

**CITY OF RIVIERA BEACH DISTRICT BOARD
AGENDA ITEM SUMMARY**

MEETING DATE: NOVEMBER 16, 2011

AGENDA ITEM SUMMARY NO. J11-112-3

- AWARDS / PRESENTATIONS / PETITIONS
- CONSENT
- PUBLIC HEARING
- ORDINANCE ON SECOND READING
- ORDINANCE ON FIRST HEARING

- REGULAR
- RESOLUTION
- DISCUSSION & DELIBERATION
- BOARD APPOINTMENT
- WORKSHOP

TITLE / SUBJECT: CHEN and ASSOCIATES, Inc. – WORK AUTHORIZATION #13 TO PROVIDE ENGINEERING DESIGN AND CONSTRUCTION PERMITTING OF SECONDARY DISINFECTION SYSTEMS AT ALL THREE REPUMP STATIONS (AVE “U”, AVE “C” AND NORTH SINGER ISLAND).

RECOMMENDATION / MOTION: Staff recommends that the Utility District Board authorize Chen and Associates, Inc., to provide professional engineering services as outlined in the attached scope of services, in order to design and permit the construction of secondary disinfection systems at all three (3) of the District’s re-pump stations, for a fee of \$32,716.00.

DEPARTMENTAL APPROVAL REVIEW & DATE

◆City Manger or AGM <i>[Signature]</i>	Library
◆District Attorney <i>[Signature]</i>	Marina
◆District Clerk <i>[Signature]</i>	Police
Community Development	Public Works
◆Interim District Finance Director <i>[Signature]</i>	◆Purchasing <i>[Signature]</i> 11-10-2011
Fire	Recreation & Parks
Human Resources	◆Utility Special District
Information Systems	Other

APPROVED BY UTILITY DISTRICT:

DATE:

Originator: UTILITY SPECIAL DISTRICT	Costs: <u>\$32,716.00</u>	District Board Actions: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/conditions
User: UTILITY SPECIAL DISTRICT	Current FY: 2011-2012	<input type="checkbox"/> Denied <input type="checkbox"/> Tabled to <input type="checkbox"/> Referred to Staff
Advertised: Date: Paper: <input checked="" type="checkbox"/> Not Required	<input type="checkbox"/> Capital Improvement <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Other	Attachments: 1. Resolution 2. Proposal from Chen and Associates, Inc.
Affected Parties <input type="checkbox"/> Notified <input checked="" type="checkbox"/> Not Required	Budget Account Number: 411-1417-536-0-3106	

BACKGROUND/SUMMARY: The Palm Beach County Health Department recently placed a consent order on the Utility District of Riviera Beach. This consent order cited the Utility District for having low chlorine residuals in the Gramercy Park area. As part of our response to the consent order, the Utility District proposes to construct improvements at our secondary disinfection systems at all three (3) repump stations. The Chen and Associates, Inc. team has extensive expertise in water treatment process and design. The Utility District would like to

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Chen & Associates – Work Authorization #13
Secondary Disinfection Design
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leverage this expertise in order to vastly improve the effectiveness of our secondary disinfection systems. The Work Authorization #13 for Chen and Associates, Inc. will be for the engineering design and construction permitting of secondary disinfection systems at all three (3) re-pump stations located at Ave “U”, Ave “C” and North Singer Island.

The Utility District of Riviera Beach owns and operates these re-pump stations and in order to maintain the required total chlorine residual in remote parts of the service area, the Utility District proposes improving the secondary disinfection at the aforementioned re-pump stations.

In the past, the Utility District has used both chlorine gas and calcium hypochlorite feed systems. Last year, the Utility District commissioned a study to determine the best approach to consistently provide a total chlorine residual throughout our service area.

The study provided the District with the best plan of action for the secondary disinfection improvements. This work authorization will allow for the design and construction of the improvements recommended in the study and allow the District to abide by requirements mandated by the Palm Beach County Health Department consent order.

RESOLUTION NO. _____

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CITY OF RIVIERA BEACH UTILITY SPECIAL DISTRICT, PALM BEACH COUNTY, FLORIDA, APPROVING THE PROPOSAL FROM CHEN AND ASSOCIATES, INC., IN THE AMOUNT OF \$32,716.00 TO PERFORM PROFESSIONAL ENGINEERING DESIGN AND CONSTRUCTION PERMITTING SERVICES FOR THE CONSTRUCTION OF SECONDARY DISINFECTION SYSTEMS FOR ALL THREE (3) REPUMP STATIONS; AND AUTHORIZING THE INTERIM DISTRICT FINANCE DIRECTOR TO PAY THIS AMOUNT FROM ACCOUNT NO. 411-1417-536-0-3106; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the consulting engineering firm of Chen and Associates, Inc., has prepared and submitted to the Utility Special District, a proposal for professional engineering evaluation services for the design of the secondary disinfection systems for all three (3) re-pump stations, for a fee of \$32,716.00; and

WHEREAS, the primary purpose of this project is to provide the most effective method of secondary disinfection to provide a constant system-wide total chlorine residual.

NOW, THEREFORE, BE IT RESOLVED BY THE UTILITY SPECIAL DISTRICT OF THE CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA, AS FOLLOWS:

SECTION 1: That the Utility Special District Board approves the proposal from Chen and Associates, Inc., in the amount of \$32,716.00, to provide professional engineering design and permitting services for secondary disinfection systems required.

SECTION 2: That the Interim District Finance Director is authorized to make payment for same under Account Number 411-1417-536-0-3106 in the amount of \$32,716.00.

SECTION 3: This Resolution shall take effect upon its passage and approval by the Utility Special District Board.

PASSED AND APPROVED this 16 day of November, 2011.

RESOLUTION NO. _____
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UTILITY SPECIAL DISTRICT

APPROVED:

JUDY L. DAVIS
CHAIRPERSON

ATTEST:

CARRIE E. WARD
MASTER MUNICIPAL CLERK
UTILITY SPECIAL DISTRICT CLERK

BILLIE E. BROOKS
VICE CHAIRPERSON

CEDRICK A. THOMAS
BOARD MEMBER

DAWN S. PARDO
BOARD MEMBER

SHELBY L. LOWE
BOARD MEMBER

MOTIONED BY: _____

SECONDED BY: _____

J. DAVIS _____

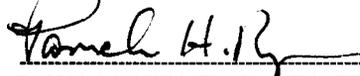
B. BROOKS _____

C. THOMAS _____

D. PARDO _____

S. LOWE _____

REVIEWED AS TO LEGAL SUFFICIENCY



PAMALA HANNA RYAN, CITY ATTORNEY

DATE: 11/10/11

EXHIBIT A

SCOPE OF SERVICE Design of Secondary Disinfection System

SCOPE OF SERVICES

Chen Moore and Associates was asked by the Riviera Beach Utility District (RBUD) to coordinate a design for a secondary disinfection system. Chen and Associates (ENGINEER) met with C Solutions, Inc. to provide the necessary services. The City of Riviera Beach (CITY) owns and operates three potable water remote distribution system ground storage tanks (GST) and repump stations: North Singer Island Repump Station, Avenue U Repump Station, and Avenue C Repump Station. In an attempt to maintain the required total chlorine residual in remote parts of the service area, the City evaluated their existing secondary disinfection practices at the three aforementioned repump stations. The study found that deficiencies existed with the systems being used at two of three pump stations. The CITY has decided to design and permit gaseous chlorine secondary disinfection systems at the Avenue C and Avenue U repump stations to reform free ammonia into a chloramine residual.

The scope of survey services will include the following:

- Design Development / Permit Submittal
- Answering RFIs from the Palm Beach County Health Department (PBCHD)
- Record Drawings / Request for Clearance

The Scope of Services is limited to:

- Permitting with PBCHD (City Building Department or Fire Department Permitting not included)
- Design / Build Contract documents for procurement and managed construction by the CITY
- Mechanical Design of secondary disinfection equipment

The professional engineering services and the associated fees are described below.

TASK 1 – DESIGN DEVELOPMENT / PERMIT SUBMITTAL

- 1.1 Water quality sampling will be helpful for the proper placement of chemical injection points at the repump stations. The ENGINEER will provide water quality testing parameters and sampling locations to the City at the Notice to Proceed (NTP). The CITY will perform water quality sampling and testing and provide these results to the Engineer within six weeks from the NTP.

The ENGINEER shall provide design services to submit a complete construction permit application for minor modifications to PWS components to PBCHD for secondary disinfection gaseous chlorination systems at the Avenue C and Avenue U repump stations. The ENGINEER will meet with the City and PBCHD to discuss the installation requirements.

The ENGINEER shall provide the following for PBCHD permit application.

- Completed permit application
- Engineering design report
- Signed and sealed process mechanical design drawings
- Specifications or Equipment Cut Sheets sufficient for a design / build project

The ENGINEER shall only provide process mechanical information. Ventilation, Plumbing, Electrical, instrumentation and control system design shall be by others. Design performance information for the control of chlorination equipment shall be provided to allow a qualified instrumentation supplier to provide proper system control. The contract documents prepared by the ENGINEER are for the purpose of design / build and are not to the level of detail sufficient for use as bid documents.

- 1.2 The ENGINEER shall meet with the PBCHD to perform a preliminary review of the permit package and incorporate any changes to the permit package as required by the PBCHD. The ENGINEER will submit a completed permit application to the PBCHD.

EXHIBIT A

SCOPE OF SERVICE
Design of Secondary Disinfection System

TASK 2 – PBCHD RFI RESPONSES FOR CONSTRUCTION PERMIT

- 2.1 The ENGINEER will respond to PBCHD's request for information with the assistance of the CITY. Permit fees are to be provided by others. Building permits, if required, shall be obtained by the CITY.

TASK 3 – RECORD DRAWINGS / REQUEST FOR CLEARANCE

- 3.1 Once the permanent system is installed, the ENGINEER shall conduct a site visit to prepare record drawings of the mechanical design drawings. The ENGINEER shall also prepare a request for clearance to place the new equipment into service for submittal to PBCHD on behalf of the City. Bacteriological sampling, required for clearance, will be conducted by the CITY.

DELIVERABLES

Chen & Associates will provide the following deliverables:

- Completed permit application
- Engineering design report
- Signed and sealed process mechanical design drawings
- Specifications or Equipment Cut Sheets sufficient for a design / build project

SCHEDULE OF FEES and SERVICES

The ENGINEER will commence services upon receipt of written authorization (NTP). The time of completion is defined below as is based on the receipt of the request water quality samples as specified above in Task 1.

Tasks	Approximate Duration
1. Design Development / Permit Submittal	8 weeks from receipt of requested sampling data
2. RFI Responses	Permit Review Time (Determined by PBCHD)
3. Record Drawings / Request for Clearance	4 weeks from permanent installation for record drawings and request for clearance

The fees for the above tasks are as follows.

ITEM	COST
TASK 1 – COORDINATION WITH RBUD and SUB-CONSULTANT	\$26,295
TASK 2 – PBCHD RFI RESPONSES FOR CONSTRUCTION PERMIT	\$1,633
TASK 3 – RECORD DRAWINGS / REQUEST FOR CLEARANCE	\$4,638
TASK 4 – REIMBURSABLE EXPENSES	\$150
TOTAL	\$32,716

All Tasks will be billed as a percent complete of Lump Sum Items as specified above.

See Exhibit B for a breakdown of fees.