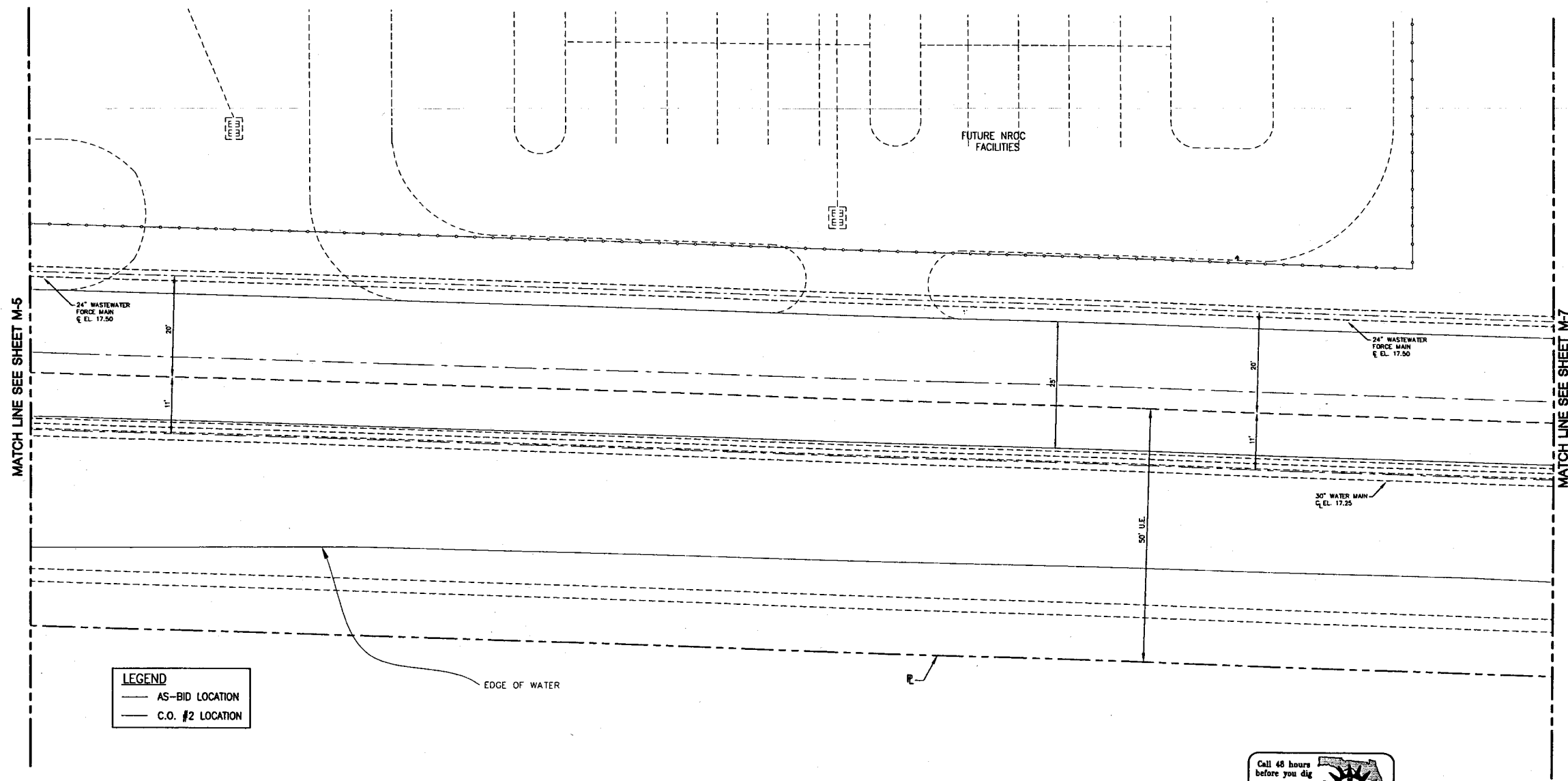
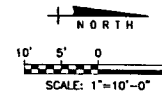
**RFP 04**

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED:	R.L.M.	 <p><b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401 TEL (561) 747-7961 LICENSE No. E.B.-0007929</p>	ENGINEER NO.:	1282	<p><b>PALM BEACH COUNTY</b> WATER UTILITIES DEPARTMENT BRP UTILITY SITE</p> <p><b>SOUTHEAST CORNER - PROFILE</b></p>	DATE:	APRIL, 2006
4/27/06	RFP No. 4	G.T.D.	DRAWN:	T.A.F.	CLIENT		WUD	SHEET:		53 of 126	 <p><b>It's the Law!</b> 1-800-432-4770 Sunshine State One Call of Florida, Inc.</p>
			CHECKED:		PROJECT NO.:		05-018	DRAWING:		M-5C	
			APPROVED:		CAD REF.:		1282M05C.D				



**RFP 04**




NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED:	R.L.M.	ENGINEER NO.:	1282	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE	DATE:	APRIL, 2006
△	4/27/06	RFP No. 4	G.T.D.	DRAWN:	T.A.F.	CLIENT	WUD	SOUTHEAST CORNER - PROFILE	SHEET:	53 of 126
				CHECKED:		PROJECT NO.:	05-018		DRAWING:	M-5D
				APPROVED:		CAD REF.:	1282M05C.D			
				<b>RENE L. MATHEWS, P.E.</b> NO. 49298		<b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1475 CENTREPARK BLVD., SUITE 250, WEST PALM BEACH, FL. 33401 TEL (561)478-7961 LICENSE No. E.B. -0007929				



**LEGEND**  
—— AS-BID LOCATION  
—— C.O. #2 LOCATION

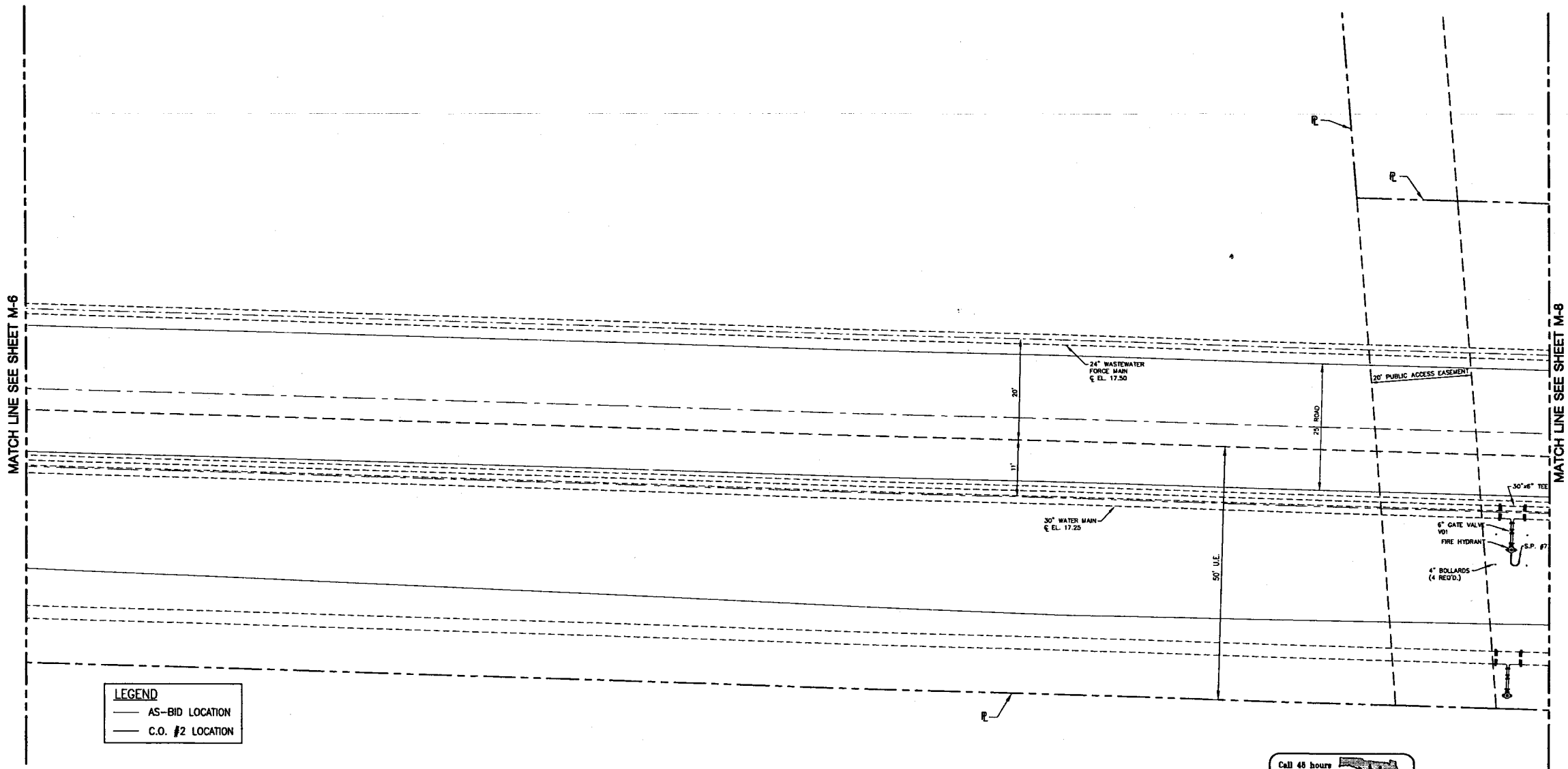
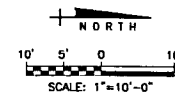


**RFP 04**

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED:	R.L.M.	<div><b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401 TEL (561)478-7961 LICENSE NO. E.B.-0007929</div>	<div><b>VERIFY SCALE</b>  BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.</div>	ENGINEER NO.: 1282  CLIENT WUD PROJECT NO.: 05-018  CAD REF.: 1282M06	<div><b>PALM BEACH COUNTY</b> <b>WATER UTILITIES DEPARTMENT</b> <b>BRP UTILITY SITE</b></div> <div><b>YARD PIPING</b> <b>SHEET 4</b></div>	<div>DATE: AUGUST, 2005 SHEET: 54 of 126 DRAWING: M-6</div>
	4-27-06	RFP No. 4	R.L.M.	DRAWN:	T.A.F.					
				CHECKED:						
				APPROVED:						

S:\Projects\BPC\1282\Cadd\RFP No. 04\1282M06.dwg, 5/24/2006 2:27:28 PM HP Color LaserJet 5500 PCL 6

RENE L. MATHEWS, P.E.  
NO. 49298

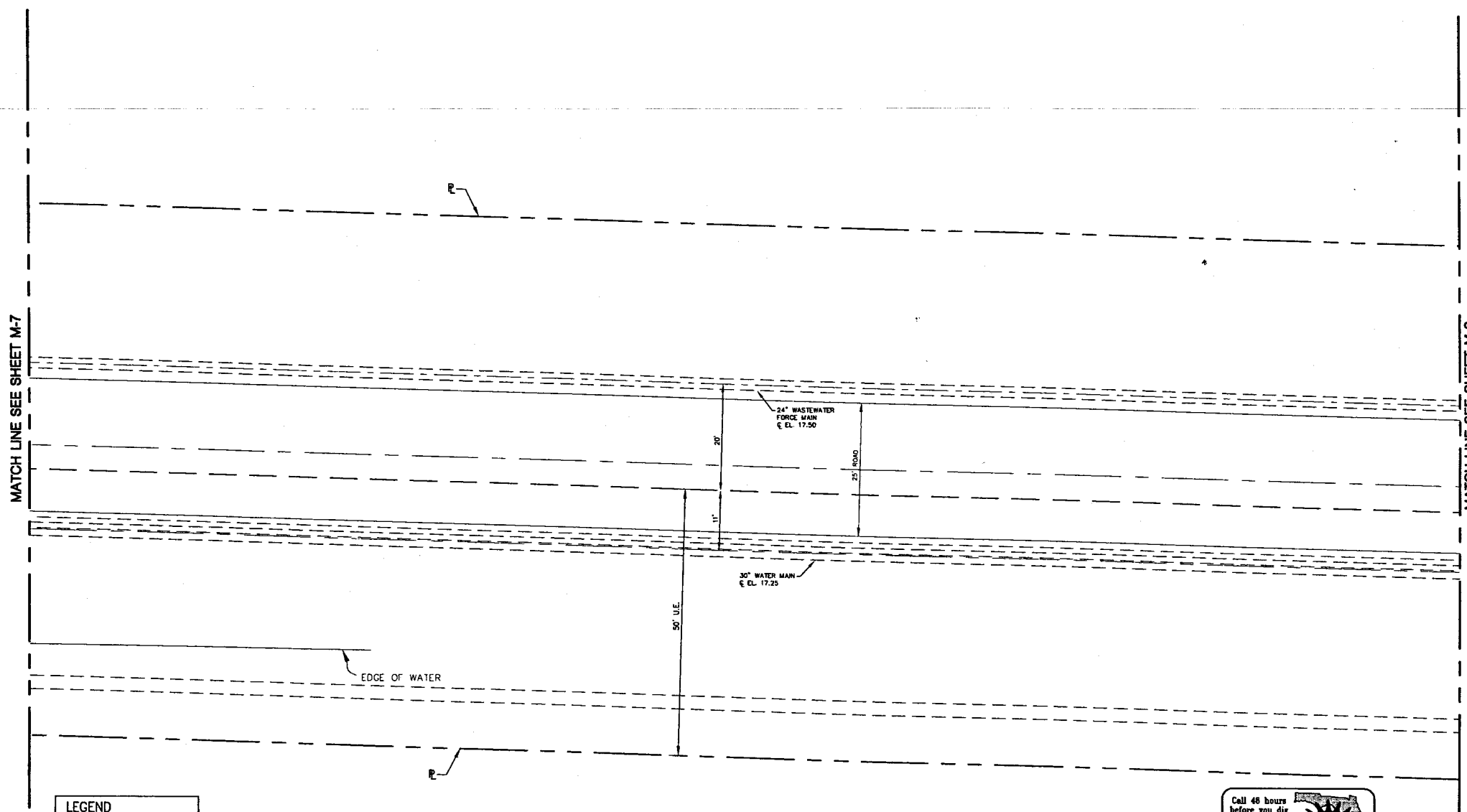
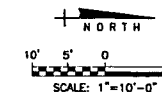


**LEGEND**  
— AS-BID LOCATION  
— C.O. #2 LOCATION

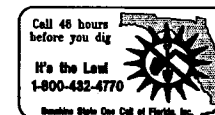


**RFP 04**



NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED: R.L.M.	<div>RENE L. MATHEWS, P.E. NO. 49298</div>	<div><b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1475 CENTREPARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401 TEL (561)478-7961 LICENSE NO. EB-0007929</div>	<div>VERIFY SCALE 1" BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.</div>	<div>ENGINEER NO.: 1282 CLIENT WJD PROJECT NO.: 05-018 CAD REF.: 1282M7</div>	<div>PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE  YARD PIPING SHEET 5</div>	<div>DATE: AUGUST, 2005 SHEET: 55 of 126 DRAWING: M-7</div>
△	4-27-06	RFP No. 4	R.L.M.	DRAWN: T.A.F.						
				CHECKED:						
				APPROVED:						



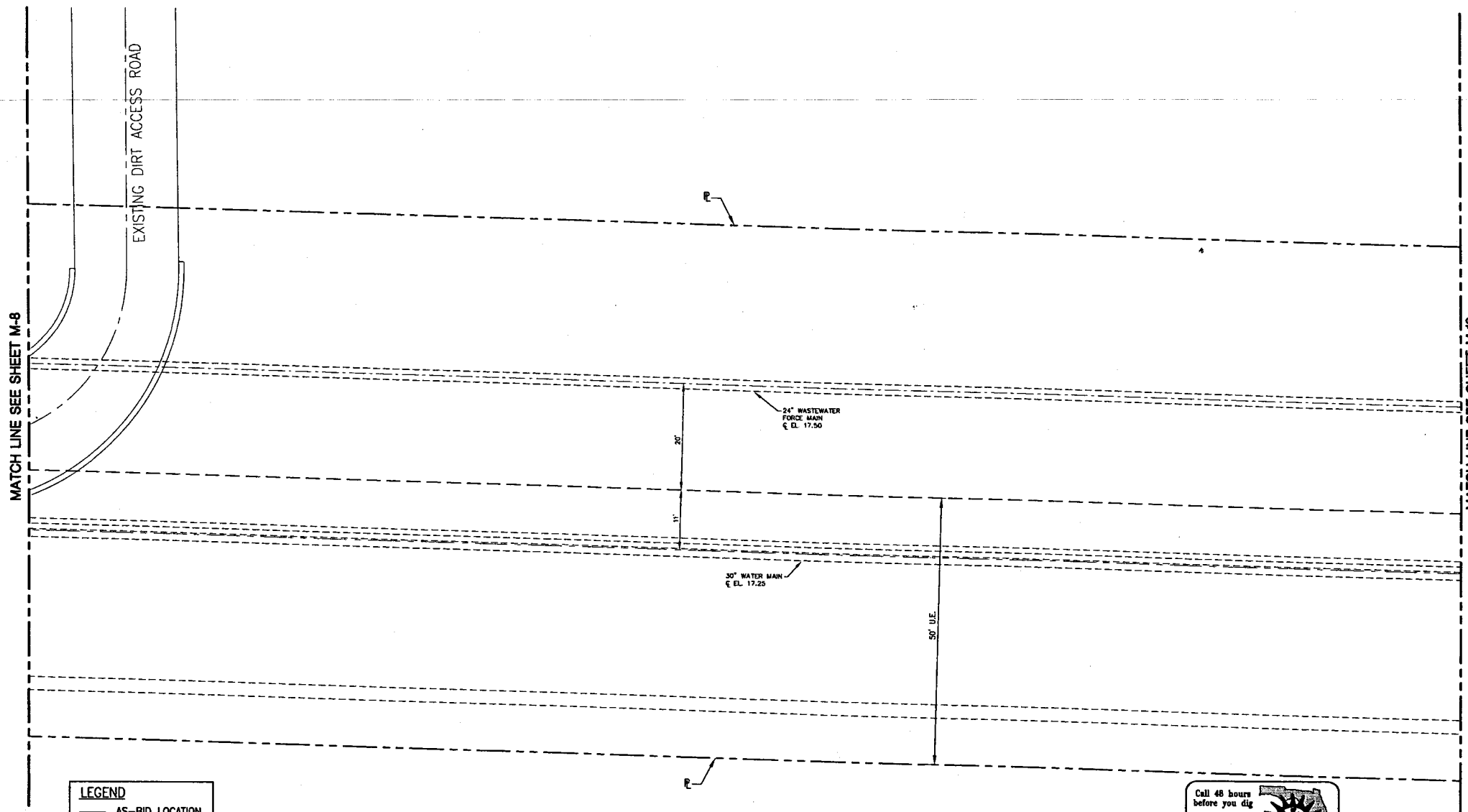
LEGEND	
---	AS-BID LOCATION
---	C.O. #2 LOCATION



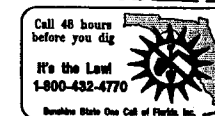
**RFP 04**

NO.	DATE	ISSUED FOR	APRV'D BY	DESIGNED:	R.L.M.	<div><b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401 TEL (561)478-7961 LICENSE No. E.B.-0007929</div>	ENGINEER NO.: 1282	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE	DATE: AUGUST, 2005
	4-27-06	RFP No. 4	R.L.M.	DRAWN:	T.A.F.		CLIENT WJD PROJECT NO.: 05-018		SHEET: 56 of 126
				CHECKED:			CAD REF.: 1282M08		DRAWING: M-8
				APPROVED:					
				RENE L. MATHEWS, P.E. NO. 49298			YARD PIPING SHEET 6		

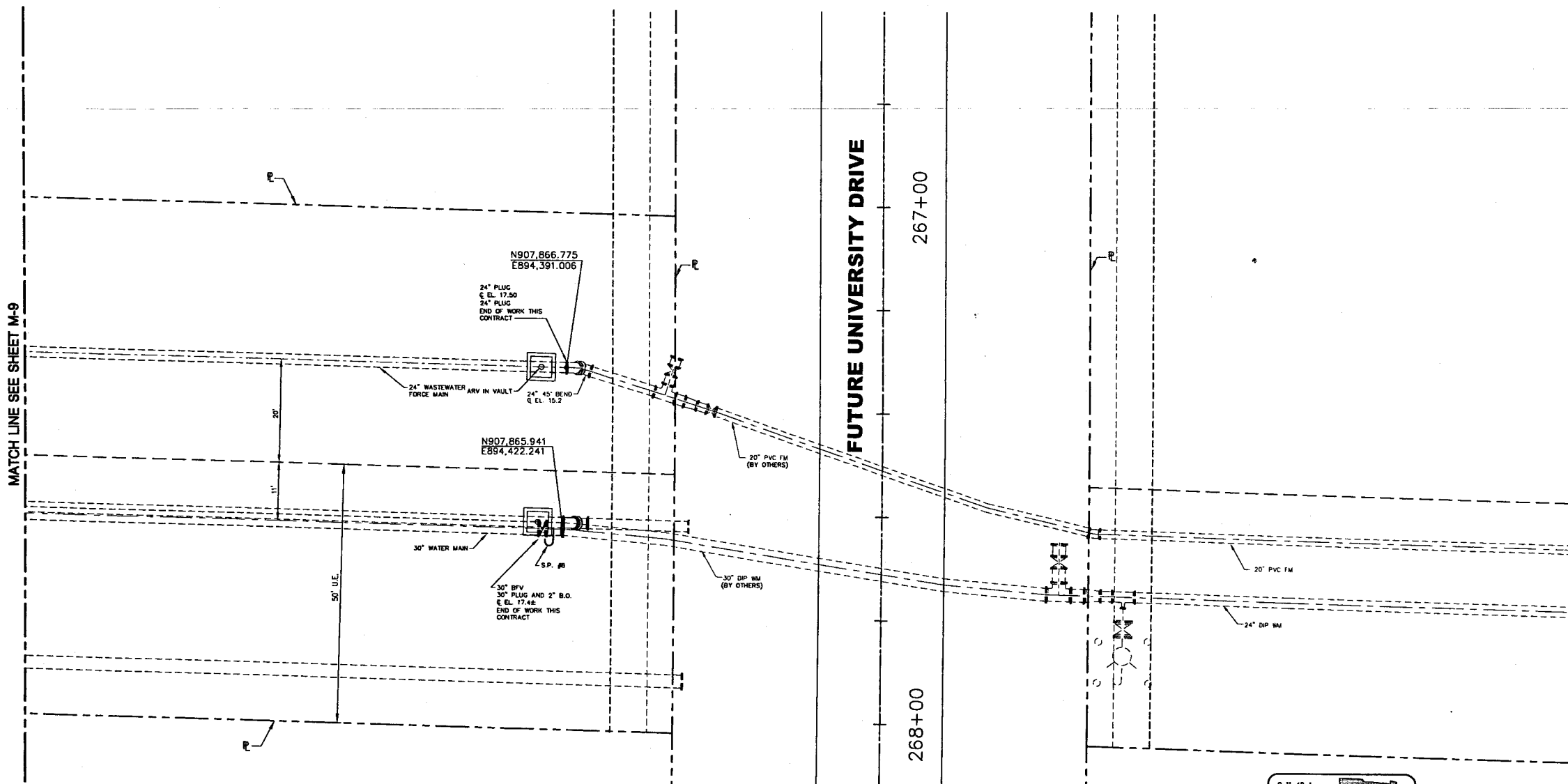
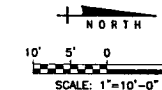




**LEGEND**  
 — AS-BID LOCATION  
 — C.O. #2 LOCATION

**RFP 04**

NO.		DATE	ISSUED FOR	APRVD BY	DESIGNED: R.L.M.	<div><div><div>3</div><div>MATHEWS CONSULTING INC.</div><div>Civil and Environmental Engineers</div><div>1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL. 33401</div><div>TEL. (561) 748-7961 LICENSE No. E.B.-0007929</div></div><div>RENE L. MATHEWS, P.E. NO. 49298</div></div>	VERIFY SCALE	ENGINEER NO.: 1282	<div>PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE</div> <div>YARD PIPING SHEET 7</div>	DATE: AUGUST, 2005
A		4-27-06	RFP No. 4	R.L.M.	DRAWN: T.A.F.		<div><div>1"</div><div></div></div>	CLIENT WUD		SHEET: 57 of 12
					CHECKED:		BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.	PROJECT NO.: 05-018		
					APPROVED:			CAD REF.: 1282M09		
										DRAWING: M-9

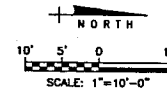


LEGEND	
---	AS-BID LOCATION
---	C.O. #2 LOCATION



**RFP 04**

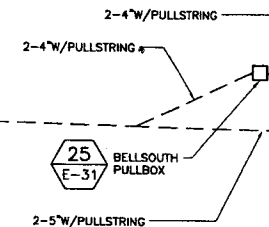
NO. 4	DATE 4-27-06	ISSUED FOR RFP No. 4	APPR'D BY R.L.M.	DESIGNED: R.L.M.	 <b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1675 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401 TEL (561) 476-7961 LICENSE No. E.B.-0007929	VERIFY SCALE 1" = 10'	ENGINEER NO.: 1282	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE		DATE: AUGUST, 2005
				DRAWN: T.A.F.		BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.	CLIENT WUD			SHEET: 58 of 126
				CHECKED:			PROJECT NO.: 05-018			
				APPROVED:		RENE L. MATHEWS, P.E. NO. 49298	CAD REF.: 1282M10	YARD PIPING SHEET 8		DRAWING: M-10



NOTE:  
① REFER TO DRAWING E-5  
FOR CONDUIT CROSS  
SECTIONS.

MATCHLINE - SEE SHEET E-03 FOR CONTINUATION

①  
A  
A



MATCHLINE - SEE SHEET E-07 FOR CONTINUATION



Electrical Design Associates  
4733 W. ATLANTIC AVE., SUITE 102  
DELRAY BEACH, FLORIDA 33446  
PHONE: (561) 818-3558  
FAX: (561) 818-0557  
E.O.A. No. 8079  
LILLIAN M. REYES, P.E.  
Florida P.E. No. 80780

**CHANGE ORDER NO.2**

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED:	DRAWN:	CHECKED:	APPROVED:	ENGINEER NO.:	CLIENT	PROJECT NO.:	CAD REF.:	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE	DATE: JUNE, 2005
[1]	07/20/05	ADDENDUM NO.1	LMR	LMR	RRM/MMB	LMR	LMR	1282	WUD	05-018	E-04 SITE	PARTIAL ELECTRICAL SITE PLAN	SHEET: 78 of 126
[2]	07/27/05	ADDENDUM NO. 2	LMR										DRAWING: E-4
[3]	09/29/05	BUILDING DEPARTMENT REVIEW COMMENTS	LMR										
[4]	08/19/06	CHANGE ORDER NO.2	LMR										

LILLIAN M. REYES, P.E.  
NO. 050780

**MATHEWS CONSULTING INC.**  
Civil and Environmental Engineers  
1475 CENTREPARK BLVD., SUITE 250, WEST PALM BEACH, FL. 33401  
TEL. (561) 476-7981 LICENSE No. E.B.-0007829

VERIFY SCALE

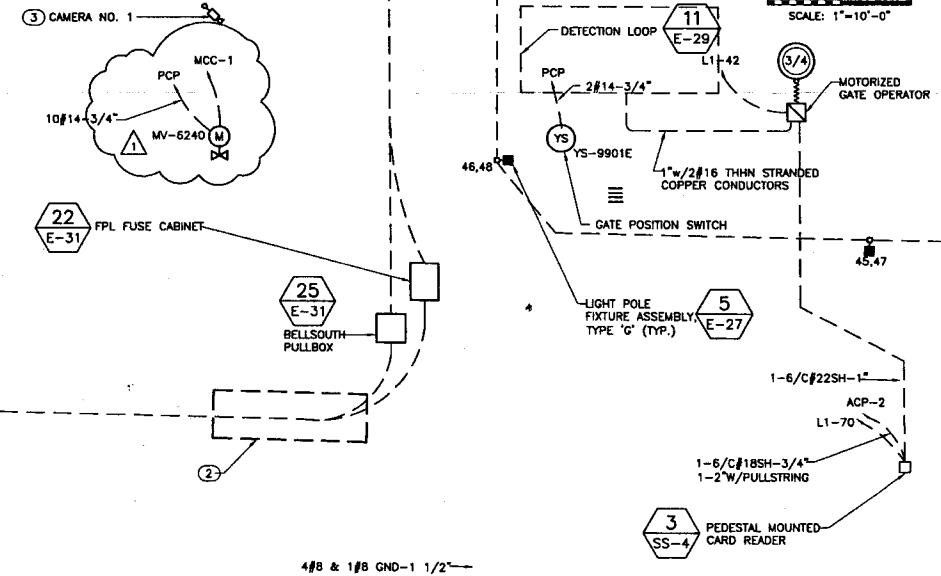


BAR IS ONE INCH ON  
ORIGINAL DRAWING.  
ADJUST SCALES  
AS NECESSARY.

MATCHLINE - SEE SHEET E-06 FOR CONTINUATION

2.5 M.G.  
GROUND STORAGE TANK  
(FUTURE)

- NOTE:**
- REFER TO DRAWING E-5 FOR CONDUIT CROSS SECTIONS.
  - MINIMUM BURIAL DEPTH SHALL BE > 60", COORDINATE WITH W/WV PIPING.
  - REFER TO DRAWING SS-3 FOR ADDITIONAL INFORMATION.



**EDA**  
Electrical Design Associates  
4733 E. ATLANTIC AVE., SUITE 130  
DELMAR BEACH, FLORIDA 33440  
PHONE: (561) 819-3008  
FAX: (561) 819-0027  
E.C.A. No. 8079  
LILLIAN M. REYES, P.E.  
Florida P.E. No. 50780

## CHANGE ORDER NO.2

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED:	DRAWN:	CHECKED:	APPROVED:	ENGINEER NO.:	CLIENT	PROJECT NO.:	CAD REF.:	DATE:	SHEET:	DRAWING:
[1]	07/26/05	ADDENDUM NO.1	LMR	LMR	RRM/MMB	LMR	LMR	1282	WUD	05-018		JUNE, 2005	81	E-7
[2]	07/27/05	ADDENDUM NO. 2	LMR											
[3]	09/29/05	BUILDING DEPARTMENT REVIEW COMMENTS	LMR											
[4]	08/19/06	CHANGE ORDER NO.2	LMR											

**MATHEWS CONSULTING INC.**  
Civil and Environmental Engineers  
1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401  
TEL: (561) 478-7961 LICENSE No. E.B.-0007928

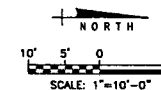
LILLIAN M. REYES, P.E.  
NO. 050780

VERIFY SCALE  
1"  
BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

PALM BEACH COUNTY  
WATER UTILITIES DEPARTMENT  
BRP UTILITY SITE

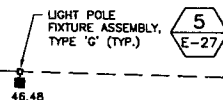
PARTIAL ELECTRICAL  
SITE PLAN

SHEET: 81 of 126



MATCHLINE - SEE SHEET E-07 FOR CONTINUATION

4#8 & 1#8 GND-1 1/2"



4#8 & 1#8 GND-1 1/2"

45,47

4#8 & 1#8 GND-1 1/2"

46,48

MATCHLINE - SEE SHEET E-09 FOR CONTINUATION



Electrical Design Associates  
4733 N. ATLANTIC AVE., SUITE 120  
DELRAY BEACH, FLORIDA 33446  
PHONE: (561) 819-5808  
FAX: (561) 819-0887  
C.S.A. No. 8079  
LILLIAN M. REYES, P.E.  
Florida P.E. No. 50780

## CHANGE ORDER NO.2

NO.	DATE	ISSUED FOR	APRVD BY
[1]	07/20/05	ADDENDUM NO.1	LMR
[2]	07/27/05	ADDENDUM NO. 2	LMR
[3]	09/29/05	BUILDING DEPARTMENT REVIEW COMMENTS	LMR
[4]	08/19/06	CHANGE ORDER NO.2	LMR

DESIGNED: LMR
DRAWN: RRM/MMB
CHECKED: LMR
APPROVED: LMR

LILLIAN M. REYES, P.E.  
NO. 050780

**MATHEWS**  
**CONSULTING INC.**  
Civil and Environmental Engineers  
1475 CENTREPARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401  
TEL: (561) 478-7961 LICENSE No. E.B.-0007929

VERIFY SCALE



BAR IS ONE INCH ON  
ORIGINAL DRAWING.  
ADJUST SCALES  
AS NECESSARY.

ENGINEER NO.: 1282  
CLIENT: WUD  
PROJECT NO.: 05-018  
CAD REF.: E-08 SITE

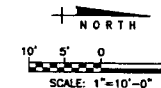
PALM BEACH COUNTY  
WATER UTILITIES DEPARTMENT  
BRP UTILITY SITE

PARTIAL ELECTRICAL  
SITE PLAN

DATE: JUNE, 2005

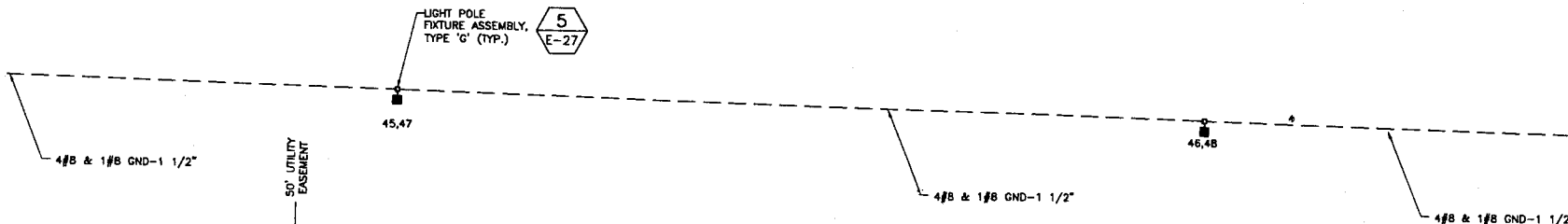
SHEET: 82 of 126

DRAWING: E-8



MATCHLINE - SEE SHEET E-08 FOR CONTINUATION

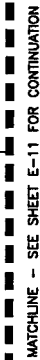
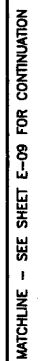
MATCHLINE - SEE SHEET E-10 FOR CONTINUATION



Electrical Design Associates  
4733 W. ATLANTIC AVE., SUITE 120  
DELRAY BEACH, FLORIDA 33448  
PHONE: (561) 818-3508  
FAX: (561) 818-0567  
C.O.A. No. 8079  
LILLIAN M. REYES, P.E.  
Florida P.E. No. 60780

## CHANGE ORDER NO.2

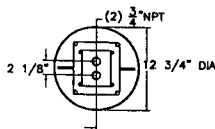
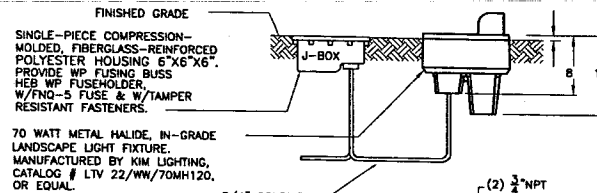
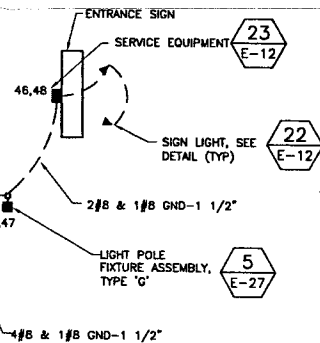
NO.	DATE	ISSUED FOR	APPR'D BY	DESIGNED:	<div><b>MATHEWS CONSULTING INC.</b> Civil and Environmental Engineers 1475 CENTRE PARK BLVD., SUITE 250, WEST PALM BEACH, FL 33409 TEL: (561) 478-7861 LICENSE No. E.C.E.-0007929</div>	VERIFY SCALE	ENGINEER NO.:	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT BRP UTILITY SITE	DATE: JUNE, 2005
[1]	07/20/05	ADDENDUM NO.1	LMR	LMR		1"	1262		
[2]	07/27/05	ADDENDUM NO. 2	LMR	RRM/MMB		BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.	WUD		SHEET: 83 of 126
[3]	08/29/05	BUILDING DEPARTMENT REVIEW COMMENTS	LMR				PROJECT NO.: 05-018		
[4]	08/18/06	CHANGE ORDER NO.2	LMR				CAD REF.: E-09 SITE	PARTIAL ELECTRICAL SITE PLAN	DRAWING: E-9
				APPROVED: LMR	LILLIAN M. REYES, P.E. NO. 050780				



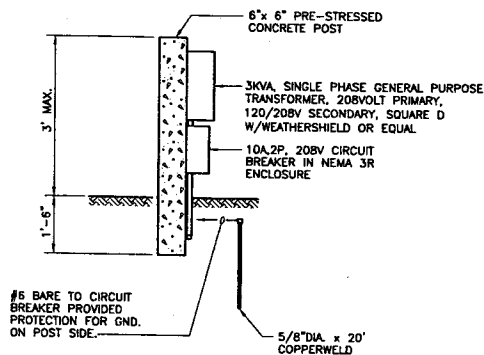
**Electrical Design Associates:**  
4753 W. ATLANTIC AVE., SUITE 120  
DELRAY BEACH, FLORIDA 33445  
PHONE: (561) 819-5556  
FAX: (561) 819-0657  
C.O.A. No. 8079  
LELHAN M. REYES, P.E.  
Florida P.E. No. 202280

DRAWING: E-10

MATCHLINE - SEE SHEET E-10 FOR CONTINUATION



**22**  
E-12  
**SIGN LIGHT**  
N.T.S.



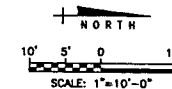
**23**  
E-12  
**SIGN SERVICE EQUIPMENT**  
N.T.S.

LENS: CLEAR TEMPERED BOROSILICATE GLASS, 1/4" THICK, FLUSH WITH LENS RING, SLIGHTLY CROWNED.

LENS GASKET: ONE PIECE MOLDED SILICONE U-CHANNEL WRAPS COMPLETELY AROUND LENS FLANGE.

HOUSING: HIGH TEMPERATURE, COMPRESSION MOLDED, FIBERGLASS IMPREGNATED, 3/16" MIN. WALL COMPOSITE, CHARCOAL GRAY. SOLID BRASS KNURLED INSERTS MOLDED-IN TO RECEIVE LENS RING SCREWS. SEPARATE SPLICE AND BALLAST COMPARTMENTS, INDIVIDUAL CAST ALUMINUM INTERNAL COVERS, WITH ONE PIECE MOLDED SILICONE GASKETS. TWO 3/4" NPT IN BOTTOM, 24 CU IN. SPLICE AREA.

OPTICAL SYSTEM: SPOT FLOOD SPUN ALUMINUM YOKE MOUNTED REFLECTORS, MEDIUM BASE SOCKET, ED-17 HID LAMP, 360 DEGREE ROTATION, +/- 15 DEGREE VERTICAL ADJUSTMENT, LOCKING SCREWS, BLACK ANODIZED UV SHIELD FOR HOUSING INTERIOR.



50' UTILITY EASEMENT

PEDESTAL LIGHTING, NOT IN CONTRACT (TYP.)



Electrical Design Associates  
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LILLIAN M. REYES, P.E.  
Florida P.E. No. 80780

## CHANGE ORDER NO.2

NO.	DATE	ISSUED FOR	APRVD BY:	DESIGNED:	DRAWN:	CHECKED:	APPROVED:	PROJECT NO.	ENGINEER NO.	CLIENT	PROJECT NO.	CAD REF.	SITE	DATE	SHEET	DRAWING
[1]	07/20/05	ADDENDUM NO.1	LMR	LMR	RRM/MMB	LMR	LMR	05-018	1282	WUD	05-018	E-11	SITE	JUNE, 2005	85 of 126	E-11
[2]	07/27/05	ADDENDUM NO. 2	LMR													
[3]	08/28/05	BUILDING DEPARTMENT REVIEW COMMENTS	LMR													
[4]	08/19/06	CHANGE ORDER NO.2	LMR													

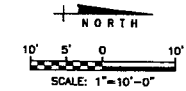
**MATHEWS CONSULTING INC.**  
Civil and Environmental Engineers  
1475 CENTREPARK BLVD., SUITE 250, WEST PALM BEACH, FL 33401  
TEL: (561) 478-7801 LICENSE No. E.B.-0007829

LILLIAN M. REYES, P.E.  
NO. 050780

PALM BEACH COUNTY  
WATER UTILITIES DEPARTMENT  
BRP UTILITY SITE  
PARTIAL ELECTRICAL  
SITE PLAN



MATCHLINE - SEE SHEET E-11 FOR CONTINUATION



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LILLIAN M. REYES, P.E.  
Florida P.E. No. 80780

## CHANGE ORDER NO.2

NO.	DATE	ISSUED FOR	APRVD BY	DESIGNED:	DRWN:	CHECKED:	APPROVED:	ENGINEER NO.:	CLIENT	PROJECT NO.:	CAD REF.:	DATE:	SHEET:	DRAWING:
[1]	07/20/05	ADDENDUM NO.1	LMR	LMR	RRM/MMB	LMR	LMR	1282	WUD	05-018	E-12 SITE	JUNE, 2005	86 of 126	E-12
[2]	07/27/05	ADDENDUM NO. 2	LMR											
[3]	08/29/05	BUILDING DEPARTMENT REVIEW COMMENTS	LMR											
[4]	08/19/06	CHANGE ORDER NO.2	LMR											



**MATHEWS CONSULTING INC.**  
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TEL: (561) 476-7881 LICENSE No. E.B.-0007829

VERIFY SCALE



BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

PALM BEACH COUNTY  
WATER UTILITIES DEPARTMENT  
BRP UTILITY SITE

PARTIAL ELECTRICAL  
SITE PLAN