

**PALM BEACH COUNTY  
BOARD OF COUNTY COMMISSIONERS  
AGENDA ITEM SUMMARY**

**Meeting Date:**      **October 1, 2013**

**Consent [X]  
Public Hearing [ ]**

**Regular [ ]**

**Department:**      **Water Utilities Department**

**I. EXECUTIVE BRIEF**

**Motion and Title:** **Staff recommends motion to approve:** Consultant Services Authorization (CSA) No. 12 with MWH Americas, Inc. (R2011-0632) for Water Treatment Plants 3 and 9 Wells Rehabilitations and Replacement in the amount of \$195,637.00.

**Summary:** On May 3, 2011, the Palm Beach County Board of County Commissioners approved the continuing Contract for Utility Hydrogeologic & Water Resources Engineering Services with MWH Americas, Inc. (R2011-0632) to obtain engineering /professional services for utility related projects. This CSA will provide for engineering and hydrogeological services to design and permit rehabilitation or replacement of two (2) wells at Water Treatment Plants 3 and 9. Over one-third of the Department's 95 wells have been in service 30 years or longer and they are approaching their useful lifespan. This is the second phase of a multi-year asset management plan to rehabilitate or replace five (5) wells per year with upgraded corrosion resistant materials which will substantially increase their lifespan. The Small Business Enterprise (SBE) participation goal established by the SBE Ordinance (R2002-0064) is 15% overall. The contract with MWH Americas, Inc. provides for SBE participation of 26% overall. This Authorization includes 30.39% overall participation. The cumulative SBE participation, including this Work Authorization, is 30.73% overall. MWH Americas, Inc. is a local company. (WUD Project No. 13-080) District 5 (JM)

**Background and Justification:** As part of the Water Utilities Departments Asset Management Program and to maintain wellfield capacity four (4) wells will be rehabilitated or replaced with corrosion resistant materials. All four (4) wells will have upgraded surface piping and instrumentation. Two (2) additional wells at WTP 9 will have upgrades to the electrical control panels.

**Attachments:**

1. Location Map
2. Two (2) Original Work Authorizations No. 12

Recommended By: \_\_\_\_\_

**Department Director**

9/6/13  
**Date**

Approved By: \_\_\_\_\_

**Assistant County Administrator**

9/17/13  
**Date**

## II. FISCAL IMPACT ANALYSIS

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

Fiscal Years	2014	2015	2016	2017	2018
Capital Expenditures	<u>\$195,637.00</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 (County)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
In-Kind Match County	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
 NET FISCAL IMPACT	 <u>\$195,637.00</u>	 <u>0</u>	 <u>0</u>	 <u>0</u>	 <u>0</u>
 # ADDITIONAL FTE POSITIONS (Cumulative)	 <u>0</u>	 <u>0</u>	 <u>0</u>	 <u>0</u>	 <u>0</u>

**Budget Account No.: Fund 4011 Dept 721 Unit W004 Object 6541**

Is Item Included in Current Budget?      Yes   X        No       

Reporting Category **N/A**

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


One (1) time capital expenditure from user fees with balances brought forward.

C. Department Fiscal Review: Delma M. West

### III. REVIEW COMMENTS

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


OFMB Fiscal and/or Contract Development

  
\_\_\_\_\_  
OFMB *2013 9/11/2013*  
*2013 9/10 12 PM*

*Dr. J. Jacobson* 9/13/83  
Contract Development and Control  
9-13-83 *Hepple*

**B. Legal Sufficiency:**

Legal Sufficiency:

 9/17/13

Assistant County Attorney

**C. Other Department Review:**

Department Director

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

# ATTACHMENT - G

## PROJECT LOCATION MAP



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

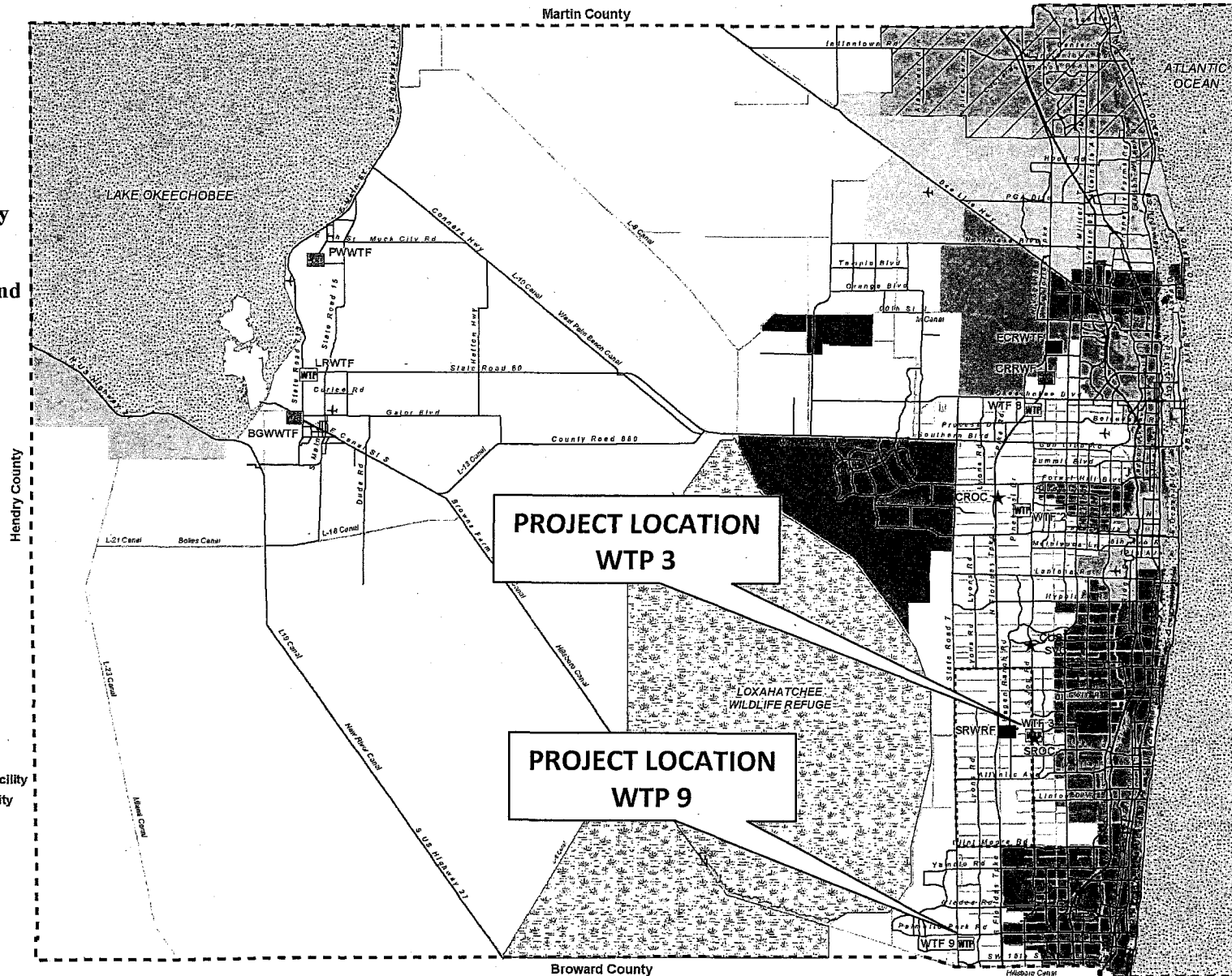
Attachment 1

### Legend

- ★ Administration
- WTF Water Treatment Facility
- Reclamation Facility
- Wastewater Reclamation Facility
- Wastewater Treatment Facility
- Mandatory Reclaimed SA
- - - - - Palm Beach County Limits
- P.B.C.W.U.D. Service Area



NOT TO SCALE



**CONSULTANT SERVICES AUTHORIZATION NO. 12**

**Project No. WUD 13-080**

**Budget Line Item No. 4011-721-W004-6541**

**Project Title: Water Treatment Plants 3 and 9 Wells Rehabilitation and Replacement**

**District No.: 5**

**THIS AUTHORIZATION #12** to the Contract for Consulting/Professional Services dated May 3, 2011 (R2011-0632), by and between Palm Beach County and the Consultant identified herein, is for the Consultant Services described in Item 3 of this Authorization. The Contract provides for 26% SBE participation overall. This Consultant Services Authorization includes 30.39% overall participation. The cumulative SBE participation, including this authorization is 30.73% overall.

1. CONSULTANT: MWH Americas, Inc.
2. ADDRESS: 100 S. Dixie Highway, Suite 300, West Palm Beach, FL 33401
3. Description of Services to be provided by the Consultant:  
Professional services to develop technical specifications and drawings for the rehabilitation or replacement of production wells 3W-2, 3W-3, 9W-10, and 9W-12, and modifications to existing wellhead equipment and above-grade raw water piping. In addition, the control panel at well 9W-13, which also controls 9W-12 will be upgraded and the control panel for 9W-11, located at 9W-10 will be upgraded. All of the above wells control panels will be designed to accommodate Variable Frequency Drives (VFD's).

**See ATTACHMENT A.**

4. Services completed by the Consultant to date (Summary and Status of Authorizations):

**See ATTACHMENT E.**

5. Consultant shall begin work promptly on the requested services.
6. The compensation to be paid to the Consultant for providing the requested services shall be:
  - A. Computation of time charges plus expenses, not to exceed \$ \_\_\_\_\_
  - B. Fixed price of \$ 195,637.00
7. This Authorization may be terminated by the County without cause or prior notice. In the event of termination not the fault of the Consultant, the Consultant shall be compensated for all services performed through the date of termination, together with reimbursable expenses (if applicable) then due.

**Project Title: Water Treatment Plants 3 and 9 Wells Rehabilitation and Replacement**

8. As described in Section 7.5 of the CONTRACT, SBE participation is included in Attachment D under this Authorization. The attached Schedule 1 defines the SBE applied to this Authorization and Schedule 2 establishes the SBE contribution from each subconsultant (Letter of Intent to perform as an SBE).
9. EXCEPT AS HEREBY AMENDED, CHANGED OR MODIFIED, all other terms, conditions and obligations of the Contract dated May 3, 2011, remain in full force and effect.

Project No. WUD 13-080

Consultant Services Authorization No. 12

Project Title: **Water Treatment Plants 3 and 9 Wells Rehabilitation and Replacement**

IN WITNESS WHEREOF, this Authorization is accepted, subject to the terms, conditions and obligations of the aforementioned Contract.

PALM BEACH COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA

Sharon R. Bock, Clerk & Comptroller,  
Palm Beach County

Palm Beach County,  
Board of County Commissioners

ATTEST:

Signed: \_\_\_\_\_

Signed: \_\_\_\_\_  
Steven L. Abrams, Mayor

*Bmf*

Typed Name: \_\_\_\_\_  
Deputy Clerk

\_\_\_\_\_  
Date

Approved as to Form and Legal  
Sufficiency

Signed: \_\_\_\_\_

Typed Name: \_\_\_\_\_  
County Attorney

CONSULTANT: \_\_\_\_\_

ATTEST:

*Neil Johnson*  
\_\_\_\_\_  
Witness

*Becky Hachenburg*  
\_\_\_\_\_  
(Signature)

*Neil Johnson, Principal*  
\_\_\_\_\_  
(Name and Title)

*Becky Hachenburg, Vice President*  
\_\_\_\_\_  
(Name and Title)

(CORPORATE SEAL)

*8/29/13*  
\_\_\_\_\_  
Date

## LIST OF ATTACHMENTS

**Project No. WUD 13-080**

**Consultant Services Authorization No. 12**

**Project Title: Water Treatment Plants 3 and 9 Wells Rehabilitation and Replacement**

ATTACHMENT - A	Scope of Work
ATTACHMENT - B	Budget Summary
ATTACHMENT - C	Project Schedule
ATTACHMENT - D	SBE Schedule 1 and Schedule 2
ATTACHMENT - E	Authorization Status Report - Summary and Status of Authorizations
ATTACHMENT - F	Authorization Status Report – Summary of SBE/MWBE Tracking
ATTACHMENT - G	Location Map
ATTACHMENT - H	Proposed Drawing List

## **ATTACHMENT A**

### **CONSULTANT SERVICES AUTHORIZATION NO. 12**

#### **PALM BEACH COUNTY WATER UTILITIES DEPARTMENT ENGINEERING/PROFESSIONAL SERVICES**

#### **SCOPE OF WORK FOR**

#### **WATER TREATMENT PLANTS 3 AND 9 WELLS REHABILITATION AND REPLACEMENT**

### **INTRODUCTION**

Palm Beach County (COUNTY) entered into an agreement entitled Contract for Engineering/ Professional Services - Palm Beach County Utilities Department Project No. WUD 11-003 (CONTRACT) with. MWH Americas, Inc. (CONSULTANT) to provide engineering services for various general activities on (Reference Document R2011-0632). This Consultant Service Authorization will be performed under that CONTRACT.

This Consultant Services Authorization encompasses providing services related to the rehabilitation or replacement of four existing production wells.

### **BACKGROUND**

In order to maintain additional rotational well capacity, the Palm Beach County Water Utilities Department (PBCWUD) has constructed an extensive wellfield system to deliver raw water to Water Treatment Plants (WTP) 3 and 9. Over time, some of the wells serving this system have shown signs of deterioration and repair or replacement is needed to maintain the integrity of the system. Many of the wells are approaching 50 years of service. PBCWUD has identified two existing WTP 3 raw water supply wells requiring rehabilitation (3W-2 and 3W-3), two existing WTP 9 raw water supply wells requiring rehabilitation (9W-10 and 9W-12), and two existing WTP 9 raw water supply wells (9W-11 and 9W-13) requiring power, control panel, instrumentation, and control upgrades as part of this scope of services.

This Scope of Work consists of engineering and hydrogeological services for the following:

- Hydrogeological evaluation, coordination, and review of COUNTY provided well video logs at proposed well sites;
- Site survey, utility locates, and soft digs;
- Design of the production wells, wellhead assembly, pumping equipment, panels and appurtenances for Variable Frequency Drives (VFDs), magnetic flow meters, new combination level/conductivity/temp transmitters, well pads, fencing (except 3W-2), lighting, and related local electrical and mechanical equipment required to enable these wells to be remotely monitored and controlled;
- Design of control panel, power supply, instrumentation and controls for Well 9W-11 with VFD;
- Upgrade control panel and instrumentation and controls for well 9W-13 with VFD;



- Wellhead elevations for 100-year flood conditions;
- Preparation of design documents for bidding the construction of the wells;
- Development of an Opinion of Probable Construction Cost at 60% and 100%;
- Permitting submittals (signed and sealed drawings) for the following: Palm Beach County Building Department, Palm Beach County Health Department for well heads, Palm Beach County ERM Vegetation Removal Permit, FDEP NOI General Permit for Groundwater Discharge, and Lake Worth Drainage District for development water associated with wells 3W-2 and 3W-3;
- Bidding Support

## SCOPE OF SERVICES

CONSULTANT shall perform the engineering Scope of Services as described herein.

### TASK 1. PROJECT MANAGEMENT/MEETINGS/QA/QC

Project Management - The CONSULTANT will provide overall Project Management and QA/QC services as well as attend project progress meetings with COUNTY as follows:

- 1.1 **Kick-Off Meeting** - The CONSULTANT will lead one kick-off meeting with the County to review the project schedule, review work responsibilities, and identify information described elsewhere in this proposal to be provided by the COUNTY, including record drawings, pump horsepower, ingress/egress routes, potential construction laydown areas, property owner coordination, discharge and make-up water locations, etc. CONSULTANT will attend a site visit of each well site as part of the Kick-Off Meeting.
- 1.2 **Progress Meetings** - The CONSULTANT will prepare for and attend progress meetings at the 60%, and 90% design submittal phases, and one progress meeting prior to the scheduling of the pre-bid conference. The CONSULTANT will prepare and distribute minutes of these meetings. The purpose of these meetings will be to review drawings and specifications, discuss technical issues, review interim reports, review budget and cost status, identify and discuss unexpected or unplanned conditions or events, and discuss and resolve other project issues.
- 1.3 **Quality Assurance and Quality Control** - The CONSULTANT will perform internal Quality Assurance review in accordance with CONSULTANT's standard procedures. Comments and responses will be documented. In addition, the CONSULTANT will provide written response to comments provided by the COUNTY at each of the design phases listed below. The Design will be in general accordance with the Palm Beach County Water Utilities Minimum Engineering Standards and Design Guidelines.
  - 1.3.1 Design Development Phase (60% Design),
  - 1.3.2 Contract Document Preparation Phase (90% design/final design phase).
  - 1.3.3 Issued for Bid Documents

## TASK 2. SCHEMATIC DESIGN PHASE

The CONSULTANT will provide the following schematic design services related to the project:

- 2.1. **Well Evaluation** – The COUNTY will provide video of the existing wells and provide to CONSULTANT. The CONSULTANT will observe well performance in the video and evaluate wells 3W-2, 3W-3, 9W-10, and 9W-12 to assist in determining the options for replacement of the outer casing, screen, and riser pipe. CONSULTANT will conduct an informal pricing survey from local Water Well Contractors to obtain rehabilitation cost estimates. A meeting will be held with the COUNTY to discuss the rehabilitation potential for each of the wells evaluated and to confirm which wells will be replaced or rehabilitated. This scope of work assumes well rehabilitation will be possible.
- 2.2. **Well Site Survey** – The CONSULTANT will perform a topographic survey of the two WTP 3 wells and four WTP 9 well sites (sites are assumed to be 200' x 200' in total area or less) to provide an AutoCAD base map for all engineering and design. Survey information will be provided to the COUNTY to be used as part of the contract documents.
- 2.3. **Power Testing to Existing Wells** – The CONSULTANT will evaluate the existing 480 volt cables running to the existing wells that are not planned for replacement for insulation degradation by megger testing.
- 2.4. **Utility Locates** - The CONSULTANT will perform up to 12 underground utility locations utilizing soft digs to locate and mark in the field the horizontal depth and direction of existing water, sewer, electric, communication, and storm drainage underground utilities. Underground utilities will not be located inside of buildings or where reasonable access is not possible. Radio frequency locators Ground Penetrating Radar (GPR) will be used to locate the underground utilities made of conductive and non-conductive materials. Utility location has limitations and some detected utilities may not be able to be identified. Located utilities will be marked in the field using blue paint and/or flags for water lines, green for sewer lines, red for electric lines, and orange for communications lines. A test hole report will be provided for each location and will within the above limitations, identify the amount of ground cover from the crown of the utility to the existing grade, utility material, shape and overall condition, approximate diameter of pipes, cables, conduits and the configuration of multiple conduit systems, thickness, type and condition of paving material, and general soil conditions. The CONSULTANT will provide X,Y,Z location of the proposed locates and restore excavations to their original conditions and repair and restore all pavement cuts.

COUNTY is advised that GPR Technology is not 100% accurate. Depending on factors such as and not limited to: soil type, soil moisture, size of underground utility, type of underground utility, depth of underground utilities; some utilities may not be detected by GPR. GPR will detect the presence of the utility but not the type. Instances may occur where some detected utilities remain unidentified.
- 2.5. **Well Site Plans** – The CONSULTANT will create a base map of each of the proposed new or modified well sites (total of 6 – to include 9W-11 and 9W-13 for control panel replacement) based on the COUNTY's GIS files showing the well locations relative to local roads and water features. These base maps will be used as part of permitting and design efforts discussed in subsequent tasks, and will encompass an area within 200-ft of each well.

- 2.6. **Schematic Design (30% design)** – The CONSULTANT will compile the results of the schematic design tasks above and prepare schematic design drawings. A review meeting will be scheduled with the COUNTY to discuss design options and to receive the COUNTY's comments.

### **TASK 3. DESIGN DEVELOPMENT PHASE**

- 3.1. **Opinion of Probable Construction Cost Estimate** – The CONSULTANT will prepare a Class 3 opinion of probable construction costs (OPCC) estimate in accordance with AACE International. Pursuant to COUNTY requirements, the OPCC will be provided in MS Excel format with an accuracy range of +30 percent to -20 percent accuracy.
- 3.2. **Design Development Phase Documents and Review** - CONSULTANT will prepare and submit five (5) copies of the design development phase (60%) documents for review by the COUNTY (drawings will be submitted four full size and one reduced 11 x 17" format for this review). A review meeting will be scheduled with the COUNTY following a two-week review period to receive comments. The COUNTY will provide an electronic log of comments (MS EXCEL™ preferred) and the CONSULTANT will incorporate the COUNTY's comments and preferences and then issue a design freeze notification. CONSULTANT will provide written response to comments (accept, reject with reason stated, or modify with description). The design will proceed to completion on the basis of the agreements reached at this stage of the project. Re-design after notification of CONSULTANT's design freeze, or redesign to meet the COUNTY's budget requirements or changed conditions will be accommodated by amendment to this CSA. The conclusion of the Design Development Phase will include:
- Finalization of all major design decisions,
  - Sufficient design detail to convey the design intent to the COUNTY,
    - Completed P&ID diagrams
    - Preliminary demolition drawings
    - Equipment lists
    - Site plan, survey, and general civil drawings
    - Preliminary mechanical equipment and piping drawings
    - Preliminary electrical drawings
    - Important plan and section information
    - First draft of major equipment specifications from Sections 1 through 17; The specification nomenclature will follow CSI 1995 format
  - An updated drawing list for construction documents

### **TASK 4. CONTRACT DOCUMENT PREPARATION PHASE**

- 4.1. **Opinion of Probable Construction Cost Estimate** – The CONSULTANT will prepare a Class 1 opinion of probable construction costs (OPCC) estimate in accordance with AACE International. Pursuant to COUNTY requirements, the OPCC will be provided in MS Excel format with an accuracy range of +15 percent to -10 percent accuracy.

- 4.2. **Contract Documentation Preparation Phase Documents and Review** - CONSULTANT will prepare and submit five copies of the contract document preparation phase (90%) documents for review by the COUNTY (drawings submitted will be four full size and one reduced 11 x 17" format for this review, and five sets of project specifications). A review meeting will be scheduled with the COUNTY following a two-week review period to receive comments. The COUNTY will provide an electronic log of comments (MS Excel preferred) and the CONSULTANT will provide responses to the COUNTY and issue the project bid-ready documents for confirmation (drawings submitted will be four full size, one reduced 11 x 17" format, one camera ready set, and one set of project specifications for reproduction). Generally the conclusion of the Contract Document Preparation Phase will include:
- Completion of the civil, mechanical, structural, electrical, instrumentation, and other design drawings outlined during the Design Development Phase for County reproduction and preparation of the project Bid Package (see **Attachment H** for proposed drawing list).
  - Completion of the equipment and project specifications Sections 1 through 17.

#### **TASK 5. BIDDING ASSISTANCE**

The CONSULTANT will assist the COUNTY with the bidding and award of a single construction contract for the project. The COUNTY will issue copies of the bid documents, maintain records of all plan holders, and receive questions from bidders. The following subtasks are included as part of this task:

- 5.1 **Addenda** - The CONSULTANT will respond to bidders' inquiries as requested by the COUNTY and assist the COUNTY with preparing an addendum to clarify the bidding documents prepared by the CONSULTANT. The addendum will be provided to the COUNTY for incorporation into the final bid package prepared by the COUNTY's procurement department and distribution to all plan holders of record. The CONSULTANT has budgeted for the preparation of one addendum to the bidding documents, after the advertisement date, to incorporate changes requested by the COUNTY.
- 5.2 **Pre-Bid Conference** - The CONSULTANT will attend one pre-bid conference. This task also includes conducting a single visit to the six sites of work with prospective bidders.

#### **ASSUMPTIONS AND CLARIFICATIONS**

CONSULTANT's scope of work is based on certain assumptions which determine the CONSULTANT's level of effort and therefore compensation, as follows:

- CONSULTANT and all sub-consultants and surveyors shall comply with the Palm Beach County and Water Utilities security requirements.
- Access will be provided by the COUNTY to the site of the work during design and construction activities.
- All equipment will be furnished under the construction contract. Separate equipment procurements are not included in this scope of work.

- Any temporary or permanent construction easements or easement agreements necessary for access to or construction of the work will be provided by the COUNTY. This scope of work does not include assistance with property acquisition or easements.
- Public information, awareness, and involvement activities are not included in this scope of work.
- A copy of available record drawings, in CAD format, depicting the layout, construction and details of the existing wellfield, will be furnished by the COUNTY for the CONSULTANT's use in preparing the contract documents within 10 days of Notice-to-Proceed.
- Pigging, or otherwise cleaning, of the existing raw water piping system is not included in this scope of work.
- All wells will be installed above-grade; landscaping design will not be required at any well site; and each well site will be enclosed with chain link fencing excluding Well 3W-2. New well sites will be concrete pad with gravel surrounding the main pad to the extents of the fence line. PBCWUD will pressure test and grout or otherwise improve existing sanitary sewers within the wellfield protection zones of influence, if required.
- No roadways or access drives will be constructed under this project, as the wells do not currently have these features.
- Electronic files exchanged between the COUNTY and the CONSULTANT will be in a format compatible with MS Office 2007 and AutoCAD 2011.
- COUNTY will coordinate and request sanitary surveys for the well sites from Palm Beach County Health Department.
- All permit applications will be prepared by the COUNTY and permit fees will be paid for by the COUNTY.
- The COUNTY will provide COUNTY standard engineering details to the CONSULTANT in AutoCAD 2011 format.
- CONSULTANT assumes hydraulic modeling will not be required due to nature of project. If determined to be required it will be performed by the COUNTY. Pump hydraulic and horsepower selection will be provided by the COUNTY.
- This scope of work assumes all wells will be rehabilitated in their current location. If relocation and replacement is required upon completion of evaluation, this scope of work will be modified and negotiated accordingly.

## COMPENSATION

MWH shall provide the services listed herein for a lump sum fee of \$195,637.00. The breakdown of the fee is included in **Attachment B**. The County will be invoiced monthly on the basis of the percent complete of each task deliverable.

Task No.	Task Description	Com Labor Subtotal	Subconsultants	Subconsultants w/ 10% Markup	CAD (\$16.75/hr)	ODCs	TOTAL
<b>Task 1</b>	<b>Project Management/ Meetings/QA/QC</b>						
Task 1.0	Project Management	\$40,404.00	\$4,000.00	\$4,400.00	\$0.00	\$1,730.00	\$46,534.00
Task 1.1	Kick-Off Meeting	\$19,036.00	\$1,000.00	\$1,100.00	\$0.00	\$300.00	\$20,436.00
Task 1.2	Progress Meetings (4)	\$1,798.00	\$1,000.00	\$1,100.00	\$0.00	\$50.00	\$2,938.00
Task 1.3	Quality Assurance and Quality Control	\$4,722.00	\$2,000.00	\$2,200.00	\$0.00	\$480.00	\$7,402.00
Sub-Task 1.3.1	Design Development Phase (60% Design)	\$6,248.00	\$0.00	\$0.00	\$0.00	\$300.00	\$6,548.00
Sub-Task 1.3.2	Contract Document Preparation Phase (90% Design/Final Design)	\$5,568.00	\$0.00	\$0.00	\$0.00	\$300.00	\$5,868.00
Sub-Task 1.3.3	Issued for Bid Documents	\$3,042.00	\$0.00	\$0.00	\$0.00	\$300.00	\$3,342.00
<b>Task 2</b>	<b>Schematic Design Phase</b>						
Task 2.1	Well Evaluation	\$22,624.00	\$35,459.00	\$39,004.90	\$536.00	\$630.70	\$62,795.60
Task 2.2	Well Site Survey						
Task 2.3	Well Site Power and I&C Testing	\$1,356.00	\$18,834.00	\$20,717.40	\$0.00	\$80.00	\$22,153.40
Task 2.4	Utility Locates	\$2,116.00	\$5,000.00	\$5,500.00	\$0.00	\$50.70	\$7,666.70
Task 2.5	Well Site Plans	\$1,680.00	\$6,625.00	\$7,287.50	\$0.00	\$200.00	\$9,167.50
Task 2.6	Schematic Design (30% Design)	\$1,684.00	\$0.00	\$0.00	\$107.20	\$250.00	\$2,041.20
		\$11,800.00	\$5,000.00	\$5,500.00	\$428.80	\$50.00	\$17,578.80
<b>Task 3</b>	<b>Design Development Phase</b>						
Task 3.1	Opinion of Probable Construction Cost Estimate	\$29,686.00	\$8,000.00	\$8,800.00	\$750.40	\$500.00	\$39,736.40
Task 3.2	Design Development Phase Documents and Review	\$4,072.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,072.00
		\$25,614.00	\$8,000.00	\$8,800.00	\$750.40	\$500.00	\$35,664.40
<b>Task 4</b>	<b>Contract Document Preparation Phase</b>						
Task 4.1	Opinion of Probable Construction Cost Estimate	\$26,385.00	\$11,000.00	\$12,100.00	\$428.80	\$500.00	\$39,413.80
Task 4.2	Contract Documentation Preparation Phase Documents and Review	\$7,553.00	\$2,000.00	\$2,200.00	\$0.00	\$0.00	\$9,753.00
		\$18,832.00	\$9,000.00	\$9,900.00	\$428.80	\$500.00	\$29,660.80
<b>Task 5</b>	<b>Bidding Assistance</b>						
Task 5.1	Addenda (1)	\$5,900.00	\$1,000.00	\$1,100.00	\$107.20	\$50.00	\$7,157.20
Task 5.2	Pre-Bid Conference	\$3,782.00	\$500.00	\$550.00	\$107.20	\$0.00	\$4,939.20
		\$2,118.00	\$500.00	\$550.00	\$0.00	\$50.00	\$3,218.00
	<b>Labor Subtotal Hours</b>						
	<b>Direct Labor Rate</b>						
	<b>Labor Hourly Billing Rates (Direct Labor Rate * 2.9)</b>						
	<b>TOTAL</b>	\$124,999.00	\$59,459.00	\$65,404.90	\$1,822.40	\$3,410.70	\$195,637.00
	<b>Subconsultants</b>						
Subconsultant	Engenuity Group Inc. - Wellsite Survey	\$1					
Subconsultant	Hillers Electrical Engineering, Inc. - Electrical/I&C	\$3					
Subconsultant	High Tech Engineering, Inc - Engineering Utility Locates	\$1					
	<b>Subconsultant Subtotal</b>	\$5					

## ATTACHMENT - C

### PROJECT SCHEDULE

The completion dates for this work will be as follows (starting from CONSULTANT'S receipt of Notice-to-Proceed).

#### Engineering Services

#### Weeks From Notice to Proceed

Task 2 - Schematic Design Phase Meeting	50 days
Task 3 - Design Development Phase 60% Submittal	75 days
Task 3 - Receive County Review Comments	85 days
Task 4 - Contract Document Preparation Phase 90% Submittal	110 days
Task 4 - Receive County Review Comments	120 days
Task 4 - Bid Ready Contract Document 100% Submittal	145 days
Task 5 - Bidding Assistance	180 days

## SCHEDULE #1

PROJECT NAME: <u>Water Treatment Plants 3 and 9 Wells Rehabilitation and Replacement</u>		PROJECT NUMBER: _____	
NAME OF PRIME BIDDER: <u>MWH Americas, Inc.</u>		ADDRESS: <u>100 S. Dixie Highway, Suite, West Palm Beach, FL 33401</u>	
CONTACT PERSON: <u>Becky Hachenburg, PE, PMP</u>		PHONE NO. <u>561-650-0070</u> FAX NO. <u>561-650-0074</u>	
BID OPENING DATE: <u>N/A</u>		DEPARTMENT <u>Water Utilities Department</u>	

NOTE:

1. The amount listed on this form for a Subconsultant must be supported by price or percentage included on Schedule 2 or a proposal from each Subconsultant listed in order to be counted toward goal attainment.
2. Firms may be certified by Palm Beach County as an SBE and/or an M/WBE. If firms are certified as both an SBE and M/WBE, please indicate the dollar amount under the appropriate category.
3. M/WBE information is being collected for tracking purposes only.



**ATTACHMENT D**

**SCHEDULE 2**

**LETTER OF INTENT TO PERFORM AS AN SBE OR M/WBE SUBCONSULTANT**

PROJECT NO. WUD 13-080 PROJECT NAME: WTP 3 and 9 Well Rehabilitation

TO: MWH Americas, Inc.  
(Name of Prime Bidder)

The undersigned is certified by Palm Beach County as a(n) – (check one or more, as applicable):

Small Business Enterprise X Minority Business Enterprise \_\_\_\_\_

Black \_\_\_\_\_ Hispanic X Women \_\_\_\_\_ Caucasian \_\_\_\_\_ Other (Please Specify) \_\_\_\_\_

Date of Palm Beach County Certification: October 17, 2012

The undersigned is prepared to perform the following described work in connection with the above project  
**(Specify in detail, particular work items or parts thereof to be performed):**

Line Item/Lot No.	Item Description	Qty / Units	Unit Price	Total Price
<u>1</u>	<u>Electrical and I&amp;C Eng Svcs</u>	<u>1</u>	<u>\$34,000.00</u>	<u>\$34,000.00</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

**View attached proposal**

at the following price  
\$ 34,000.00

(Subconsultant's Quote)

And will enter into a formal agreement for work with you conditioned upon your execution of a contract with Palm Beach County.

If undersigned intends to sub-subcontract any portion of this subcontract to a non-certified SBE subconsultant, the amount of any such subcontract must be stated: \$ \_\_\_\_\_.

The undersigned subcontractor understands that the provision of this form to prime bidder does not prevent subcontractor from providing quotations to other bidders

Hillers Electrical Engineering  
(Print Name of SBE-M/WBE Subconsultant)

By: [Signature]  
(Signature)

Tam Daraa VP  
(Print name/title of person executing on  
behalf of SBE-M/WBE Subconsultant)

Date: 7/30/13

**ATTACHMENT D**

**SCHEDULE 2**

**LETTER OF INTENT TO PERFORM AS AN SBE OR MWBE SUBCONSULTANT**

PROJECT NO. WAD 13-080 PROJECT NAME: WTP 3 and 9 Well Rehabilitation

TO: MWH Americas, Inc.  
(Name of Prime Bidder)

The undersigned is certified by Palm Beach County as a(n) – (check one or more, as applicable):

Small Business Enterprise X Minority Business Enterprise \_\_\_\_\_

Black \_\_\_\_\_ Hispanic \_\_\_\_\_ Women \_\_\_\_\_ Caucasian X Other (Please Specify) \_\_\_\_\_

Date of Palm Beach County Certification: August 17, 2010 to August 16, 2013

The undersigned is prepared to perform the following described work in connection with the above project  
(Specify in detail, particular work items or parts thereof to be performed): Perform a topographic survey of the two WTP 3 wells and four WTP 9 well sites (sites are assumed to be 200' x 200' in total area or less) to provide an AutoCAD base map for all engineering and design. Survey information will be provided to the COUNTY to be used as part of the contract documents. Provide 100 year flood plain elevations for each site. Incorporate easement and property boundary information into surveys.

Line Item/Lot No.	Item Description	Qty / Units	Unit Price	Total Price
<u>1</u>	<u>Land Surveyor Services</u>	<u>1</u>	<u>1</u>	<u>\$18,834.00</u>

View attached proposal

at the following price  
\$18,834.00

(Subconsultant's Quote)

And will enter into a formal agreement for work with you conditioned upon your execution of a contract with Palm Beach County.

If undersigned intends to sub-subcontract any portion of this subcontract to a non-certified SBE subconsultant, the amount of any such subcontract must be stated: \$ \_\_\_\_\_

The undersigned subcontractor understands that the provision of this form to prime bidder does not prevent subcontractor from providing quotations to other bidders

Engenuity Group  
(Print Name of SBE/MWBE Subconsultant)

By: [Signature]  
(Signature)

C. ANDRE RAYMAN, PRESIDENT  
(Print name/title of person executing on behalf of SBE-MWBE Subconsultant)

Date: 7/19/13

## ATTACHMENT D

### SCHEDULE 2

#### LETTER OF INTENT TO PERFORM AS AN SBE OR MWBE SUBCONSULTANT

PROJECT NO. WUD 13-080 PROJECT NAME: WTP 3 and 9 Well Rehabilitation

TO: MWH Americas, Inc.  
(Name of Prime Bidder)

The undersigned is certified by Palm Beach County as a(n) – (check one or more, as applicable).

Small Business Enterprise \_\_\_\_\_ Minority Business Enterprise X

Black \_\_\_\_\_ Hispanic X Women \_\_\_\_\_ Caucasian \_\_\_\_\_ Other (Please Specify) \_\_\_\_\_

Date of Palm Beach County Certification: \_\_\_\_\_

The undersigned is prepared to perform the following described work in connection with the above project  
(Specify in detail, particular work items or parts thereof to be performed):

Line Item/Lot No.	Item Description	Qty / Units	Unit Price	Total Price
<u>1</u>	<u>Soft Dig Locates</u>	<u>12</u>	<u>\$375.00</u>	<u>\$4,500.00</u>
<u>1</u>	<u>GPR Survey</u>	<u>12 hr</u>	<u>\$177.08</u>	<u>\$2,125.00</u>

View attached proposal

at the following price  
\$ 6,625.00

(Subconsultant's Quote)

And will enter into a formal agreement for work with you conditioned upon your execution of a contract with Palm Beach County.

If undersigned intends to sub-subcontract any portion of this subcontract to a non-certified SBE subconsultant, the amount of any such subcontract must be stated: \$ \_\_\_\_\_

The undersigned subcontractor understands that the provision of this form to prime bidder does not prevent subcontractor from providing quotations to other bidders

High Tech Engineering  
(Print Name of SBE/MWBE Subconsultant)

By: [Signature]  
(Signature)

Rafael Jimenez  
(Print name/title of person executing on  
behalf of SBE-MWBE Subconsultant)

Date: 7/18/13

# AUTHORIZATION STATUS REPORT

<b>Auth. No.</b>	<b>Description</b>	<b>Status</b>	<b>Project Total Amount</b>	<b>Date Approved</b>	<b>WUD No. Assigned</b>	<b>Consultant's Project No.</b>
1	Miscellaneous Hydrogeology and Water Resources Services	Approved	\$ 30,026.00	08/30/11	WUD 11-141	1011867
2	Disinfection System Evaluation	Approved	\$ 90,813.00	07/20/11	WUD 11-117	1011641
3	Modification of Proposed System 8 and 3 Well Site Locations	Approved	\$ 72,261.00	09/07/11	WUD 11-137	1011957
4	WQBEL White Paper	Approved	\$ 9,915.00	09/02/11	WUD 11-147	1011856
5	New Water Treatment Plant 2, 3, and 8 Production Wells	Approved	\$ 497,928.00	01/24/12	WUD12-006	10500004
5.1	Supplement to Authorization No. 5	Approved	\$ 12,373.40	01/24/12	WUD12-006	10502626
6	Water Treatment Plant 8 Wells Replacement and Rehabilitation	Approved	\$ 166,443.60	02/07/12	WUD12-008	1012730
7	Lake Region Water Treatment Plant Well 8 Construction Services	Approved	\$ 98,012.20	01/20/12	WUD 11-113	1012646
8	Pahokee Wastewater Treatment and Disposal Facility Lower Zone Monitoring Well	Approved	\$ 56,280.00	10/17/12	WUD 10-077	10501489
8.1	Supplement to Authorization No. 8	Approved	\$ 0.00	12/07/12	WUD 10-077	10501489
8.2	Supplement to Authorization No. 8	Pending	\$ 0.00	7/1/13	WUD 10-077	10501489
9	Deep Injection Lower Zone Monitoring Well Construction Services	Pending	\$ 99,070.40	6/19/13	WUD 10-077	10503014
10	New Water Treatment Plant 2, 3, and 8 Production Wells Engineering Services During Construction	Pending	\$ 328,273.20	TBD	WUD12-006	TBD
11	Water Treatment Plant 8 Wells Replacement and Rehabilitation Engineering Services During Construction	Pending	\$ 298,419.46	TBD	WUD12-008	TBD
12	Water Treatment Plant 3 and 9 Well Rehabilitation	Pending	\$ 195,637.00	TBD	WUD 13-080	TBD
<b>Total</b>			<b>\$1,958,257.56</b>			

# ATTACHMENT - F

## AUTHORIZATION STATUS REPORT

### SUMMARY OF SBE / MINORITY BUSINESS TRACKING

	Total	SBE
<b>Current Proposal</b>		
Value of Authorization No.	\$195,637.00	
Value of SBE - M/WBE Letters of Intent	\$59,459.00	\$59,459.00
Actual Percentage	30.39%	30.39%
<b>Signed Authorizations</b>		
Total Value of Authorizations	\$1,133,122.60	
Total Value of SBE - M/WBE Signed Subcontracts	\$348,888.00	\$348,888.00
Actual Percentage	30.78%	30.78%
<b>Signed Authorizations Plus Current Proposal</b>		
Total Value of Authorizations	\$1,328,759.60	
Total Value of Subcontracts & Letters of Intent	\$408,347.00	\$408,347.00
Actual Percentage	30.73%	30.73%
<b>GOAL</b>	26%	26%

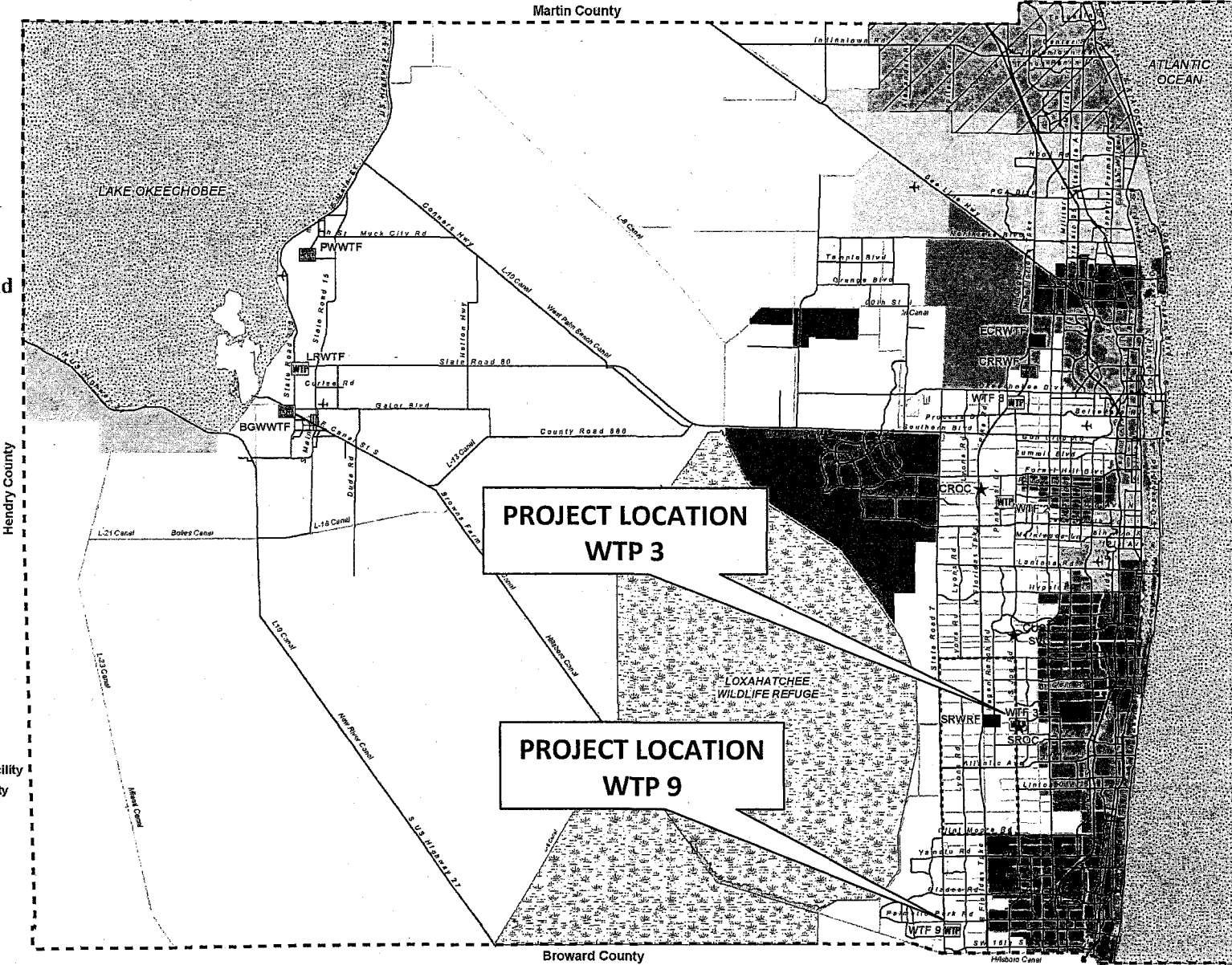
ATTACHMENT - G

PROJECT LOCATION MAP



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

- Legend
- ★ Administration
  - WTP Water Treatment Facility
  - Reclamation Facility
  - Wastewater Reclamation Facility
  - Wastewater Treatment Facility
  - Mandatory Reclaimed SA
  - - - - - Palm Beach County Limits
  - P.B.C.W.U.D. Service Area



**Attachment – H**  
**Proposed Drawing List**

DWG #	DWG TITLE	DWG #	DWG TITLE
G-1	COVER SHEET	E-6	WTP 9 - ELECTRICAL SITE PLAN Sheet 2
G-2	LOCATION MAP, LIST OF DRAWINGS, AND GENERAL NOTES	E-7	WELL 3W-2 ELECTRICAL PLAN
G-3	STANDARD DETAILS	E-8	WELL 3W-3 ELECTRICAL PLAN
		E-9	WELL 9W-10 ELECTRICAL PLAN
C-1	CIVIL STANDARD DETAILS 1	E-10	WELL 9W-11 ELECTRICAL PLAN
C-2	CIVIL STANDARD DETAILS 2	E-11	WELL 9W-12 ELECTRICAL PLAN
C-3	CIVIL STANDARD DETAILS 3	E-12	WELL 9W-13 ELECTRICAL PLAN
C-4	SITE PLAN WTP 3 PRODUCTION WELLS - I	E-13	WELL 3W-2 AND 3W-3 ONE LINE DIAGRAM
C-5	SITE PLAN WTP 3 PRODUCTION WELLS - II	E-14	WELL 9W-10 AND 9W-11 ONE LINE DIAGRAM
C-6	SITE PLAN WTP 9 PRODUCTION WELLS - I	E-15	WELL 9W-12 AND 9W-13 ONE LINE DIAGRAM
C-6	SITE PLAN WTP 9 PRODUCTION WELLS - II	E-16	WELL 3W-2 AND 3W-3 SCHEMATIC DIAGRAM
C-6	SITE PLAN WTP 9 PRODUCTION WELLS - III	E-17	WELL 9W-10 AND 9W-11 SCHEMATIC DIAGRAM
		E-18	WELL 9W-12 AND 9W-13 SCHEMATIC DIAGRAM
S-1	GENERAL NOTES AND STANDARD DETAILS 1	E-19	WELL 3W-2 AND 3W-3 RISER DIAGRAM
S-2	GENERAL NOTES AND STANDARD DETAILS 2	E-20	WELL 9W-10 AND 9W-11 RISER DIAGRAM
S-3	TYPICAL WELL PADS – PLAN(S)	E-21	WELL 9W-12 AND 9W-13 RISER DIAGRAM
S-4	TYPICAL WELL PADS – PLAN(S) AND SECTION(S)	E-22	ELECTRICAL DETAILS SHEET 1
		E-23	ELECTRICAL DETAILS SHEET 2
M-1	MECHANICAL STANDARD DETAILS 1	E-24	ELECTRICAL DETAILS SHEET 3
M-2	MECHANICAL STANDARD DETAILS 2		
M-3	TYPICAL WELL PLAN AND SECTION	I-1	INSTRUMENTATION LEGEND
M-4	WELL 3W-2 AND 3W-3 MECHANICAL PLAN	I-2	WTP#3 COMMUNICATION BLOCK DIAGRAM
M-5	WELL 9W-10 AND 9W-12 MECHANICAL PLAN	I-3	WTP#9 COMMUNICATION BLOCK DIAGRAM
M-6	WELL CASING SCHEDULE AND PUMP DATA	I-4	P&ID WELL 3W-2 AND 3W-3
		I-5	P&ID WELL 9W-10 AND 9W-11
E-1	ELECTRICAL LEGEND AND SYMBOLS	I-6	P&ID WELL 9W-12 AND 9W-13
E-2	ELECTRICAL GENERAL NOTES	I-7	INSTRUMENTATION DETAILS SHEET 1
E-3	WTP 3 - ELECTRICAL SITE PLAN Sheet 1	I-8	INSTRUMENTATION DETAILS SHEET 2
E-4	WTP 3 - ELECTRICAL SITE PLAN Sheet 2		
E-5	WTP 9 - ELECTRICAL SITE PLAN Sheet 1		