

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date: June 18, 2019

Consent ☒ Regular ☐
Public Hearing ☐

Department: Water Utilities Department

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: Consultant Services Authorization (CSA) No. 10 for Water Treatment Plant (WTP) No. 8 Rehabilitation and Replacement Evaluation (Project) with Kimley-Horn and Associates, Inc., for a fixed price of \$194,345.04.

Summary: On July 11, 2017, the Board of County Commissioners (BCC) approved the Water Utilities Department (WUD) Contract for Consulting/Professional Services for Water Treatment and Water Resources Engineering Services with Kimley-Horn and Associates, Inc., (R2017-0903) (Contract). CSA No. 10 provides for professional engineering services to perform the condition assessment and rehabilitation and replacement evaluation of WTP No. 8 to identify any necessary improvements. This Contract was procured under the requirements of the 2002 Small Business Enterprise (SBE) Ordinance (R2002-0064) prior to the adoption of the amended Equal Business Opportunity Ordinance on October 16, 2018. The SBE participation goal established under the 2002 Ordinance was 15% overall participation. The Contract provides for 28% SBE participation and 7% Minority/Women Business Enterprise (M/WBE) participation. CSA No. 10 includes 31.06% SBE and 19.51% M/WBE participation. The cumulative SBE and M/WBE participation is 33.81% SBE and 6.19% M/WBE. Kimley-Horn and Associates, Inc., is headquartered in Raleigh, North Carolina but maintains an office in Palm Beach County from which the majority of the work under CSA No. 10 will be undertaken. The Project is included in WUD's FY19 budget. (WUD Project No. 19-036) District 2 (MJ)

Background and Justification: WUD has a comprehensive plan to evaluate and perform a condition assessment of the existing WTP No. 8 treatment processes. This evaluation will identify necessary improvements to maintain operation of the treatment facility and provide recommendations for future improvement project planning and budgeting purposes.

Attachments:

1. Four (4) Originals of CSA No. 10
2. Location Map
3. Certificate of Liability Insurance

Recommended By:


For Department Director

MAY 20th, 2019
Date

Approved By:


Assistant County Administrator

6/17/19
Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2019	2020	2021	2022	2023
Capital Expenditures	\$194,346	0	0	0	0
Operating Costs	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income (County)	0	0	0	0	0
In-Kind Match County	0	0	0	0	0
NET FISCAL IMPACT	\$194,346	0	0	0	0
# ADDITIONAL FTE POSITIONS (Cumulative)	0	0	0	0	0
Budget Account No.:	Fund 4001	Dept 720	Unit 2323	Object	3120

Is Item Included in Current Budget?	Yes	<input checked="" type="checkbox"/>	No
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Does this item include the use of federal funds? Yes No **X**

Reporting Category **N/A**


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

One (1) time expenditure from 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:


 cluhq
 OFMB
 9/16/11


 Contract Development and Control
 6/13/19 AW

B. Legal Sufficiency:


Assistant County Attorney

C. Other Department Review:

Department Director

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

CONSULTANT SERVICES AUTHORIZATION NO. 10

**Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services Water Treatment
and Water Resources Engineering**

Resolution #2017-0903 Contract Dated July 11, 2017

Project Title: Water Treatment Plant No. 8 Rehabilitation and Replacement Evaluation

WUD Project No.: WUD 19-036

Consultant: Kimley-Horn and Associates, Inc.

Address: 1920 Wekiva Way, Suite 200, West Palm Beach, FL 33411

Budget Line Item No. 4001-720-2323-3120

District No.: 2

This Consultant Service Authorization provides for: _____

The condition assessment and rehabilitation and replacement evaluation of Water Treatment Plant No. 8 (WTP 8) to identify the improvements needed to maintain water production for the next 10 years. This evaluation will be used to develop a project scope of improvements that can be implemented in the next year as part of the master capital improvement plan.

(See ATTACHMENT A for detailed scope of services)

The Contract provides for **28**% SBE participation and **7**% M/WBE participation. This Consultant Services Authorization includes 31.06% SBE participation and 19.51% M/WBE participation. The cumulative SBE and M/WBE participation, including this authorization is 33.81% and 6.19% participation, respectively.

1. Services completed by the Consultant to date:

See ATTACHMENT B.

2. Consultant shall begin work upon receipt of Notice to Proceed correspondence.
3. 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 \$ 0.00
 - B. Fixed price of \$ \$ 194,345.04
 - C. Total \$ 194,345.04
4. 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.

CONSULTANT SERVICES AUTHORIZATION NO. 10

**Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services Water Treatment
and Water Resources Engineering
Resolution #2017-0903 Contract Dated July 11, 2017**

Project Title: Water Treatment Plant No. 8 Rehabilitation and Replacement Evaluation

WUD Project No.: WUD 19-036

5. SBE participation is included in **ATTACHMENT C** under this Authorization. The attached Schedule 1 defines the SBE applied to this Authorization and Schedule 2 establishes the SBE contribution from each Sub-Consultant (Letter of Intent to Perform as an SBE).
6. This Authorization does not amend, change, or modify the Contract dated July 11, 2017 which remains in full force and effect.
7. All Attachments to this Authorization are incorporated herein and made a part of this Consultant Services Authorization.

CONSULTANT SERVICES AUTHORIZATION NO. 10

Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services Water Treatment
and Water Resources Engineering
Resolution #2017-0903 Contract Dated July 11, 2017

Project Title: Water Treatment Plant No. 8 Rehabilitation and Replacement Evaluation

WUD Project No.: WUD 19-036

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: _____
Mack Bernard, Mayor

Typed Name: _____
Deputy Clerk

Date _____

Approved as to Form and Legal
Sufficiency

CONSULTANT: Kimley-Horn and Associates, Inc.

Signed: _____

Bryan T. Rapp
(Signature)

Typed Name: _____
County Attorney

Bryan Rapp, Sr. Vice President
(Name and Title)

May 17, 2019
Date

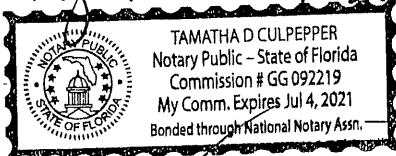
STATE OF FLORIDA

COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me this 17th day of May, 2019.

by Bryan Rapp as Sr Vice President

for Kimley-Horn and Associates Inc



Tamatha D Culpepper
(Signature of Notary Public - State of Florida)

Tamatha D Culpepper
(Print, Type, or Stamp Commissioned Name of Notary Public)

Personally Known ☒ OR Produced Identification _____ Type of Identification Produced _____

LIST OF ATTACHMENTS

CONSULTANT SERVICES AUTHORIZATION NO. 10

**Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services Water Treatment
and Water Resources Engineering**

Resolution #2017-0903 Contract Dated July 11, 2017

ATTACHMENT - A	Scope of Services
ATTACHMENT - B	Summary and Status of Authorizations
ATTACHMENT - C	SBE Schedule 1 and 2
ATTACHMENT - D	Project Schedule
ATTACHMENT - E	Budget Summary
ATTACHMENT - F	Summary of SBE/Minority Business Tracking
ATTACHMENT - G	Location Map

ATTACHMENT A

SCOPE OF SERVICES

Project Title: Water Treatment Plant No. 8 Rehabilitation and Replacement Evaluation

WUD Project No.: WUD 19-036

Consultant shall perform the following services related to a condition assessment and rehabilitation and replacement evaluation of Water Treatment Plant No. 8 (WTP 8).

Background

The following scope of services consists of performing a condition assessment and rehabilitation and replacement evaluation of Water Treatment Plant No. 8 (WTP 8) to identify the improvements needed to maintain water production for the next 10 years. This evaluation will be used to develop a project scope of improvements that can be implemented in the next year as part of the master capital improvement plan.

Scope of Services

CONSULTANT shall perform:

Consultant will examine the existing process components and conduct a condition assessment of major system components in order to identify necessary improvements to maintain operation of the treatment facility. Water Utilities Department (WUD) has identified a number of issues and upgrades for consideration including, but not limited to: carbon dioxide dosing system and ozone contact basin usage; 10 MGD anion exchange system (vessels #1-7), resin replacement timing, and functionality within the treatment process; flow monitoring at multiple locations and demand confirmation for each existing process component; washwater recovery basin and recovery system; decanting system; sodium hexametaphosphate and polymer chemical evaluation; high service pump replacement, isolation valves, and pipe chase/trench upgrades; flume upgrades or retrofit; electrical improvements. Each specific item to be evaluated is listed below in individual tasks.

Task 1 – Collect and Review Information

Consultant will collect and review drawings and documents of the current facilities, ongoing onsite projects, historical master plans, capital projects identified for WTP 8 and existing permits consisting of South Florida Water Management District (SFWMD) drainage and water use permits, and Florida Department of Environmental Protection/Health Department construction permits. Site plans will be collected and reviewed.

Task 2 – Conduct Condition Assessment

Consultant will conduct a condition assessment with renewal/replacement description for the major water plant components as listed herein, and review of WUD furnished data on existing equipment age and replacement history. Equipment that has exceeded its recognized useful life or is judged to require replacement or significant repairs, will be included in the program with the objective being to update the entire system to extend equipment useful life following completion of the renewal/replacement program. The results of this work will be presented as a written description of the improvements, and include Opinions of Probable Cost. Consultant will prepare and provide a Class 5 Opinion of Probable Construction Cost (OPCC) based on final design documents and in accordance with the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R-97.

Task 3 – CO₂ Solution System Evaluation

Consultant will evaluate replacement and standardization of the existing carbon dioxide (CO₂) feed system, which consists of both a direct gas feed and solution feed of carbon dioxide (CO₂) into pipe and the converted ozone contact basins. The existing direct gas feed system appears to be less efficient than the solution fed system, and WUD's desire is to improve the CO₂ efficiency of the delivery system using a solution feed from one of the solution feed systems provided by TOMCO or Blue-In-Green (BIG) systems evaluated at WTP No.11.

Consultant will perform a desktop evaluation of the demands and analysis of the two solution systems. The evaluation will identify which system is determined to be more efficient and operations friendly for WTP 8 and standardize the system for the water plant.

The existing ozone contact basins are currently used as CO₂ contact basins, and are not currently used for ozone contactors with the recent removal of the ozone generators from the water plant process. Consultant will evaluate their use and identify alternatives for consideration by WUD. The preliminary consideration includes options to: integrate the basins into the treatment process with better isolation and flow control; repurpose the basins and utilize the existing structure; or remove the basins from the treatment process and demolish the existing structures. Each alternative will identify repairs and/or necessary upgrades to accomplish the intended service or non-service.

Consultant will prepare a recommendation for WUD's consideration and implementation at WTP 8. The recommendation will include conceptual level sketches of the proposed modifications to the existing TOMCO CO₂ feed system and potential demolition of the existing ozone basins to support the desired alternative necessary to integrate the recommended CO₂ delivery alternative. The recommendation will also consist of a description of construction implementation including phasing if necessary to maintain service while the proposed improvements are being completed.

Task 4 - Anion Exchange Vessels and Resin Replacement Evaluation – Old System

The existing anion exchange (AIX) system includes seven (7) older vessels (vessels 1 through 7) which are outdated and in need of more aggressive regeneration, repair and/or replacement. The vessel manufacturer (Tonka) has performed a site visit and inspection of the vessels to determine the extent of the needed repairs to the internal components. The manufacturer's on-going investigation of the vessel interior, including resin vessel structural inspection will be provided to the Consultant for review and consideration within the evaluation effort. Consultant will collaborate efforts with these inspections.

Consultant will review the field inspection reports, conduct a site visit and observe the interior of up to two vessels, and evaluate potential resin replacement, options for vessel modifications, replacement and/or relocation, and the phasing/timing of proposed work.

Consultant will prepare a recommendation for WUD consideration of any proposed modifications, upgrades, and/or replacement of the AIX vessels and system alternatives, replacement of the resin and a description of an implementation plan of the proposed improvements.

Task 5 – Finish Water Distribution Flow Meters and Plant Service Water Supply Evaluation

Currently, WTP 8 has three distribution system point of entry flow meters, consisting of three discharge points (one 30-inch West venturi, one 30-inch East venturi and one 16-inch East magnetic). The existing 16-inch East magnetic flowmeter and 30-inch West venturi flowmeters are installed underground and create confined spaces for maintenance and operational staff. Consultant will evaluate the flow meter types (venturi and magnetic flowmeters), select a standard type for both flow meters, and review options for relocating each meter to an above ground service with proper bypass piping and isolation.

Consultant will evaluate the type of flow meters available and provide a recommendation for standardization of the discharge flow meter locations. Consultant will prepare a recommendation for relocation of the flow meters to an above ground installation with proper bypass and isolation, including phasing and implementation needed to maintain continuous monitoring of distribution flows while being constructed. The recommendation will consist of conceptual sketches and description of implementation for flow meter replacement.

The existing plant service water demands are also currently unmetered and unaccounted for in WTP 8 output. Consultant shall identify the potable service uses within the treatment plant and process for evaluation. The evaluation will consist of demand forecasting for each service, identifying backflow protection needed, and recommending monitoring alternatives for the completed plant service water. The demands and pressures to each process need will be quantified and accounted for in the overall plant monitoring. Initial feedback indicates that two 8-inch and one 12-inch connection with central plant supply water mains will provide sufficient water supply to the processes.

Consultant will evaluate a water plant balance analysis and perform a comparison of raw water flow and finished water flow, including individual flows from each well and comparison with raw water master flow meter.

Consultant will prepare a recommendation for WUD consideration consisting of a summary of plant services, water demands, conceptual sketches of the proposed modifications needed to quantify and monitor the plant process and service water systems. The recommendation will include a description of implementation plan for the proposed improvements.

Task 6 - Wash Water Recovery Basin and Decant System Evaluation

The existing wash water recovery basin receives backwash water from the onsite filters and currently drains by gravity to the onsite lift station for pumping to the respective wastewater treatment plant for processing. The current system does not accommodate decanting of the clarified water and recycling it back to the treatment process. The basin is cylindrical in shape with washwater entry located on the west side of the basin. It includes water cannons used to push sludge around the basin. The plant currently has ten (10) filters which all require backwashing to maintain operation. The current basin holds up to three (3) backwash volumes before requiring to be drained to the onsite sanitary lift station prior to decanting for wash water recovery. Accordingly, the backwashed water appears to need more settling time for successful recovery to the process stream. It is physically cleaned to remove sludge after three months of operation requiring additional downtime.

Consultant will evaluate the capacity of the existing wash water recovery basin; potential for an additional wash water basin and respective capacity; alternative sources for backwashing filters 7-10; and equipment and upgrades necessary to incorporate a new basin into the site and treatment processes.

Consultant will evaluate the alternatives for vacuum decanting of the clarified water and recycling it back into the treatment process as well as looking at alternatives for rerouting the decanted water to the onsite emergency pond.

Consultant will evaluate the potential for implementing air/water backwash with the existing filters in an effort to reduce backwash water volumes.

Consultant will evaluate the existing backwash supply pump capacity and alternative supply for this pump, including spare ability to this pump or duplicate use of the other high service pumps as a backup to the backwash pump.

Consultant will prepare a recommendation for WUD's consideration including a summary of potential alternatives, description of the modifications necessary to implement each alternatives

for implementation, and conceptual sketches of the alternative options.

Task 7 - Polymer and Sodium Hexametaphosphate Addition Evaluation

The existing lime softening units utilize a polymer to assist in coagulation during the lime softening process. The current turbidity leaving the lime softening units is elevated above typical standards for the clarification process.

The current treatment process includes injection of the sodium hexametaphosphate upstream of the filters. Historically, this chemical has been associated with filter media bunching or congealing which reduces the effective filter media available for filtration.

Consultant will evaluate the current treatment process use of sodium hexametaphosphate and provide a recommendation for the chemical's continued or discontinued use at WTP 8.

Consultant will evaluate up to four polymers (including a ferric alternative) for their ability to enhance the settling process. The evaluation will identify the efficiency of each polymer in its ability to improve the flocculation within the lime softening process. It is anticipated that WUD will take the results from the study and implement a polymer change provided one of the alternate polymers improves the process efficiency.

Consultant will prepare a recommendation for WUD's consideration including a summary of each polymer's performance. If additional upgrades are necessary to implement the polymer change, the recommendation will include a description of the upgrades and conceptual sketches of the upgrades.

Task 8 – High Service Pump Replacement and Pipe Chase Access and Upgrade Evaluation

The existing high service pump numbers 1 and 2 are currently deficient in meeting their design capacity resulting in inefficient and ineffective operation. In addition, the suction and discharge manifolds for the high service pumps currently include isolation valves that isolate high service pumps 1-3 from high service pumps 4-7, which are installed within tight conditions and insufficient room for maintenance access. The existing pipe chase is restrictive in space and replacement of the valves will need a phasing and implementation plan that allows maintaining operation of the high service pumps during valve replacement. The pipe chase currently has two access points with limited space and only one is sufficient to utilize for maintenance. Further, the pipe chase has insufficient room for proper valve, equipment, and structure maintenance.

Consultant will evaluate replacement of high service pumps 1 and 2, and replacement of the high service pump suction and discharge header valves that isolate the east and west group of high service pumps. In addition, Consultant will evaluate improving reliability and redundancy should the pipe headers fail and result in the WTP being out of service.

Consultant will evaluate the pipe chase, valve and pipe access to identify alternatives to improve access to the pipe chase below the high service pumps and provide coatings to pipe manifold and concrete walls and floor within the pipe chase.

Consultant will prepare a recommendation for WUD's consideration including alternatives to improve pipe chase access, coat pipe manifold and concrete surfaces within the pipe chase, redundant pipe header and a phasing/implementation plan for accomplishing the upgrades while maintaining operation of the plant production. The recommendation will include conceptual sketches of each alternative.

Task 9 – Lime Softening Flume Evaluation

The lime softening units 1 and 2 feed softened water into a large concrete flume for collection from the separate softening units prior to filtration. The concrete flume is aging and showing signs of

spalling. It is suspected that lime softening unit 3 currently sends water through a pipe underground and then back up above ground to connect to the flume prior to entering the filter building.

It is suspected that this pipe elevation change can trap sludge which can result in problematic operations in both capacity and quality conditions.

Consultant will evaluate the existing concrete flume and the potential alternatives to replace it with a large diameter pipe or repair it for continued service. The evaluation will also consider the belly in the discharge pipe from lime softening unit 3 and the alternatives to eliminate the potential sludge trap within the below ground section.

Consultant will prepare a recommendation for WUD's consideration including alternatives to repair the existing concrete flume or replace it with a large diameter pipe, and alternatives for remedying the potential sludge trap in the lime softening unit 3 effluent pipe. The recommendations will include a description of each alternative and conceptual sketches of the recommended modifications.

Task 10 - Electrical Improvements Evaluation

The current electrical system and equipment is aging and in need of repair or replacement. Consultant will provide an assessment of the existing power and control system to determine the limits of upgrades needed for the short-term improvements to maintain operation of the treatment process.

Consultant will prepare a summary of findings and recommendations for WUD's consideration including the limits of replacement for both the electrical power and plant control system. The summary of findings will include an existing single line power diagram for the facility and a conceptual sketch indicating the necessary upgrades to facilitate continued operation. Hillers Electrical Engineering will provide the detailed evaluation.

Task 11 – Meetings and Report

Consultant will prepare for and attend up to three (3) Project related meetings as follows:

- Project Kickoff Meeting (1)
- Draft Report Review (1)
- Final Report Review (1)

Consultant will prepare and distribute all meeting agenda materials and meeting minutes to attendees. Electronic copies will be provided in native file and PDF file format.

Consultant will prepare and provide a Class 4 Opinion of Probable Construction Cost (OPCC) for each of the proposed improvements and in accordance with the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R-97

Consultant will prepare a draft and final summary report including summary of condition assessment and technical memoranda for each task listed above. CONSULTANT will submit six (6) copies of each report to WUD for review. Review comments will be assimilated into each report.

DELIVERABLES

The following deliverables will be provided as a result of the efforts described in the Scope of Services:

- Meeting Agenda and Minutes
- Draft Report summarizing findings of 9 technical memoranda
- Final report summarizing findings of 9 technical memoranda

ITEMS NOT INCLUDED

The following services are not included in the Scope of Services for this project, and are assumed to be provided or performed by others. Some of these may be required depending on circumstances that may arise during the execution of this project. Other items that may be considered additional services are mentioned herein.

- Sample panel instrument building
- Valve replacement at ozone basin
- Chlorine system improvements
- Fluoride system improvements
- Ammonia system improvements
- Evaluation of odor control of the raw water stream
- Evaluate setback requirements or other applicable regulations if any improvements are required outside the water treatment plant site.
- Evaluation of the ammonia supply and feed system
- Evaluation of the lime slurry pumping system

ATTACHMENT B

SUMMARY AND STATUS OF CONSULTANT SERVICES AUTHORIZATIONS

[illegible]

OEBO SCHEDULE 1

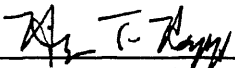
LIST OF PROPOSED CONTRACTOR/CONSULTANT AND SUBCONTRACTOR/SUBCONSULTANT PARTICIPATION

SOLICITATION/PROJECT/BID NAME: WTP 8 Rehabilitation and Replacement Evaluation
NAME OF PRIME RESPONDENT/BIDDER: Kimley-Horn and Associates, Inc.
CONTACT PERSON: Mark Miller, P.E.
SOLICITATION OPENING/SUBMITTAL DATE: _____

SOLICITATION/PROJECT/BID No.: WUD 19-036
ADDRESS: 1920 Wekiva Way, Suite 200, West Palm Beach, FL 33411
PHONE NO.: 561-845-0665 E-MAIL: mark.miller@kimley-horn.com
DEPARTMENT: Water Utilities Department

PLEASE LIST THE DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY THE PRIME CONTRACTOR/CONSULTANT ON THIS PROJECT.
PLEASE ALSO LIST THE DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY ALL SUBCONTRACTORS/SUBCONSULTANTS ON THE PROJECT.

Name, Address and Phone Number	(Check all Applicable Categories)			DOLLAR AMOUNT OR PERCENTAGE OF WORK				
	Non-SBE	M/WBE Minority/Women Business	SBE Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)
1. Kimley-Horn and Associates, Inc. 1920 Wekiva Way, Suite 200 West Palm Beach, FL 33411	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____	\$133,980.00
2. Hillers Electrical Engineering, Inc. 23257 State Road 7, Suite 100 Boca Raton, FL 33428	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____	_____	_____	\$37,931.04 Asian
3. Eckler Engineering Inc. 2255 Glades Road, Suite 324A Boca Raton, FL 33431	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____	_____	\$22,434.00	_____
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____	_____
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____	_____
(Please use additional sheets if necessary)				Total	_____	_____	\$22,434.00	\$171,911.04
Total Bid Price \$ <u>194,345.04</u>				Total SBE - M/WBE Participation <u>\$60,365.04/31.06%</u>				

I hereby certify that the above information is accurate to the best of my knowledge:  Bryan T. Rapp Sr. Vice President
Signature Title

- Note:
- 1. The amount listed on this form for a Subcontractor/subconsultant must be supported by price or percentage listed on the properly executed Schedule 2 or attached signed proposal.
 - 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/or M/WBE, please indicate the dollar amount under the appropriate category.
 - 3. Modification of this form is not permitted and will be rejected upon submittal.

OEBO LETTER OF INTENT – SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. The Schedule 2 shall contain bolded language indicating that by signing the Schedule 2, both parties recognize this Schedule as a binding document. All Subcontractors/subconsultants, including any tiered Subcontractors/subconsultants, must properly execute this document. Each properly executed Schedule 2 must be submitted with the bid/proposal.

SOLICITATION/PROJECT NUMBER: WUD 19-036

SOLICITATION/PROJECT NAME: Water Treatment Plant No. 8 Rehabilitation and Replacement Evaluation

Name of Prime: Kimley-Horn and Associates, Inc.

(Check box(s) that apply)

☒ SBE ☐ WBE ☐ MBE ☐ M/WBE ☐ Non-S/M/WBE Date of Palm Beach County Certification (if applicable): 11/09/2017

The undersigned affirms they are the following (select one from each column):

Column 1

Column 2

☒ Male ☐ Female ☐ African-American/Black ☐ Asian American ☒ Caucasian American
☐ Hispanic American ☐ Native American

S/M/WBE PARTICIPATION – S/M/WBE Primes must document all work to be performed by their own work force on this form. Failure to submit a properly executed Schedule 2 for any S/M/WBE participation may result in that participation not being counted. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed proposal may be attached to a properly executed Schedule 2.

Line Item	Item Description	Unit Price	Quantity/ Units	Contingencies/ Allowances	Total Price/Percentage
1	Hydraulic Engineering		1		\$22,434.00

The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$22,434.00

If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2.

Name of 2nd/3rd tier Subcontractor/subconsultant

Price or Percentage: _____

Kimley-Horn and Associates, Inc.

Print Name of Prime

By: Bryan T. Rapp

Authorized Signature

Bryan T. Rapp

Print Name

Sr. Vice President

Title

Date: May 17, 2019

Eckler Engineering, Inc.

Print Name of Subcontractor/subconsultant

By: Doug Hamman

Authorized Signature

Doug Hamman, P.E.

Print Name

President

Title

Date: 5/17/2019

Revised 02/28/2019

OEBO LETTER OF INTENT – SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. The Schedule 2 shall contain bolded language indicating that by signing the Schedule 2, both parties recognize this Schedule as a binding document. All Subcontractors/subconsultants, including any tiered Subcontractors/subconsultants, must properly execute this document. Each properly executed Schedule 2 must be submitted with the bid/proposal.

SOLICITATION/PROJECT NUMBER: WUD 19-036

SOLICITATION/PROJECT NAME: Water Treatment Plant No. 8 Rehabilitation and Replacement Evaluation

Name of Prime: Kimley-Horn and Associates, Inc.

(Check box(s) that apply)

☒SBE ☐WBE ☒MBE ☐M/WBE ☐Non-S/M/WBE Date of Palm Beach County Certification (if applicable): 02/25/2019

The undersigned affirms they are the following (select one from each column):

Column 1

Column 2

☒Male ☐Female ☐African-American/Black ☒Asian American ☐Caucasian American
☐Hispanic American ☐Native American

S/M/WBE PARTICIPATION – S/M/WBE Primes must document all work to be performed by their own work force on this form. Failure to submit a properly executed Schedule 2 for any S/M/WBE participation may result in that participation not being counted. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed proposal may be attached to a properly executed Schedule 2.

Line Item	Item Description	Unit Price	Quantity/ Units	Contingencies/ Allowances	Total Price/Percentage
1	Electrical Engineering		1		\$37,931.04

The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$37,931.04

If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2.

Name of 2nd/3rd tier Subcontractor/subconsultant

Price or Percentage:

Kimley-Horn and Associates, Inc.

Print Name of Prime

By:

Authorized Signature

Print Name

Title

Date:

Hillers Electrical Engineering, Inc.

Print Name of Subcontractor/subconsultant

By:

Authorized Signature

Paul Hillers, P.E.

Print Name

President

Title

Date:

Revised 02/28/2019

ATTACHMENT - D

PROJECT SCHEDULE

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

<u>Engineering Services</u>	<u>Completion Date from Notice-to-Proceed</u> <u>(Calendar Days After NTP)</u>
Task 1 – Collect and Review Information	30
Task 2 – Conduct Condition Assessment	45
Task 3 – CO2 Solution System Evaluation	60
Task 4 – Anion Exchange Vessels and Resin Replacement Evaluation – old system	60
Task 5 – Finish Water Distribution Flow Meters and Plant Service Water Supply Evaluation	60
Task 6 – Wash Water Recovery Basin and Decant System Evaluation	60
Task 7 – Polymer and Sodium Hexametaphosphate Addition Evaluation	60
Task 8 – High Service Pump Replacement and Pipe Chase Access and Upgrade Evaluation	60
Task 9 – Lime Softening Flume Evaluation	60
Task 10 – Electrical Improvements Evaluation	60
Task 11 – Meetings and Report	90

ATTACHMENT - E

BUDGET SUMMARY

Palm Beach County Water Utilities Department

Water Treatment Plant #8 R&R Evaluat

Consultant Service Authorization: #10

Resolution #2017-0901

Contract Dated July 11, 2011

Consultant: Kimley-Horn and Associates, Inc.

Project Name: Water I

CSA # 10		Labor Classification and Hourly Rate										
Task	Water Treatment Plant #8 R&R Evaluation	Principal	Senior Prof		Intern							Sub
Number	Task Description	MDM	FHLL	THAC	Engineer/ Analyst	Inspector	Designer	Tech Support	Snr Support Staff	Support Staff	Total	Consultant
1	Collect and Review Information											
	Collect and Review Information	3	6		12					4	\$ 3,846.00	
	HEE											\$ 3,544.32
	ECKLER										\$ -	\$ 2,394.00
	Subtotal Task 1	3	6	0	12	0	0	0	0	4	\$ 3,846.00	\$ 5,938.32
2	Conduct Condition Assessment											
	Conduct one day site visit and condition assessment	3	12		18						\$ 5,562.00	
	Follow up site visits	8	12		18						\$ 6,882.00	
	Review data & prepare spreadsheet of major equip	8	12		18					4	\$ 7,218.00	
	ECKLER										\$ -	\$ 7,434.00
	Subtotal Task 2	19	36	0	54	0	0	0	0	4	\$ 19,662.00	\$ 7,434.00
3	CO2 Solution System Evaluation											
	Review CO2 demands	1	2	6							\$ 1,698.00	
	Research up to 2 feed systems		2	2	9						\$ 1,785.00	
	Evaluate Ozone basin mods/demo	1	4	8							\$ 2,484.00	
	Prepare written recommendation & draft TM	1	4	8						4	\$ 2,820.00	
	Sketches of proposed modifications	1	4	8	18					4	\$ 4,818.00	
	HEE										\$ -	\$ 2,362.88
	Subtotal Task 3	4	16	32	27	0	0	0	0	8	\$ 13,605.00	\$ 2,362.88
4	Anion Exchange Vessel and Resin Replacement Evaluation											
	Additional Site Visit			4							\$ 648.00	
	Evaluate resin replacement/modifications/relocation	2	6	8							\$ 3,210.00	
	Prepare written recommendation/phasing plan	3	12	16	4					6	\$ 7,104.00	
	HEE										\$ -	
	Subtotal Task 4	5	18	28	4	0	0	0	0	6	\$ 10,962.00	\$ -
5	Finish Water Distribution Flow Meters & Plant Service Water Supply											
	Site Visit		4	4							\$ 1,572.00	
	Evaluate flow meter types/select standard		1	2							\$ 999.00	
	Develop bypass plan for replacing	1	6	9	4						\$ 3,552.00	
	Evaluate raw water and finish water balance	1	8	10	16						\$ 5,508.00	
	Identify alternatives for each service		2	6	9						\$ 2,433.00	
	Prepare written recommendation/phasing plan	1	4	8						4	\$ 2,820.00	
	Sketches of proposed modifications	4	8	6	24					6	\$ 7,044.00	
	HEE										\$ -	\$ 1,772.16
	Subtotal Task 5	7	33	45	57	0	0	0	0	10	\$ 23,928.00	\$ 1,772.16
6	Wash Water Recovery Basin and Decant System Evaluation											
	Coordination and review of information	2	2	4						2	\$ 1,806.00	
	ECKLER										\$ -	\$ 4,986.00
	Subtotal Task 6	2	2	4	0	0	0	0	0	2	\$ 1,806.00	\$ 4,986.00
7	Polymer and Sodium Hexametaphosphate Addition Evaluation											
	Coordination and review of information	2	3	4						2	\$ 2,037.00	
	ECKLER										\$ -	\$ 4,986.00
	Subtotal Task 7	2	3	4	0	0	0	0	0	2	\$ 2,037.00	\$ 4,986.00
8	High Service Pump Replacement and Pipe Chase Access and Upgrade Evaluation											
	Evaluate pumping capacity/operations of Hasps 1 and 2		2		8						\$ 1,350.00	
	Evaluate options for replacing isolation valve	1	6		8						\$ 2,538.00	
	Evaluate options for pipe chase		4	12							\$ 2,868.00	
	Prepare written recommendation/phasing plan	1	4	8						4	\$ 2,820.00	
	Sketches of proposed modifications	1	2	2	18					4	\$ 3,384.00	
	Coordination and review of information	2	6	6	2					2	\$ 3,276.00	
	HEE										\$ -	\$ 1,391.60
	Subtotal Task 8	5	24	28	36	0	0	0	0	10	\$ 16,236.00	\$ 1,391.60
9	Line Softening Flume Evaluation											
	Evaluate options for replacing pipe flume	4	6	6							\$ 3,414.00	
	Sketches of proposed modifications	4	8	6	18					4	\$ 6,210.00	
	Prepare recommendations/phasing plan	4	4	8	4					2	\$ 3,888.00	
	Subtotal Task 9	12	18	20	22	0	0	0	0	6	\$ 13,512.00	\$ -
10	Electrical Improvements Evaluation											
	Site Visit to identify electrical system		4	4							\$ 1,572.00	
	Coordination and review of information	2	4	4	4					2	\$ 2,712.00	
	HILLERS										\$ -	\$ 25,429.36
	Subtotal Task 10	2	8	8	4	0	0	0	0	2	\$ 4,284.00	\$ 25,429.36
11	Meetings and Report											
	Meeting attendance, prep agendas/minutes	2	8	6							\$ 3,348.00	
	Prepare/submit Draft consolidated TM submittal	8	8	16	12					12	\$ 8,892.00	
	QC	6	6								\$ 2,970.00	
	Prepare/submit FINAL consolidated report submittal	8	8	16	12					12	\$ 8,892.00	
	HILLERS										\$ -	\$ 3,430.72
	ECKLER										\$ -	\$ 2,634.00
	Subtotal Task 11	24	30	38	24	0	0	0	0	24	\$ 24,102.00	\$ 6,064.72
	Labor Subtotal Hours	85	194	207	240	0	0	0	0	78		804
	Labor Raw Costs	\$ 88.00	\$ 77.00	\$ 54.00	\$ 37.00	\$ 45.00	\$ 46.00	\$ 42.00	\$ 42.00	\$ 28.00		
	Labor Multiplier	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
	Labor Sub Total	\$ 264.00	\$ 231.00	\$ 162.00	\$ 111.00	\$ 135.00	\$ 138.00	\$ 126.00	\$ 126.00	\$ 84.00		
	Labor Total (KHA)	\$22,440.00	\$ 44,814.00	\$ 33,534.00	\$ 26,640.00	\$ -	\$ -	\$ -	\$ -	\$ 6,552.00	\$133,980.00	
	Labor Total (EEC)										\$ 37,931.04	
	Labor Total (HEE)										\$ 22,434.00	
	Sub Consultant Labor Total	\$ -										\$ 60,365.04
	Sub Consultant Multiplier											1.0
	Subcontract Total	\$ -										\$ 60,365.04
	Out of Pocket Expenses (Mileage, Copies, Printing, etc.)											\$ -
	Project Total	\$ -										\$ 194,345.04
											% CRE	21.68%

April 3, 2019
263-000.BD

Mr. Mark Miller, P.E.
Kimley-Horn & Associates, Inc.
1920 Wekiva Way, Suite 200
West Palm Beach, FL 33411

via email: Mark.Miller@kimley-horn.com

Dear Mr. Miller:

Reference: Water Treatment Plant No. 8 Rehabilitation and Replacement Evaluation
PBCWUD 19-036
EEI IPO: CSA 10-001

Eckler Engineering is pleased to submit our executed Individual Project Order for the above referenced project. The following Documents are attached:

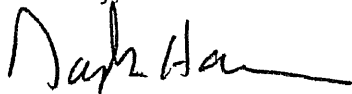
1. Executed IPO No.: CSA 10-001, dated April 3, 2019.
2. IPO Fee Matrix dated April 3, 2019
3. Executed Attachment C, EEI Schedule 2, dated April 3, 2019.

Once the above documents have been approved and executed by Kimley-Horn, please color scan and return a signed copy via email.

We look forward to working with Kimley-Horn on this Palm Beach County Water Utilities Department project

If you have any questions or require additional information pertaining to the enclosed documents or the project in general, please do not hesitate to contact me.

Sincerely,



Douglas K. Hammann, P.E.

Encl.

Y:\Documents\Kimley-Horn\263-000.BD\PBCWUD WTP #8 Rehabilitation and Replacement Evaluation\EEI IPO 0X\W. Miller IPO transmittal.wpd

"Celebrating Service to South Florida Since 1985"

INDIVIDUAL PROJECT ORDER NUMBER CSA10-001

This Individual Project Order describes a specific agreement between Kimley-Horn and Associates, Inc. (the Consultant) and Eckler Engineering, Inc. (the SubConsultant) pursuant to the Master Agreement for Continuing Professional Services dated July 7, 2017, the terms of which are incorporated by reference.

Identification of Project and Consultant's Client:

Palm Beach County Water Utilities Department

Project: Water Treatment Plant No. 8 Rehabilitation and Replacement Evaluation (WUD 19-036)

Project Background:

The following scope of services consists of performing a condition assessment and rehabilitation and replacement evaluation of Water Treatment Plant #8 (WTP 8) to identify the improvements needed to maintain water production in the next 10 years that will be used to develop a project scope of improvements that can be implemented in the next year as part of the master capital improvement plan.

Scope of SubConsultant's Services:

SubConsultant shall perform the specific engineering scope of services as described herein below in accordance with the general requirements of the Kimley-Horn & Associates, Inc. Consultant Services Authorization No. 10 (CSA #10) with Palm Beach County Utilities Department.

Task 1 – Collect and Review Information

SubConsultant shall request and review data, drawings, and documents of the current facilities, ongoing onsite projects, historical Master Plan, capital projects identified for WTP 8, record drawings of the impacted facilities that apply to our scope, and other information necessary to develop the engineering assessment and project recommendations.

Task 2 – Conduct Condition Assessment

In support of this Task, SubConsultant will visit the facility for the purpose of assessing the condition of existing lime slurry pumping, washwater recovery basin, polymer feed system, and Sodium Hexametaphosphate feed system equipment and operation. SubConsultant shall photograph, evaluate, note existing conditions, and gather additional information needed to assess condition of the existing facilities.

Task 3 – CO₂ Solution System Evaluation

N/A

Task 4 – Anion Exchange Vessel and Resin Replacement Evaluation – Old System

N/A

Task 5 – Finish Water Distribution Flow Meters and Plant Service Water Supply Evaluation

N/A

Task 6 –Washwater Recovery Basin and Decant System Evaluation

SubConsultant shall provide engineering and other technical assistance to complete the washwater recovery basin and decant system evaluation by providing the following: review all gathered data, describe the facility purpose, detail and describe the existing conditions, confirm and provide design criteria, design consideration, and system capacity requirements; determine and describe system basic design; prepare preliminary sketches of recommended improvements; prepare opinion of probable construction cost; and provide record photos of existing conditions.

Task 7 – Polymer and Sodium Hexametaphosphate Addition Evaluation

SubConsultant shall provide engineering and other technical assistance to complete the Sodium Hexametaphosphate evaluation by providing the following: review all gathered data, describe the facility purpose, detail and describe the existing conditions, confirm and provide design criteria, design consideration, and system capacity requirements; determine and describe system basic design; prepare preliminary sketches of recommended improvements; prepare opinion of probable construction cost; and provide record photos of existing conditions.

SubConsultant shall also obtain the services of a water process and treatability evaluator to test four (4) various polymers including a ferric alternative.

Task 8 – High Service Pump Replacement and Pipe Chase Access and Upgrade Evaluation

N/A

Task 9 – Lime Softening Flume Evaluation

N/A

Task 10 – Electrical Improvements Evaluation

N/A

Task 11 – Meetings and Report

SubConsultant will prepare for and attend up to two (2) project meetings.

- Kickoff (1)
- Technical Memorandum Reviews (1)

Consultant will preside over meetings, prepare and distribute meeting minutes to attendees.

Data or Assistance to be Provided by Consultant or PBCWUD

SubConsultant shall be entitled to rely on the completeness and accuracy of all information provided by Consultant and/or PBCWUD. Consultant and/or PBCWUD shall provide all information and services requested by SubConsultant during the project including, but not limited to, the following:

- A. Attendance at project meetings.
- B. Access to project location.
- C. Provide general project review, where required.

- D. Provide with assistance in locating existing facilities, when requested.
- E. Existing facility record drawings and specifications and other requested data/information.

Project Deliverables

Project deliverables shall be in accordance with Consultant's CSA and as defined herein the individual tasks of this IPO.

Electronic versions of all deliverables shall be provided in both native (e.g. DOC, XLS, DWG, etc.) and PDF file formats.

Schedule to be met by SubConsultant:

See Consultant's CSA.

SubConsultant's Compensation:

As consideration for providing the services enumerated above, CONSULTANT shall pay the SUBCONSULTANT fees as described below:

A. Design Phase Services

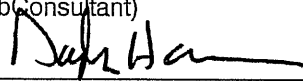
For the services enumerated in Tasks above, the lump sum fee basis of **\$22,434.00**.

The above fee has been determined in accordance with the SubConsultant's scope of work breakdown attached.

Fee does not include the provision of the following items:

- Any other work not specifically defined or listed herein this IPO.

ECKLER ENGINEERING, INC.
(SubConsultant)

By: 
(signature)

Douglas K. Hammann, P.E., President
(Print Name and Title)

4-3-19
(Date)

KIMLEY-HORN AND ASSOCIATES, INC.

By: _____
(signature)

(Print Name and Title)

(Date)

KIMLEY-HORN AND ASSOCIATES, INC.

WATER TREATMENT PLANT NO. 8 REHABILITATION AND REPLACEMENT EVALUATION (WUD 19-036)
PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
CSA NUMBER: 10-001
IPO NUMBER: 0X

I. LABOR

DATE: April 3, 2019

TASK NO.	TASK DESCRIPTION	PERSONNEL											
		Principal	Engineer 8	Engineer 7	Engineer 5	Engineer 3	Engineer 2	Technician 4	Technician 3	Technician 1	Resident	Administrative	
1	Collect and review information		4		4			8				2	\$2,394.00
2	Conduct Condition Assessment		16		16			16				2	\$7,434.00
3	Not Used												\$0.00
4	Not Used												\$0.00
5	Not Used												\$0.00
6	Wash water Recovery basin and Decant System Evaluation		4		16			16				2	\$4,986.00
7	Polymer and Sodium Hexametaphosphate Addition Evaluation		4		16			16				2	\$4,986.00
8	Not Used												\$0.00
9	Not Used												\$0.00
10	Not Used												\$0.00
11	Meetings		12									2	\$2,634.00
12	Not Used												\$0.00
Total Hours		0	40	0	52	0	0	56	0	0	0	10	
Raw Labor Rate		\$75.00	\$68.00	\$55.00	\$50.00	\$38.00	\$26.50	\$33.00	\$30.50	\$20.00	\$33.00	\$31.00	
Multiplier		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
Labor Billing Rate		\$225.00	\$204.00	\$165.00	\$150.00	\$114.00	\$79.50	\$99.00	\$91.50	\$60.00	\$99.00	\$93.00	
Sub-Total Labor		\$0.00	\$8,160.00	\$0.00	\$7,800.00	\$0.00	\$0.00	\$5,544.00	\$0.00	\$0.00	\$0.00	\$930.00	
TOTAL LABOR												\$22,434.00	\$22,434.00

II. REIMBURSABLE EXPENSES

EXPENSE ITEM	EXPENSE TYPE	UNIT	No. OF UNITS	COST PER UNIT	TOTAL COST
1	REPRODUCTION				
	Half Size Drawings (11" x 17")	EA	0	\$0.00	\$0.00
	Full Size Drawings (22" x 34")	EA	0	\$0.00	\$0.00
	Report Books	EA	0	\$45.00	\$0.00
	CD of Report	EA	0	\$15.00	\$0.00
2	PHOTOCOPIES	EA	0	\$0.25	\$0.00
3	PLOTTING				
	22 X 34 (SET UP)	EA	0	\$15.00	\$0.00
	11 X 17 (SET UP)	EA	0	\$15.00	\$0.00
4	TRAVEL				
	MILEAGE	MILE	0	\$0.535	\$0.00
	TOLLS	TRIP	0	\$4.60	\$0.00
	HOTEL/MEALS	DAY	0	\$250.00	\$0.00
5	MISCELLANEOUS				
	Structural	LS	0	\$0.00	\$0.00
	Electrical	LS	0	\$0.00	\$0.00
	MISC. SUPPLIES	LS	0	\$0.00	\$0.00
	IXOM	LS	0	\$0.00	\$0.00
		LS	0	\$0.00	\$0.00
TOTAL EXPENSES					\$0.00

GRAND TOTAL

\$22,434.00



HILLERS ELECTRICAL ENGINEERING, INC.

April 3, 2019

Mr. Mark Miller, P.E.
Kimley-Horn
1920 Wekiva Way, Suite 200
West Palm Beach, FL 33411

Subject: WTP8 Rehabilitation and Replacement Evaluation Scope

Dear Mark:

Hillers Electrical Engineering, Inc. (HEE) is pleased to provide Kimley-Horn and Associates, Inc. a proposal for the evaluation of the electrical system at WTP 8 relating to the above referenced project. Our scope will follow Kimley-Horn's latest Scope of Work /Task Authorization between Palm Beach County Water Utilities Department (Owner) and Kimley-Horn and Associates, Inc. (Consultant). Our scope will include the following:

- Task 1- Collect and Review Information: Perform site visits and review existing documents.
- Task 3 - CO2 Solution System Evaluation (BlueinGreen versus TOMCO): Review other discipline engineer recommendations and provide recommendation for power and controls connection to the plant electrical and control system.
- Task 5 –Finish Water Distribution Flow Meters and Plant Service Water Supply Evaluation: Evaluate flowmeter types and provide recommendation for electrical and signals connection to the plant electrical and control system.
- Task 8 – High Service Pump Replacement and Pipe Chase Access and Upgrade Evaluation: Provide electrical related recommendation for High Service Pump Replacement.
- Task 10 – Electrical Improvements Evaluation: Provide assessment of the existing power system and provide recommendation for short-term improvements as well as summary of findings and other recommendations. HEE will provide existing single line power diagram for the facility and conceptual sketch for the recommended upgrades. HEE will also provide a brief tech memo relating electrical improvements evaluation.
- Task 11 – Meetings and Report: HEE will attend up to 3 meetings and provide responses to the QC/comments.
- Assume other tasks not listed in this scope letter have no work relating to HEE.

Our proposed lump sum fee is \$ 37,931.04 as per attached fee breakdown sheet.

If you have any questions, please do not hesitate to call me.

Sincerely,

Thein Win, P.E.

PBCWUD WTP8 Rehabilitation and Replacement Evaluation								
HILLERS ELECTRICAL ENGINEERING, INC.								
Scope Fee Breakdown -Design Phase Services								
Date: 4/3/2019								
	Raw Rate	\$74.00	\$54.00	\$50.00	\$40.00	\$44.00		
	Multiplier	2.84	2.84	2.84	2.84	2.84		
	Base Rate	\$210.16	\$153.36	\$142.00	\$113.60	\$124.96		
PHASE OF WORK	Proj. Man.	Profess Eng.	Lead Engineer	Const. Coord	Designer	SUBTOTAL	ORIGINAL TASK	TOTAL PROJECT
	Hours	Hours	Hours	Hours	Hours	TASK COST	COST	COST
Evaluation							\$34,500.32	\$34,500.32
Task 1: Collect and Review Information								
Collect and review information		12	12			\$3,544.32	\$3,544.32	
Taks 3: CO2 Solution System Evaluation								
Assist with Electrical Portion		8	8			\$2,362.88	\$2,362.88	
Task 5: Finish Water Distribution Flowmeters and Plant Service Water Supply Evaluation								
Assist with Electrical and I&C Portion		6	6			\$1,772.16	\$1,772.16	
Task 8: HSP Replacement and Pipe Chase Access and Upgrade Evaluation								
Assist with Electrical Portion	1	4	4			\$1,391.60	\$1,391.60	
Task 10: Electrical Improvements Evaluation								
Ozone Building Electrical	1	12	16		12	\$5,822.00		
Control Building Electrical	1	12	24		12	\$6,958.00		
Hypo. Building Electrical	1	12	16		8	\$5,322.16		
Wellfield Generator Building Electrical	1	12	16		8	\$5,322.16		
Tech Memo.	1	8	4			\$2,005.04		
Review Meetings and Report								
							\$3,430.72	\$3,430.72
up to 3 meetings (4hrs per meeting)		12				\$1,840.32		
Respond to review comments	1	9				\$1,590.40		
	Total Hours	7	107	106		40		
	Total Labor and Expenses	\$1,471.12	\$16,409.52	\$15,052.00		\$4,998.40		\$37,931.04

ATTACHMENT - F

**Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services Water Treatment
and Water Resources Engineering
Resolution #2017-0903 Contract Dated July 11, 2017**

AUTHORIZATION STATUS REPORT

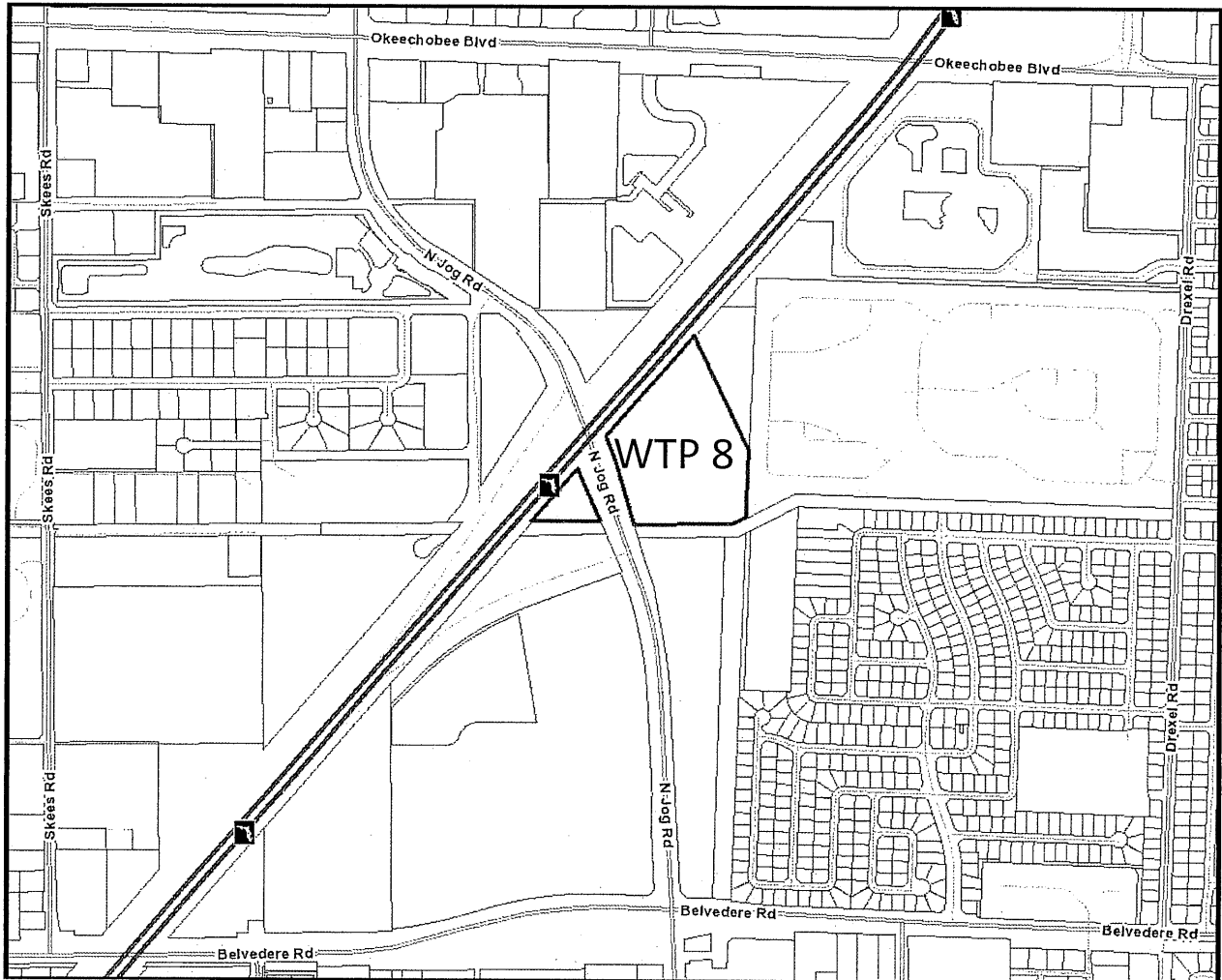
**SUMMARY OF
SBE-M/WBE MINORITY BUSINESS TRACKING**

Master Contract Goal: 28(%)	SBE
Current Proposal	
Value of Authorization No. <u>10</u>	\$ 194,345.04
Value of SBE-M/WBE Letters of Intent	\$ 60,365.04
Actual Percentage	31.06%
Signed/Approved Authorizations	
Total Value of Authorizations	\$776,514.24
Total Value of SBE-M/WBE Signed Subcontracts	\$267,938.24
Actual Percentage	<u>34.50%</u>
Signed/Approved Authorizations Plus Current Proposal	
Total Value of Authorizations	\$970,859.28
Total Value of Subcontracts & Letters of Intent	\$328,303.28
Actual Percentage	<u>33.81%</u>

ATTACHMENT - G

Palm Beach County Water Utilities Department
Contract for Consulting/Professional Services Water Treatment
and Water Resources Engineering
Resolution #2017-0903 Contract Dated July 11, 2017

LOCATION MAP



Water Treatment Plant No. 8
Rehabilitation and Replacement Evaluation
Project No. WUD 19-036

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Greyling Ins. Brokerage/EPIC 3780 Mansell Road, Suite 370 Alpharetta, GA 30022	CONTACT NAME: Jerry Noyola	
	PHONE (A/C, No, Ext): 770-552-4225	FAX (A/C, No): 866-550-4082
	E-MAIL ADDRESS: jerry.noyola@greyling.com	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A : National Union Fire Ins. Co.	
	INSURER B : Aspen American Insurance Company	
INSURED Kimley-Horn and Associates, Inc. 421 Fayetteville Street, Suite 600 Raleigh, NC 27601	INSURER C : New Hampshire Ins. Co.	
	INSURER D : Lloyds of London	
	INSURER E :	
	INSURER F :	
	NAIC #	
	19445	

COVERAGES CERTIFICATE NUMBER: 19-20 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY			5268169	04/01/2019	04/01/2020	EACH OCCURRENCE
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						\$1,000,000
	<input checked="" type="checkbox"/> Contractual Liab.						DAMAGE TO RENTED PREMISES (Ea occurrence)
							\$500,000
							MED EXP (Any one person)
	GEN'L AGGREGATE LIMIT APPLIES PER:						\$25,000
	<input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC						PERSONAL & ADV INJURY
	OTHER:						\$1,000,000
							GENERAL AGGREGATE
							\$2,000,000
							PRODUCTS - COMP/OP AGG
							\$2,000,000
							\$
A	AUTOMOBILE LIABILITY			4489663	04/01/2019	04/01/2020	COMBINED SINGLE LIMIT (Ea accident)
	<input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY	<input type="checkbox"/> SCHEDULED AUTOS	\$1,000,000				
	<input checked="" type="checkbox"/> HIRED AUTOS ONLY	<input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	BODILY INJURY (Per person)				
			\$				
			BODILY INJURY (Per accident)				
			\$				
						PROPERTY DAMAGE (Per accident)	
						\$	
B	UMBRELLA LIAB	<input checked="" type="checkbox"/> OCCUR		CX005FT19	04/01/2019	04/01/2020	EACH OCCURRENCE
	<input checked="" type="checkbox"/> EXCESS LIAB	<input type="checkbox"/> CLAIMS-MADE	\$5,000,000				
	DED	<input checked="" type="checkbox"/> RETENTION \$0	AGGREGATE				
						\$	
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			015893685 (AOS) 015893686 (CA)	04/01/2019	04/01/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	N/A				E.L. EACH ACCIDENT
	If yes, describe under DESCRIPTION OF OPERATIONS below						\$1,000,000
							E.L. DISEASE - EA EMPLOYEE
							\$1,000,000
D	Professional Liab			B0146LDUSA1904949	04/01/2019	04/01/2020	E.L. DISEASE - POLICY LIMIT
							\$1,000,000
							Per Claim \$3,000,000
						Aggregate \$3,000,000	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Re: Project #WUD 17-007; Consulting/Professional Services Water Treatment & Water Resources Engineering Services ; Mark Miller. Palm Beach County Board of County Commissioners, a Political Subdivision of the State of Florida, its officers, employees & agents are named as Additional Insureds on the above referenced liability policies with the exception of workers compensation & professional liability where required by written contract. The above referenced liability policies with the exception of professional liability are (See Attached Descriptions)

CERTIFICATE HOLDER	CANCELLATION
Palm Beach County Water Utilities Department c/o JDi Data Corporation 100 W Cypress Creek Rd, Suite 1052 Fort Lauderdale, FL 33309-0000	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

DESCRIPTIONS (Continued from Page 1)

primary & non-contributory where required by written contract. Waiver of Subrogation is applicable where required by written contract & allowed by law. Retroactive Date: Full Prior Acts

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED - OWNERS, LESSEES OR
CONTRACTORS - SCHEDULED PERSON OR
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
ANY PERSON OR ORGANIZATION WHOM YOU BECOME OBLIGATED TO INCLUDE AS AN ADDITIONAL INSURED AS A RESULT OF ANY CONTRACT OR AGREEMENT YOU HAVE ENTERED INTO.	PER THE CONTRACT OR AGREEMENT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II - Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than

that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. With respect to the insurance afforded to these additional insureds, the following is added to Section III - Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable Limits of Insurance shown in the Declarations; whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR
CONTRACTORS - COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations
ANY PERSON OR ORGANIZATION WHOM YOU BECOME OBLIGATED TO INCLUDE AS AN ADDITIONAL INSURED AS A RESULT OF ANY CONTRACT OR AGREEMENT YOU HAVE ENTERED INTO.	PER THE CONTRACT OR AGREEMENT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II - Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that

which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to Section III - Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
 2. Available under the applicable Limits of Insurance shown in the Declarations;
- whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

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