

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

Meeting Date: August 16, 2011

Consent ☒   
Public Hearing ☐

Regular ☐

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

**I. EXECUTIVE BRIEF**

**Motion and Title:** Staff recommends motion to approve: Consultant Service Authorization No. 3 to the Water Plant and Water Resources Engineering Services Contract with Carollo Engineers (R2011-0630) for a Water Master Plan Update Report in the amount of \$ 254,708.

**Summary:** On May 3, 2011, the Board of County Commissioners approved the continuing Contract for Water Plant and Water Resources Engineering Services with Carollo Engineers (R2011-0630) to obtain engineering/professional service for utility related projects. This Consultant Service Authorization will provide an update to the County Water Master Plan which includes updates to water demand projections, assistance with distribution system hydraulic model development, water quality modeling, and development of a Capital Improvements Program for the County's water system. The Small Business Enterprise (SBE) participation goal established by the SBE Ordinance (R2002-0064) is 15% overall. The contract with Carollo Engineers provides for SBE participation of 26% overall. This authorization includes 26.01% overall participation. The cumulative SBE participation, including this Consultant Work Authorization is 20.20% overall. Carollo Engineers is a local Palm Beach County Company (WUD Project No. WUD 11-118) District – Countywide (JM)

**Background and Justification:** The County's most recent Water Master Plan was completed in 2008. Since 2008 a major changes in population projections have occurred, therefore an update to the Water Master Plan is needed. Consultant Service Authorization No. 3 will provide an update to the Water Master Plan which covers the next 20 years of growth. The master plan will contain updates to water demand projections, evaluation of water treatment facilities and storage tank capacity, a schedule and cost for replacement of water system pipelines, assistance with hydraulic distribution system modeling development and development of a Capital Improvements Program for the water system. The updated hydraulic water model will be used to determine the adequacy of the water system to handle projected fire flow requirements and peak water demands for the next 20 years.

**Attachments:**

1. Location Map
2. Two (2) Original Consultant Service Authorization No. 3

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

*[Signature]*  
Department Director

7/12/2011  
Date

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

*[Signature]*  
Assistant County Administrator

8/1/2011  
Date

## II. FISCAL IMPACT ANALYSIS

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

Fiscal Years	2011	2012	2013	2014	2015
Capital Expenditures	<u>\$ 254,708.00</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>\$ 254,708.00</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 4001 Agency 720 Org. 2322 Object 3120

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 operating expenditure from the user fees and balance brought forward

C. Department Fiscal Review: Suhra M. Vest

## III. REVIEW COMMENTS

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

[Signature] 7/14/2011  
OFMB  
7/19/11  
7/27/11

[Signature] 7/26/11  
Contract Development and Control  
7-25-11 B. Wheeler

### B. Legal Sufficiency:

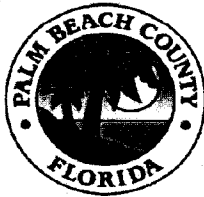
[Signature] 7/27/11  
Assistant County Attorney

This item complies with current  
County policies.

### C. Other Department Review:

\_\_\_\_\_  
Department Director

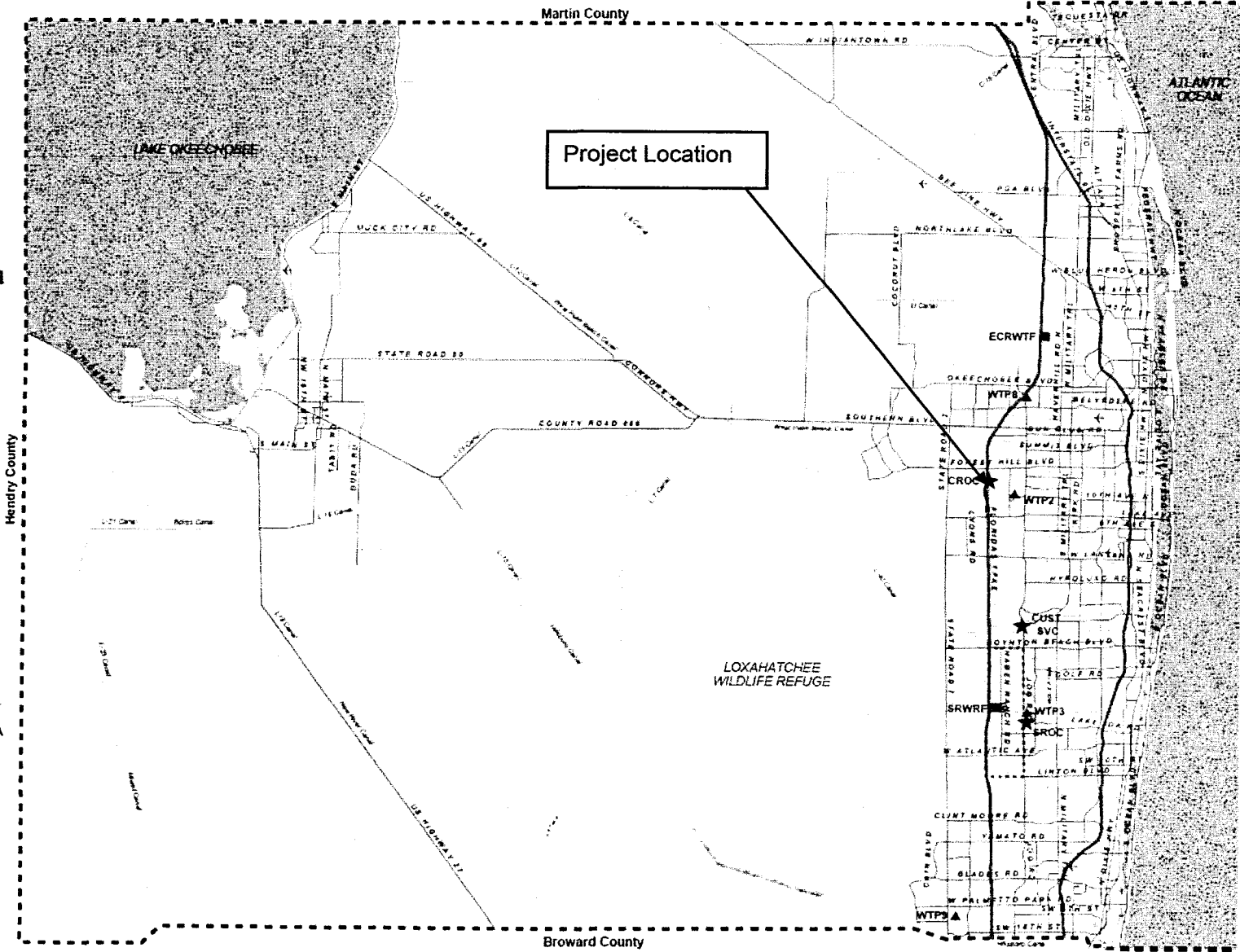
This summary is not to be used as a basis for payment.



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

Legend

- P.B.C.W.U.D. SA
- MANDATORY RECLAIMED SA
- - - - - COUNTY LIMITS
- ★ Administration
- Water Reclamation Plant
- ▲ Water Treatment Plant
- ① Wetlands



**CONSULTANT SERVICES AUTHORIZATION NO. 3**

**Project No. WUD 11-118**

**Budget Line Item No. 4001-720-2122-3120**

**Project Title Water Masterplan Update**

**District No.: Countywide**

**THIS AUTHORIZATION # 3** to the Contract for Consulting/Professional Services dated 5/3/2011 with an effective date of 6/3/2011 (Resolution/Document R2011-0630), 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 26.01% overall. The cumulative SBE participation, including this authorization is 20.20% overall. Additional authorization will be utilized to meet or exceed the stated overall participation goal.

1. CONSULTANT: Carollo Engineers
2. ADDRESS: 8401 Lake Worth Rd. Lake Worth, FL 33467
3. Description of Services to be provided by the Consultant:

Prepare an to the County's Water Master Plan, including updates to water demand projections, assistance with distribution system hydraulic and water quality modeling, and development of a Capital Improvements Program for the County's water system.

**See EXHIBIT "A".**

4. Services completed by the Consultant to date:

**See EXHIBIT "B" and "C".**

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 \$ N/A
  - B. Fixed price of \$ 254,708

PROJECT NO. WUD 11-118

AUTHORIZATION NO. 3

Budget Line Item No. 4001-720-2122-3120

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.
8. EXCEPT AS HEREBY AMENDED, CHANGED OR MODIFIED, all other terms, conditions and obligations of the Contract dated 5/3/2011 with an effective date of 6/3/2011 remain in full force and effect.

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

**CONSULTANT:**

**PALM BEACH COUNTY**

FIRM: Carollo Engineers, Inc.

Signed: 

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

Typed Name: Lyle Munce, P.E.

Typed Name: Karen T. Marcus

Title: Vice President

Title: Chair, Palm Beach County  
Board of County Commissioners 

Signed: 

Date: \_\_\_\_\_

Typed Name: Thomas Gillogly, P.E.

Title: Associate Vice President

Date: July 7, 2011

Carollo Engineers, Inc. is a Delaware Corporation qualified to do business in the State of Florida. By corporate resolution, all client service managers, including Lyle Munce and Thomas Gillogly, are authorized to execute contracts relating to the firm's usual and customary engineering business on behalf of Carollo Engineers, Inc.

ATTEST: 

(Signed)

## **EXHIBIT A**

### **CONSULTANT SERVICE AUTHORIZATION NO. 3**

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

#### **SCOPE OF WORK**

### **INTRODUCTION**

Palm Beach County (COUNTY) entered into an agreement entitled Contract for Engineering/ Professional Services - Palm Beach County Utilities Department Project No. WUD 11-001 (CONTRACT) with. Carollo Engineers (CONSULTANT) to provide engineering services for various general activities on (Reference Document R2011-0630). This Consultant Service Authorization will be performed under that CONTRACT.

### **BACKGROUND**

The COUNTY's most recent Water Master Plan was completed in 2007 and 2008. The Utilities Department has requested that CONSULTANT update its Water Master Plan including revisions to water demand projections, assistance with hydraulic distribution system modeling, and development of a Capital Improvements Program for the water system. The Water Master Plan Update will include model calibration and expanded modeling scenarios analyses, which will serve to provide a higher level of confidence in the model and its recommendations for future capital projects.

### **SCOPE OF SERVICES**

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

#### **WATER MASTER PLAN UPDATE**

CONSULTANT shall perform the following engineering services to develop the COUNTY Water Master Plan Update. This authorization includes assistance with hydraulic modeling and development of a Capital Improvements Program and Water Master Plan Update Report. Because of the nature of this project, certain assumptions apply to this Scope of Services. To the extent possible, these assumptions are stated within this document and are reflected in the Consultant fee.

The engineering services described herein have been based upon the understanding of the direction provided by COUNTY staff. Assumptions include:

- COUNTY staff will provide all previous reports, data, and information available to assist in the development of the Water Master Plan Update.
- The CONSULTANT shall be entitled to rely upon the accuracy of the data and information supplied by the COUNTY without independent review or evaluation.

- The COUNTY shall attend all workshops and review meetings to maintain the progress of the project according to the schedule.
- The COUNTY shall review Draft deliverables and provide comments to the CONSULTANT within a two-week period.
- The COUNTY shall provide GIS data requested by the CONSULTANT when available.
- The COUNTY shall provide the data and information requested to compute the water demand projections and peaking factors.
- The CONSULTANT will assist with model calibration and analyses; however, all model input activities will be completed by COUNTY staff in their office.
- COUNTY staff will use InfoWater modeling software.
- The Water Master Plan Update includes evaluation of infrastructure necessary for future growth and development only, and does not include replacement of pipes due to age or condition. It is understood that these renewal and replacement (R&R) projects were developed by the COUNTY under a separate project. COUNTY will provide R&R projects and cost estimates to include in the final Master Plan CIP.

### **Task 1 Project Management, Communication, and Meetings**

The CONSULTANT's project manager will direct and coordinate the efforts of the project team members in order to deliver the project. Work under this task includes the following:

- 1.1 Project Management/Communication: The project manager will make staffing assignments, review work progress, and coordinate quality assurance and review procedures. The project manager will manage the budget, schedule, and invoicing.

The project manager will prepare and maintain a decision log that will record the decisions made by COUNTY throughout the project. The decision log will contain decisions made during regular meetings and phone conversations with COUNTY staff. The decision log will list the date the decision was made, the type of meeting in which it was made, the individuals involved in making the decision, and the nature of the decision. The decision log will be included in each monthly progress report to COUNTY.

- 1.2 Meetings and Workshops: The CONSULTANT will schedule progress meetings with COUNTY staff to keep staff informed of the project status, discuss upcoming tasks and deliverables, and to address issues relating to the project. It is estimated that the project will require six (6) progress meetings. These meetings will be combined with the deliverable review meetings when possible. The CONSULTANT will prepare meeting agendas and meeting notes to document discussions, decisions, and work progress. The CONSULTANT will participate in the following meetings:

- Project kick-off meeting
- Six (6) progress meetings

### **Task 1 Deliverables**

The following deliverables shall be provided:

- Meeting agendas and notes

## **Task 2 Data Collection and Planning Framework**

The CONSULTANT will collect data and past reports to understand the COUNTY's system, assist with hydraulic modeling, and complete the Water Master Plan Update. The planning framework consists of demand projections to be used in the models and the criteria that will be used to evaluate the adequacy of water system infrastructure. Items included in this task are:

- 2.1 Water Data Collection: The CONSULTANT will collect data from COUNTY that will be needed to estimate water demands for the COUNTY service area, as well as the assumed schedule for development. This data may include past reports, customer billing records, major customer consumption, traffic analysis zone (TAZ) population estimates, water production records, and peaking factor information. In addition, the following GIS data will be required: property parcels, street centerlines, service area boundaries, TAZ areas, land use, and zoning. The COUNTY will also provide their required performance criteria as defined in the COUNTY's UPAP, including water level of service, minimum pressures, fire flow requirements, and maximum pipe velocities.
- 2.2 Confirm Water Demands: The CONSULTANT will obtain the COUNTY'S water demand data that has already been developed and attached to the COUNTY's TAZ GIS layer. The water demands, which were developed by the COUNTY using TAZ population and a per capita demand factor, will be reviewed. The CONSULTANT will provide comments and/or recommendations on any potential modifications or considerations for the demand projections. If the COUNTY/CONSULTANT team determines that demand projections should be modified, the COUNTY will update the demand projections in the TAZ GIS layer and provide an updated version to the CONSULTANT.
- 2.3 Develop Peaking Factors: The CONSULTANT will analyze the collected data to determine monthly and diurnal peaking factors for the water system. Diurnal curves are necessary for the extended period simulation modeling analyses. Diurnal curves will be developed based on historical data at each water treatment plant, as well as for the water system as a whole.
- 2.4 Technical Memorandum No. 1: The CONSULTANT will develop Technical Memorandum (TM) No. 1 to present the planning and performance information that will be the foundation of the modeling studies. TM1 will include population and water demand estimates. Seasonal demand patterns, daily peaking factors, and diurnal curves will be provided.. COUNTY staff will be asked to provide comments on TM1. These comments will be incorporated into the Water Master Plan Update.

### Task 2 Deliverables

Ten (10) copies of TM1.

## **Task 3 Water Model Development and Calibration**



The CONSULTANT will assist COUNTY staff to update and calibrate the COUNTY's water system hydraulic model for the purpose of planning future infrastructure. The primary objective of the calibration task is to give the COUNTY confidence that the model is a reasonable representation of the water distribution system so that capital improvement decisions can be made based on model results.

All modeling work will be completed by COUNTY staff at their offices. The CONSULTANT will provide a modeling engineer to assist COUNTY staff throughout this task as defined in the scope and fee for this task. Communication via phone, email, NetMeeting, and/or WebEx may also be utilized to provide the most efficient means of communication during this task.

The CONSULTANT will work with COUNTY staff to obtain the information necessary to update the water system model. A list detailing the data required will be provided. Information necessary to complete the update will include the following items. Some of these items have already been developed by the COUNTY, such as GIS data.

- GIS Infrastructure Data: Mains, hydrant locations, service area boundaries, and pump station and tank data.
- Infrastructure Data: Elevations of facilities, storage tank size and height, pump number and size, and performance curves.
- Operational Information: SCADA data, infrastructure control schemes and setpoints, fire hydrant test data, and location and use of control valves, if any.

Model creation and calibration will include the following tasks:

- 3.1 Water Model Development: The CONSULTANT will assist COUNTY staff as they update their model using GIS data, as-built drawings, or other available information. Development of the model also includes establishing pipe connectivity and entering hydraulic infrastructure data for pump stations and tanks, including control information. The COUNTY has already begun this task; however, the CONSULTANT will assist the COUNTY to provide a third party check of the connectivity. The CONSULTANT will discuss each pump station and storage tank site in the water system with COUNTY staff to obtain an understanding of the system and to give guidance on how to incorporate pertinent data into the model. Model development also includes assigning node elevations, incorporating diurnal curves, and other miscellaneous data that is used by the model for calculations.
- 3.2 Water Demand Allocation: The CONSULTANT will review and verify the water demand allocation for all model scenarios. If model demands do not appear to be allocated appropriately, the CONSULTANT will make recommendations for the COUNTY to update the demand allocation. The CONSULTANT will also review customer service data with the COUNTY to determine if any demands for major customers should be handled individually.
- 3.3 Water System Field Test Plan: The CONSULTANT will develop a field test plan that identifies field-testing locations, test timing, equipment requirements, and support requirements. The CONSULTANT will present the plan to COUNTY staff for feedback and to communicate level of effort required by COUNTY for the field-testing. Pressure and flow information will be collected by the COUNTY's SCADA system and will be used for the calibration.

- 3.4 Water System Field Testing: The CONSULTANT or its SUBCONSULTANTS will assist the COUNTY with coordination of the field-testing including download of SCADA data, field investigations, and SCADA data analysis.
- 3.5 Water Model Calibration: Using data collected from the field tests, the CONSULTANT will work with the COUNTY to calibrate the water model by comparing model results with the test data. The CONSULTANT will recommend modification of data parameters such as infrastructure, controls, demands, or friction factors until there is a reasonable correlation between the model and the test data. The model will be calibrated for extended period simulation (EPS) conditions using SCADA data.
- 3.6 Technical Memorandum No. 2: The CONSULTANT will prepare TM2 describing the model and the model calibration. Maps showing pipe infrastructure data will be provided, along with tables of data describing infrastructure parameters such as storage tank sizes and elevations, pump design points and curves, and control information. TM2 will provide a location to document all data used in the model. TM2 will also include the field test plan, raw field data, model calibration results, and a discussion of additional investigations that may be needed to resolve anomalies that have been discovered during the model calibration process. The CONSULTANT will review the calibration results in a meeting with COUNTY staff. Staff will be asked to provide comments on TM2. These comments will be incorporated into the Water Master Plan Update.

#### Task 3 Deliverables

Ten (10) copies of TM2.

#### **Task 4 Water System Evaluations and CIP**

The CONSULTANT will conduct evaluations and develop scenarios for the COUNTY to meet the projected water demands in the 5-, 10-, and 20-year planning periods. These evaluations and scenarios will become the basis for the recommended projects in the COUNTY's Water Master Plan Update. All modeling analyses completed during this task will be directed and documented by the CONSULTANT; however, the actual modeling efforts will be completed by COUNTY. This task includes the following:

- 4.1 Evaluate Existing Water Distribution System: The CONSULTANT will evaluate the existing water distribution system to identify deficiencies, evaluate fire flow capabilities, and determine the adequacy of existing pump stations and storage tanks. The CONSULTANT will also evaluate the redundancy in the system to identify any critical pipes that are crucial to system operation, as well as typical water age throughout the distribution system under a variety of demand conditions.
- 4.2 Develop Master Plan for Future Water Infrastructure: The CONSULTANT will develop a master plan for future water infrastructure to service the projected water demands in the anticipated growth areas. Recommendation of future infrastructure will include an alternatives analysis that will evaluate the benefits of various configurations and sizes of water distribution mains. The pipes will be sized and configured to maintain adequate pressure and fire flow capacity. The CONSULTANT will also complete an evaluation of system storage and will recommend sizes and locations of additional water storage tanks and pump

stations if necessary. Future infrastructure will be designed to achieve system operations that maintain the performance criteria selected in Task 2.0.

Model scenarios will include steady-state peak hour analyses, as well as fire flow evaluations, for each time period being evaluated. Extended period simulation (EPS) scenarios will be developed for average day and maximum day demand conditions to evaluate storage fluctuations and water age/quality considerations. The CONSULTANT will also evaluate the redundancy in the system to identify any pipes that are currently or may become critical to system operation.

- 4.3 Storage Analysis: The CONSULTANT will also complete a storage volume assessment for each time period under evaluation to determine the adequacy of finished water storage.
- 4.4 Treatment Plant Capacity Analysis. The CONSULTANT will complete a capacity assessment of each WTP based on the modeling results. The CONSULTANT will determine the required capacity for each major treatment process at the WTPs. The CONSULTANT will calculate the required raw water production requirement for each plant.
- 4.5 Asbestos Cement and Galvanized Pipe Replacement Program: The COUNTY will supply the location and linear feet of existing asbestos and galvanized pipe. The CONSULTANT will develop a recommended program for replacing this pipe using a prioritization matrix that will be developed based on diameter, location, age, and criticality. This evaluation will be completed based on general pipe classifications based on geographic location, age, or other factors that will be discussed with COUNTY. The replacement program will only include these two types of pipe and will assume that all of this pipe will be replaced throughout a 10-year period. The Master Plan will provide the recommended replacement schedule and estimated costs.
- 4.6 Develop Water Capital Improvements Plan: The CONSULTANT will develop unit costs for the water infrastructure (plant and distribution system) and will develop cost estimates of the recommended capital improvements projects. The costs will be based on Class 5 (Conceptual Level) cost estimates. The CONSULTANT will develop 5-, 10-, and 20-year capital improvement plans (CIPs) based on these costs with a detailed implementation schedule for the first 5 years. The COUNTY will provide R&R programmed projects and cost estimates to include in the CIP. (R&R projects were developed by the COUNTY in a separate project.) The Water Master Plan Update includes evaluation of infrastructure necessary for future growth and development and does not include replacement of pipes due to age or condition.
- 4.7 Financing/Funding Options: The CONSULTANT will investigate potential funding options for the recommended CIP projects. All sources of financing will be explored including grants, loans, developer-contributed projects, and COUNTY capital and/or operating budgets.

#### **Task 5 Water Master Plan Update Report**

The results of the project will be summarized in a comprehensive Water Master Plan Update Report. The Water Master Plan Update Report will include the following sections, as a minimum:

- Standard Executive Summary
  - Introduction including background information, general purpose and scope, and description of factors affecting the COUNTY's water planning efforts such as regional water supply planning efforts, permitting regulations, population shifts, and/or global warming.
  - Summary of existing water facilities including treatment plants, wells, water distribution system, and storage facilities
  - Population estimates as provided in the COUNTY's TAZ data
  - Water demand projections including raw water, finished water, demands for various customer classes, and peaking factors
  - Description of the water transmission system including pumping, storage, and pipeline infrastructure
  - Model description and documentation including model elements, demand allocations, and calibration efforts
  - Model scenarios including existing and 5-, 10-, and 20-year scenarios for both steady state and EPS evaluations
  - WTP capacity evaluations including capacity of major unit processes and recommendations for modifications and/or expansions
  - Capital improvements plan through the 20-year timeframe including cost estimates, timing, and financing options
- 5.1 Draft Water Master Plan: The CONSULTANT will prepare a Draft Water Master Plan that summarizes the analyses completed in Tasks 4.1 through 4.3. This document will include tables of existing system operational parameters, maps of existing and recommended future infrastructure, and breakdown of costs for the capital improvements plan. The CONSULTANT will review the results of the Water Master Plan in a meeting with COUNTY staff. COUNTY staff will be asked to provide comments on the Draft Water Master Plan. These comments will be incorporated into the Final Water Master Plan Update.
- 5.2 Draft Report Review Meeting: The CONSULTANT will attend a meeting to discuss comments on the Draft Water Master Plan Update Report.
- 5.3 Final Water Master Plan Update Report: Upon receipt of COUNTY comments, the document will be revised and a final version will be issued.

#### Task 5 Deliverables

Ten (10) copies of the Draft Water Master Plan Update Report.

Minutes from Draft Report Review Meeting.

Ten (10) copies of the Final Water Master Plan Update Report and meeting materials in hard and electronic format.

**Items Not Included In Scope of Services**

- Services associated with wellfields or alternative water resources.
- Hydrant flow testing for determining C-factors. Typical values for friction C-factors can normally be used to achieve adequate modeling results. However, if throughout the course of the project it becomes evident that hydrant flow testing is necessary for calibration, additional project effort will be required (in addition to what is currently included).
- Evaluations, plans, and/or scheduling of repair and replacement (R&R) programs for water system assets other than the work described in Task 4.4 for asbestos and galvanized pipe replacement projects. The COUNTY will provide existing R&R programs and schedules for all other water system assets to be documented in the Water Master Plan Update.
- The GUA service area will not be included in the Master Plan.
- Modeling services other than the assistance specifically outlined in this Scope of Services. The CONSULTANT will not obtain, update, or utilize the model independently and will only work on the model with the COUNTY at their offices.
- Additional services not otherwise provided for in this Scope of Services.

**Compensation**

Lump Sum - \$254,708

**M/WBE Participation**

As prescribed under Section 7.5 of the CONTRACT, SBE participation is included in Attachment B under this Authorization. The attached Schedule 1 defines the SBE participation.

ATTACHMENT – A	Budget Summary
ATTACHMENT – B	Project Schedule
ATTACHMENT – C	SBE Schedules 1 & 2
ATTACHMENT – D	Location Map

**ATTACHMENT A**

**Labor Classification and Hourly Rate**

[illegible]

**ATTACHMENT - B**  
**PROJECT SCHEDULE**

The completion dates for this work will be as follows.

<u>Services</u>	<u>Completion Date</u> From Receipt of PBCWUD Supplied Project Information
Task 1 - Project Management, Communication, Meetings	8 months
Task 2 - Data Collection and Planning Framework	2 months
Task 3 - Water Model Development and Calibration	4 months
Task 4 - Water System Evaluations and CIP	6 months
Task 5 - Water Master Plan Update Rep	8 months

ATTACHMENT C  
SCHEDULE 1

LIST OF PROPOSED SBE-M/WBE PRIME AND/OR SUBCONTRACTOR PARTICIPATION

PROJECT NAME OR BID NAME: Water Master Plan Update PROJECT NO. OR BID NO.: WUD 11-118  
NAME OF PRIME BIDDER: Carollo Engineers, Inc. ADDRESS: 8401 Lake Worth Road, Suite 224, Lake Worth FL, 33467  
CONTACT PERSON: Lyle Munce, P.E. PHONE NO.: (561)209-6004 FAX NO.: (561)340-1487  
BID OPENING DATE: N/A USER DEPARTMENT: \_\_\_\_\_

THIS DOCUMENT IS TO BE COMPLETED BY THE PRIME CONTRACTOR AND SUBMITTED WITH BID PACKET. PLEASE LIST THE NAME, CONTACT INFORMATION AND DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY ALL SBE -M/WBE SUBCONTRACTORS ON THIS PROJECT. IF THE PRIME IS AN SBE-M/WBE, PLEASE ALSO LIST THE NAME, CONTACT INFORMATION AND DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY THE PRIME ON THIS PROJECT.

Name, Address and Phone Number	(Check one or both Categories)		DOLLAR AMOUNT OR PERCENTAGE OF WORK				
	M/WBE	SBE	Black	Hispanic	Women	Caucasian	Other (Please Specify)
Chen Moore & Associates Consulting Engineers, Inc. 500 Australian Avenue South, Suite 624 1. West Palm Beach, FL 33401 (561/746-6900)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					\$66,250 Asian American
2.	<input type="checkbox"/>	<input type="checkbox"/>					
3.	<input type="checkbox"/>	<input type="checkbox"/>					
4.	<input type="checkbox"/>	<input type="checkbox"/>					
5.	<input type="checkbox"/>	<input type="checkbox"/>					
(Please use additional sheets if necessary)							
Total							\$66,250

Total Bid Price \$ 254,708

Total SBE-M/WBE Participation Dollar Amount or Percentage of Work \$66,250

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



**SCHEDULE 2**  
**LETTER OF INTENT TO PERFORM AS AN SBE-M/WBE SUBCONTRACTOR**

**This document must be completed by the SBE-M/WBE Subcontractor and submitted with bid packet. Specify in detail, the particular work items to be performed and the dollar amount and/or percentage for each work item. SBE credit will only be given for items which the SBE-M/WBE Subcontractor are SBE certified to perform. Failure to properly complete Schedule 2 may result in your SBE participation not being counted.**

PROJECT NUMBER: WUD 11-118 PROJECT NAME: Water Master Plan Update

TO: Carollo Engineers, Inc.  
(Name of Prime Bidder)

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

Small Business Enterprise  X  Minority Business Enterprise  X

Black \_\_\_\_\_ Hispanic \_\_\_\_\_ Women \_\_\_\_\_ Caucasian \_\_\_\_\_ Other (Please Specify) Asian American

Date of Palm Beach County Certification: December 3, 2007

The undersigned is prepared to perform the following described work in connection with the above project. Additional Sheets May Be Used As Necessary

[illegible]

at the following price or percentage sixty six thousand, two hundred and fifty dollars  
(Subcontractor'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 subcontractor, the amount of any such subcontract must be stated.

Price or Percentage\_\_\_\_\_

The undersigned subcontractor understands that the provision of this form to Prime Bidder does not prevent Subcontractor from providing quotations to other bidders.

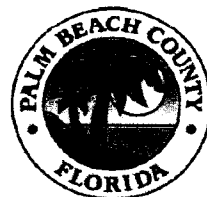
Chen Moore & Associates, Inc.  
(Print name of SBE-M/WBE Subcontractor)

By: \_\_\_\_\_  
(Signature)

Peter Moore, P.E., President  
(Print name/title of person executing on behalf  
of SBE-M/WBE Subcontractor)

Revised 03/15/11

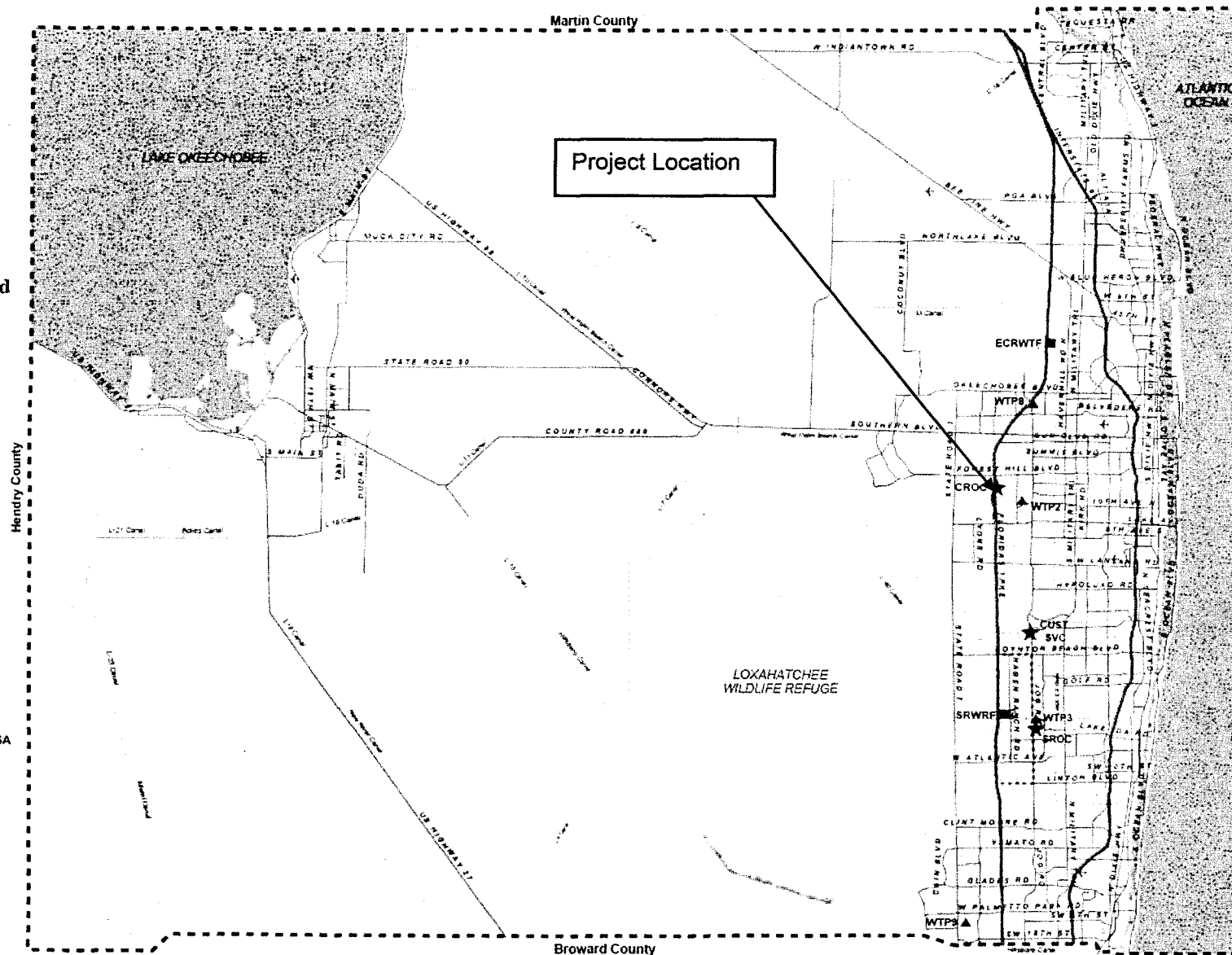
Date: 7/7/2011



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

Legend

- P.B.C.W.U.D. SA
- MANDATORY RECLAIMED SA
- COUNTY LIMITS
- Administration
- Water Reclamation Plant
- Water Treatment Plant
- Wetlands



**EXHIBIT - B**

## AUTHORIZATION STATUS REPORT

(CONTINUED)

## SUMMARY AND STATUS OF REQUESTS FOR AUTHORIZATIONS

[illegible]

# **EXHIBIT - C** **AUTHORIZATION STATUS REPORT**

## SUMMARY OF SMALL BUSINESS TRACKING SYSTEM

	Total	SBE
<b>Current Proposal</b>		
Value of Authorization No. 3	\$254,708	
Value of MWBE Letters of Intent	\$66,250	\$66,250
Actual Percentage	26.01	26.01
<b>Signed / Approved Authorizations</b>		
Total Value of Authorizations	\$128,180	
Total Value of MWBE Signed Subcontracts	\$11,100	\$11,100
Actual Percentage	8.65	8.65
<b>Approved Authorizations Plus Current Proposal</b>		
Total Value of Authorizations	\$382,888	
Total Value of Subcontracts & Letters of Intent	\$77,350	\$77,350
Actual Percentage	20.20	20.20
<b>GOAL</b>	26 %	