

PALM BEACH COUNTY  
BOARD OF COUNTY COMMISSIONERS  
AGENDA ITEM SUMMARY

Meeting Date: February 3, 2015                      Consent [X]                      Regular [ ]  
Public Hearing [ ]

Department: Water Utilities Department

I. EXECUTIVE BRIEF

**Motion and Title:** Staff recommends motion to approve: **A)** Consultant Services Authorization (CSA) No. 4 for the South West Belle Glade Water Main and Water Services Replacement; Zone 1, Phase 2 Project with Keshavarz & Associates, Inc., (R2014-0824) in the amount of \$430,446; and **B)** CSA No. 5 for Belle Glade Water Main Replacement Project - SE Avenue G with Keshavarz & Associates, Inc., (R2014-0824) in the amount of \$167,722.

**Summary:** On June 3, 2014, the Board of County Commissioners (BCC) approved the Water Utilities Department (WUD) Engineering/Professional Services Contract with Keshavarz & Associates, Inc. (R2014-0824). CSA Nos. 4 and 5 provide construction phase services and record drawings preparation for water main replacement in the Southwest areas of the City of Belle Glade. These improvements are part of the continued restoration and repair of vital water infrastructure in the Glades and will ensure the provision of high quality water delivery to the residents and businesses. The Small Business Enterprise (SBE) participation goal established by the SBE Ordinance (R2002-0064) is 15% overall. The contract with Keshavarz and Associates, Inc. provides for SBE participation of 95%. These CSA's include 100% overall participation. The cumulative SBE participation for CSA No. 4 is 99.01% and for CSA No. 5 is 99.21% overall. Keshavarz and Associates, Inc. is a local Palm Beach County company. (WUD Project No. 13-060 and 14-015) District 6 (JM)

**Background and Justification:** On January 15, 2013, (R2013-0094) the BCC approved the First Amendment to the Interlocal Agreement by and among Palm Beach County and the Cities of Belle Glade, Pahokee and South Bay (R2009-1033 thru R2009-1035). Through this Amendment, Palm Beach County committed to make a capital contribution of \$17,500,000 to repair and replace parts of the utility system in the City of Belle Glade in the first five (5) years following the transfer date (March 31, 2013). WUD has determined an area of improvement and divided it into six (6) zones according to improvement priorities (Zone 1, the highest priority). These priorities are based on the number of main breaks, leaks, age and pipe capacity, as well as fire protection improvement requirements.

**Attachments:**

- 1. Location Map
- 2. Two (2) Original CSA No. 4
- 3. Two (2) Original CSA No. 5

Recommended By: Jim Stiles                      1-13-15  
Department Director                      Date

Approved By: [Signature]                      1/22/15  
Assistant County Administrator                      Date

## II. FISCAL IMPACT ANALYSIS

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

Fiscal Years	2015	2016	2017	2018	2019
Capital Expenditures	<u>\$598,168.</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>\$598,168.</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
# ADDITIONAL FTE POSITIONS (Cumulative)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

**Budget Account No.:** Fund 4011 Dept 721 Unit W038 Object 6543

Is Item Included in Current Budget?      Yes **X**      No

Reporting Category **N/A**

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

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

C. Department Fiscal Review: Debra M. West


### III. REVIEW COMMENTS

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

12/29/10  
OFMB  
12/29  
12/29

A. J. Jacoby  
Contract Development and Control  
1/14/15 Wheeler

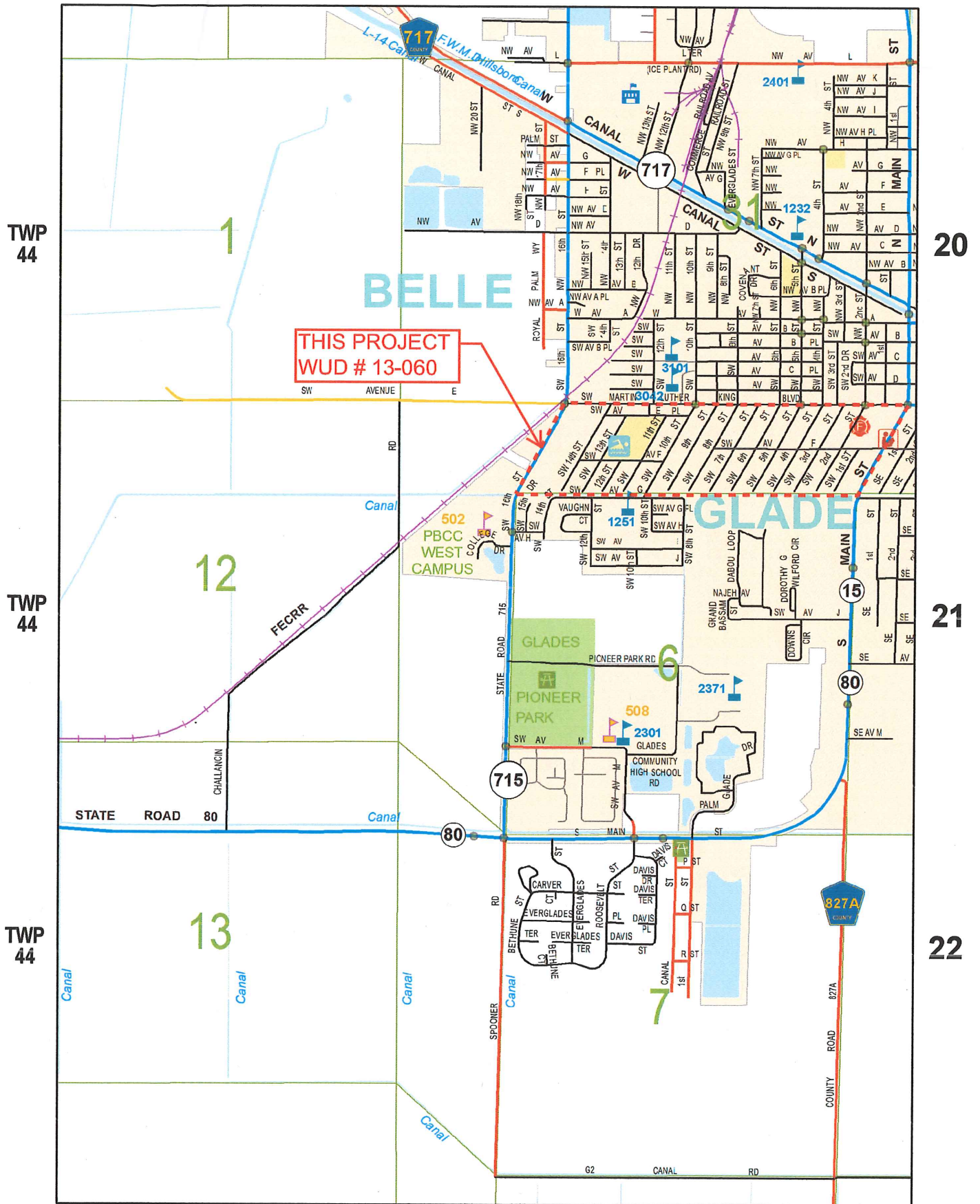
**B. Legal Sufficiency:**

  
Assistant County Attorney

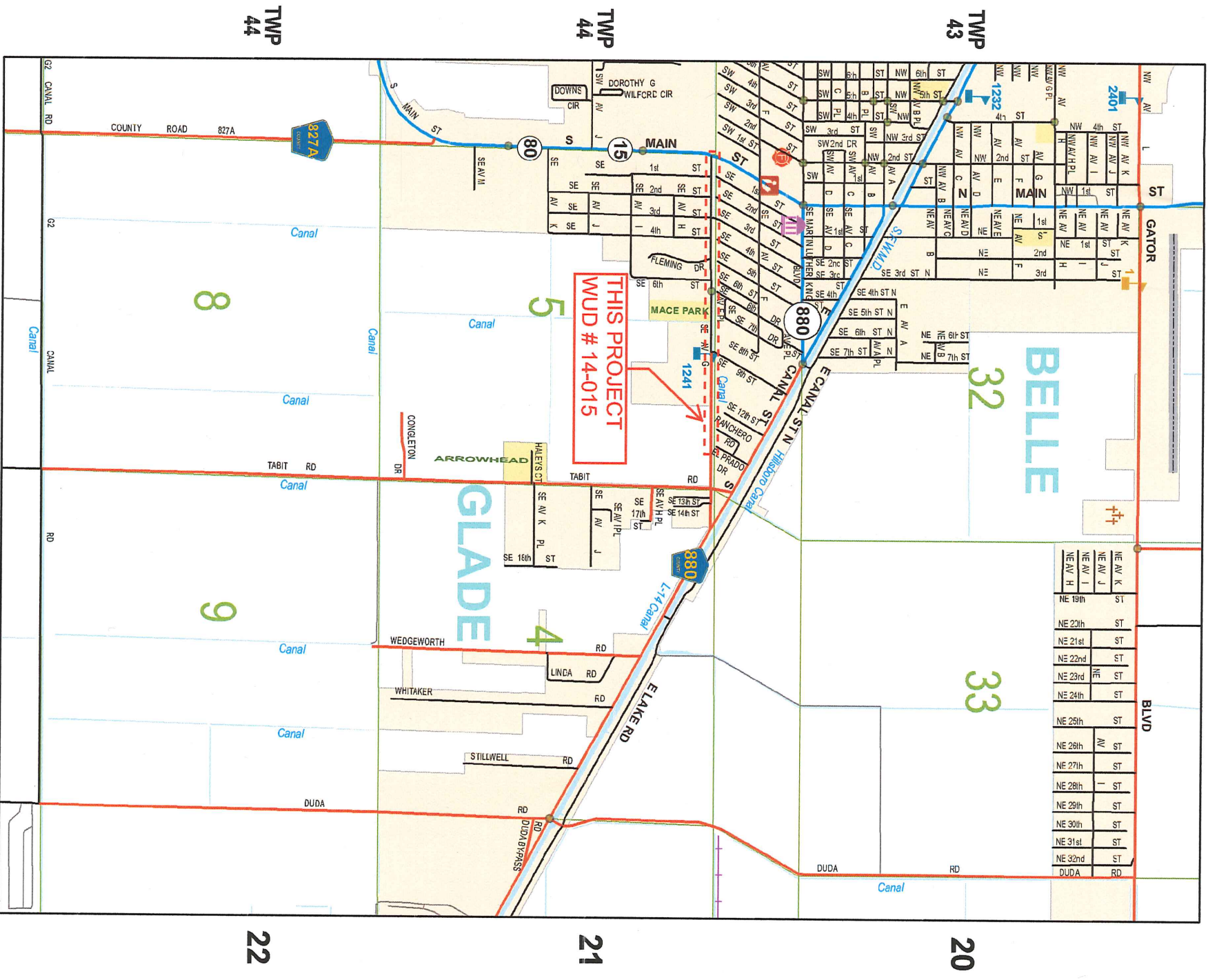
**C. Other Department Review:**

Purchasing Department Director

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



**NN** ATTACHMENT 1 OF AGENDA ITEM **MM**





✓  
Budget  
OK

**CONSULTANT SERVICES AUTHORIZATION NO. 4**

Project No. WUD 13-060

Budget Line Item No. 4011-721-W038-6543

**Project Title: SW Belle Glade Water Main Replacement, Zone 1, Phase 2, Construction Phase Services**

**District No.: 6**

**THIS AUTHORIZATION #4** to the Contract for Consulting/Professional Services dated June 3<sup>rd</sup>, 2014 with an effective date of June 4<sup>th</sup>, 2014 (R2014-0824), 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 95% SBE participation overall. This Consultant Services Authorization includes 100% overall participation. The cumulative SBE participation, including this authorization is 99.01% overall. Additional authorization will be utilized to meet or exceed the stated overall participation goal.

1. CONSULTANT: Keshavarz & Associates, Inc.
2. ADDRESS: 711 N Dixie Highway, Suite 201, West Palm Beach, FL 33401
3. Description of Services to be provided by the Consultant:  
Construction Phase Services for the SW Belle Glade Water Main Replacement Project, Zone 1, Phase 2.

**See ATTACHMENT A.**

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

**See ATTACHMENT E.**

5. Consultant shall begin work promptly on the requested services.
6. The compensation to be paid to the Consultant for providing the requested services shall be:
  - A. Computation of time charges plus expenses, not to exceed \$ \_\_\_\_\_
  - B. Fixed price of \$ 430,446.00 ✓
7. This Authorization may be terminated by the County without cause or prior notice. In the event of termination not the fault of the Consultant, the Consultant shall be compensated for all services performed through the date of termination, together with reimbursable expenses (if applicable) then due.

Project No. WUD 13-060 Consultant Services Authorization No. 4

Project Title SW Belle Glade Water Main Replacement Project, Zone 1 Phase 2, Construction Phase Services

8. As described in Section 7.5 of the CONTRACT, SBE participation is included in Attachment D under this Authorization. The attached Schedule 1 defines the SBE applied to this Authorization and Schedule 2 establishes the SBE contribution from each subconsultant (Letter of Intent to perform as an SBE).
9. EXCEPT AS HEREBY AMENDED, CHANGED OR MODIFIED, all other terms, conditions and obligations of the Contract dated June 3<sup>rd</sup>, 2014 remain in full force and effect.

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

JCS  
Palm Beach County,  
Board of County Commissioners

ATTEST:

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

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

Shelley Vana, Mayor

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

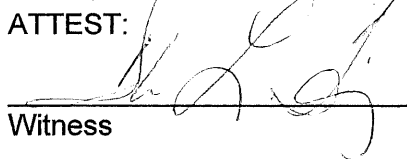
\_\_\_\_\_  
Date

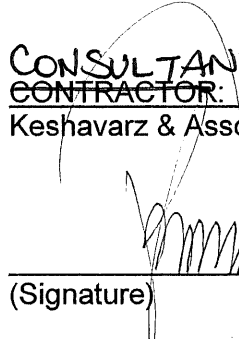
Approved as to Form and Legal  
Sufficiency

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

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

CONSULTANT  
CONTRACTOR:  
Keshavarz & Associates, Inc.

ATTEST:  
  
\_\_\_\_\_  
Witness

  
\_\_\_\_\_  
(Signature)

Deborah L. Fulgenzi, Administrator ✓  
(Name and Title)

Maziar Keshavarz, P.E., President ✓  
(Name and Title)

(CORPORATE SEAL)

8/27/14  
\_\_\_\_\_  
Date

**LIST OF ATTACHMENTS**

**Project No. WUD 13-060      Consultant Services Authorization No. 4**  
**Project Title SW Belle Glade Water Main Replacement Project, Zone 1, Phase 2,**  
**Construction Phase Services**

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

**ATTACHMENT A**  
**CONSULTANT SERVICE AUTHORIZATION NO. 4**  
**PALM BEACH COUNTY WATER UTILITIES DEPARTMENT**  
**ENGINEERING/PROFESSIONAL SERVICES**  
**SCOPE OF WORK**  
**FOR**  
**Construction Phase Services**  
**SW Belle Glade Water Main Replacement Zone 1, Phase 2**  
**WUD 13-060**

**INTRODUCTION**

Palm Beach County (COUNTY) entered into an agreement entitled Contract for Engineering/ Professional Services - Palm Beach County Utilities Department Project No. WUD 14-005 (CONTRACT) with Keshavarz & Associates, Inc (CONSULTANT) to provide engineering services for various general activities on (Reference Document R2014-0824). This Consultant Service Authorization will be performed under that CONTRACT.

This Consultant Services Authorization encompasses providing construction phase services associated with the water and wastewater components for a project known as "SW Belle Glade Water Main Replacement Zone 1, Phase 2".

**BACKGROUND**

PBCWUD (OWNER) wishes to improve the City of Belle Glade Water System infrastructure in Zone 1. The construction of the systems was designed by CONSULTANT. This Consultant Services Authorization is for the **Construction Phase Services for SW Belle Glade Water Service Replacement for Zone 1, Phase 2**.

**SCOPE OF SERVICES**

CONSULTANT shall act as the "Engineer of Record" (EOR) during construction of the Water and Wastewater components and perform customary construction administration services, field observations, provision of "plan revision" services as necessary, and coordinate with all relevant entities involved;

CONSULTANT shall perform all field and office services to acquire record survey data from the completed components and produce certifiable "Record Drawings" for those components designed by CONSULTANT. CONSULTANT shall utilize GPS and conventional surveying methods to obtain the record drawing information.

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## Task 1

### **CONSTRUCTION PHASE SERVICES relating to Water and Wastewater Components, Zone 1, Phase 2**

This proposal includes provision of field and office construction observation and administration services to properly observe the substantial conformance of construction with the approved plans prepared by CONSULTANT. These services shall be performed as needed to the level determined by CONSULTANT to enable CONSULTANT to provide proper technical advocacy for OWNER during construction and also the required Certifications of Completion to the applicable jurisdictional agencies for water and wastewater components only. Liaison services with regulating agencies and COUNTY's contractor (CONTRACTOR) of choice will also be included towards that goal.

This proposal is based on an estimated period of Three Hundred (300) Days for construction and finalization of the infrastructure improvements commencing with the CONTRACTOR's receipt of "Notice of Commencement" from the COUNTY and ending with the issuance of the last "Construction Completion Statement" by CONSULTANT. CONSULTANT's time frame of services is 15 days prior to and 15 days preceding those dates for a total of Three Hundred Thirty (330) business days.

While the necessary steps outlined in this proposal will be performed under the lump sum fee listed in this proposal, the activities due to the delayed project completion or re-testing/re-visits due to failed first time attempts by the Contractor could result in additional fees.

This Scope of Services and Schedule of Compensation is based upon all infrastructure improvements being completed in a single phase currently identified as "Phase 2" unless specifically mentioned herein.

**I(a). COUNTY Representation and Contract Administration Services:** CONSULTANT, in this case, will ultimately certify the compliance of constructed facilities with the approved plans, but will also act as the COUNTY's main agent and contact with the CONTRACTOR and regulating agencies in reference to the subject project's water and wastewater components. While CONSULTANT's role is not one of "Construction Management", it is one of technical advocacy and comprehensive representation of the OWNER and COUNTY's interests. While COUNTY will perform the "Bid Phase" services and enter the "Agreement to Construct" (contract with the CONTRACTOR selected by CONSULTANT and COUNTY) for the entire "Phase 2", CONSULTANT shall be given the authority and responsibility to carry out the required administrative and observation services from award of contract to final releases and payment to CONTRACTOR associated with the water and wastewater construction.

**I(b). Bid Tabulation and Package, and Construction Specifications:** CONSULTANT shall provide assistance to the COUNTY during the bid phase, including assistance in determination of project schedule, project advertisement and launch process. The CONSULTANT shall also provide assistance to the COUNTY during the Bid Phase to include the provision of responses to "Requests for Information (RFI)"s and attendance of the Pre-Bid Meeting and Bid Opening.

**I(c). Project Start Up, Orientation and Pre-Construction Meeting:** CONSULTANT shall conduct a pre-construction meeting with COUNTY, chosen CONTRACTOR, and other pertinent parties in attendance. At the time of the pre-construction meeting, the plans will be issued for construction purposes. CONSULTANT shall be responsible for preparing and issuing the meeting minutes. This task will also include all CONSULTANT's efforts in connection with the initial construction phase orientation, coordination with the COUNTY and Contractor and resulting in a pre-construction meeting.

**I(d). Shop Drawing Review:** CONSULTANT shall review and evaluate shop drawings, diagrams, illustrations, catalog data, product schedules, samples, results of tests and inspections, and other data which the CONTRACTOR is required to submit, to show that the materials proposed to be used in the work are in substantial compliance with the CONSULTANT's drawings and specifications. All suggested "Substitutions" presented by CONTRACTOR for project's materials and fabrication will also be evaluated if submitted at this stage or throughout the course of the project.

**I(e). Routine and Regular Construction Observation:** CONSULTANT will make routine and regular visits to the project site for the purpose of observing progress and general quality of the ongoing work and to determine if the work is proceeding in substantial compliance with the construction drawings and specifications related to the water and wastewater components of Phase 2. CONSULTANT shall review the Contractor's initial project construction schedule, and review the schedule at appropriate intervals (no less than monthly) throughout the construction period.

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This effort is directed toward assisting COUNTY in knowing that the completed project will conform with requirements contained in the approved drawings, specifications and regulatory agency permits. CONSULTANT will not be responsible for the work of the CONTRACTOR or others. CONSULTANT will not be responsible for construction means, methods, sequences, procedures, schedule or safety measures. CONSULTANT will not provide full time construction observation, but will keep in close contact with CONTRACTOR and COUNTY's Project Manager with respect to the project's progress including regular monthly progress meetings to the level necessary to provide CONSULTANT the opportunity to be present at the site during critical stages of construction by giving proper notice prior to the specific activity. CONSULTANT shall be responsible to inform all pertinent parties who are tasked with the responsibility of observing the construction of the water and wastewater components of this project upon learning of the plan to execute various relevant tasks by the CONTRACTOR. Those entities are anticipated to be:

- Palm Beach County Water Utilities Department (COUNTY)
- Palm Beach County Fire Rescue
- South Florida Conservancy District
- City of Belle Glade
- Florida Department of Transportation
- Florida Power & Light Company
- AT&T

Following each field observation, a report shall be prepared by the CONSULTANT and provided to the COUNTY and CONTRACTOR. The following outlines a general schedule of the CONSULTANT's required field observations and other activities for each site component:

**CIVIL WORKS relating to the Water and Wastewater, Zone 1 Phase 2.**

- Water main installation, including excavation trenching, unsuitable soil removal, fill, filter fabric, poly-bagging and backfilling operations;
- Water service wet taps off existing water mains;
- Aerial crossing construction including pile driving FDOT piles through existing rock
- Subaqueous crossing including directional bore operations
- Pavement restoration of driveways and roadways
- Insertion valves including restraining existing pipe
- Residential water services installation;
- Sewer lateral replacement
- Connections to existing water mains
- Cannon flushing
- Pressure and leakages tests
- Bacteriological testing
- Plugging, capping, grouting and abandonment of existing water mains in place after Health Department clearance
- Erosion control devices/measures
- Removal and reinstallation of dry utilities
- Review backfill density test reports prepared by others for compliance with design specifications when necessary
- Open cuts of roads and all proposed impacts to road right-of-way for compliance with design documents.
- Review "Record Drawings", generate comments if necessary and assist CONTRACTOR in providing "Close Out" documentation
- Attend semi-final walk through(s) with pertinent regulating agency and CONTRACTOR and prepare punch list of items to complete work
- Attend one final walk through(s) with pertinent regulating agency

**I(f). Requests for Information:** The CONSULTANT shall provide resolution of and assistance with Requests for Information (RFI)'s from the CONTRACTOR or COUNTY.

**I(g). Pay Applications:** The CONSULTANT shall review the CONTRACTOR's monthly pay applications and provide recommendation for payment based on the construction completion percentage on a set date each month as determined by the COUNTY.

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**I(h). Final "Construction Completion Statements":** Final Completion Statements shall be prepared for various project components designed and observed during construction by CONSULTANT as may be required by regulating agencies to release and transfer those systems to "Operation Phase".

CONSULTANT shall attend final walk through(s) with the applicable agencies. Completion statements shall be provided by CONSULTANT to regulatory agencies for Zone 1, Phase 2 only.

## **Task 2      Preparation of "Record Drawings", Zone 1, Phase 2:**

CONSULTANT shall perform field and office surveying services to acquire record survey data from the completed components and produce certifiable "Record Drawings" for those components designed by CONSULTANT.

CONSULTANT shall utilize a Global Positioning System (GPS) to locate the installed watermain and other relevant appurtenances horizontally and vertically with the expected deviations to be within 0.00' +/- 0.12' of horizontal and 0.00' +/- 0.40' of vertical distance. For maximum accuracy, CONSULTANT will begin and end each session of GPS data acquisition by re-tying the closest control point/benchmark in order to gauge vertical deviations and manually adjust those deviations associated with the GPS collected point based on the average difference between the published value of the control/benchmark and the re-tied value. CONSULTANT shall also use GPS to locate existing ground (finish grade) at the same time the pipe is located to facilitate the determination of depth of cover. All conflict pipe crossings will be physically measured by CONSULTANT's forces and the clearance/ separation between the bottom of one pipe(s) and the top of the other pipe(s) will be depicted on the Record Drawings as such. Additionally, CONSULTANT has the ability to utilize conventional survey methods, i.e. total station, differential leveling or level laser, for appurtenances associated with the aerial crossings or for other facilities that the COUNTY and/or CONSULTANT require more stringent vertical accuracy.

Under this proposal, CONSULTANT shall only be responsible to coordinate with CONTRACTOR and COUNTY, acquire field data and produce Record Drawings for the following infrastructure elements:

- Potable water and fire protection system including: DIP watermain, PVC watermain, sample points, fire hydrants, valves, meter locations. The plugs and cap points of existing watermain to be abandoned and left in place are included in this task.
- Wastewater system service lateral replacements.

CONSULTANT shall prepare the Record Drawings for sufficiency from the regulatory process approval standpoint, as well as clarity and completeness from the engineering standpoint. All necessary coordination with CONSULTANT's Survey Division and relating agencies is included in this task.

For proposed subaqueous or subterranean crossings that require a contractor with the necessary equipment and experience to install the proposed facilities pursuant to the design plans, the said contractor shall provide record data in the form of directional bore reports generated by the machinery used and operated by the contractor.

See Attachment 'H', Record Drawings (As Built) Checklist that has been revised for this project.

**ATTACHMENT B**

KESHA VARZ & ASSOCIATES, INC.  
Palm Beach County Water Utilities Department

**August 27, 2014**

**K&A Project No.13-1010**

**CSA No. 4 SW Belle Glade Water Services Replacement Project, Zone 1, Phase 2**

WUD No. 13-060

WORK ELEMENT	Senior Project Manager \$/hr	Sr Project Engineer \$/hr	Engr/ Surv CAD Tech \$/hr	Const Project Manager \$/hr	Senior PSM \$/HR	Survey Crew \$/hr	Admin. \$/hr	Totals by Task
	\$175.00	\$125.00	\$82.00	\$102.00	\$120.00	\$145.00	\$75.00	
Task 1: Construction Phase Services, Water and Wastewater Zone 1, Phase 2								\$267,652.00
1(a) County representation and contract administration services	32.0	24.0	0.0	50.0	0.0	0.0	12.0	\$14,600.00
1(b) Bid phase assistance, bid RFI's, pre bid and bid opening meetings	14.0	0.0	0.0	0.0	0.0	0.0	0.0	\$2,450.00
1(c) Project Start Up, Orientation and Pre-construction meeting	24.0	18.0	0.0	36.0	0.0	0.0	32.0	\$12,522.00
1(d) Shop Drawing Review	14.0	12.0	0.0	32.0	0.0	0.0	8.0	\$7,814.00
1(e) Routine and Regular Construction Observation	30.0	48.0	0.0	1662.0	0.0	0.0	82.0	\$186,924.00
1(f) Requests for Information	36.0	22.0	36.0	74.0	0.0	0.0	8.0	\$20,150.00
1(g) Pay Applications	16.0	16.0	0.0	48.0	0.0	0.0	12.0	\$10,596.00
1(h) Final "Construction Competition Statements"	28.0	14.0	0.0	48.0	0.0	0.0	14.0	\$12,596.00
Task 2: Preparation of "Record Drawings", Phase II	8.00	4.00	492.00	60.00	104.00	650.00	16.00	\$156,294.00
TOTAL Hours	202.00	158.00	528.00	2010.00	104.00	650.00	184.00	\$423,946.00
FEE Estimate	\$35,350.00	\$19,750.00	\$43,296.00	\$205,020.00	\$12,480.00	\$94,250.00	\$13,800.00	
Reimburseables, Copies, Prints, Deliveries								\$6,500.00
TOTAL SERVICES & Reimburseables	\$430,446.00							



ATTACHMENT - C

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>
TASK 1: CONSTRUCTION PHASE SERVICES FOR WATER AND WASTEWATER SYSTEMS AND UTILITY COORDINATION	300 BUSINESS DAYS
TASK 2: PREPARATION OF RECORD DRAWINGS	330 BUSINESS DAYS

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**ATTACHMENT D**

**SCHEDULE #1**

**LIST OF PROPOSED SBE-M/WBE PRIME/SUBCONSULTANTS**

PROJECT NAME: SW Belle Glade Watermain Replacement, Zone 1, Phase 2 PROJECT NUMBER: 13-060  
Construction Phase Services  
NAME OF PRIME BIDDER Keshavarz & Associates, Inc. ADDRESS: 711 N. Dixie Highway, Suite 201, West Palm Beach, FL 33401  
CONTACT PERSON: Maziar Keshavarz, P.E. PHONE NO 561-689-8600 FAX NO. 561-689-7476  
BID OPENING DATE: \_\_\_\_\_ DEPARTMENT Water Utilities

PLEASE IDENTIFY ALL APPLICABLE CATEGORIES							
Name, Address and Telephone Number of Minority Consultant	(Check one or both Categories)		Dollar Amount				
	Minority Business	Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)
Keshavarz & Associates, Inc. 711 N Dixie Hwy, #201, WPB FL 33401 (561) 689-8600	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	\$	\$	\$		\$430,446.00
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$0
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
PRIME CONSULTANT TO COMPLETE:	TOTAL		\$ -	\$ -	\$ -	\$	430,446.00
BID PRICE:	\$430,446.00	Total Value of SBE Participation:		\$ 430,446.00			

NOTE:

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

## ATTACHMENT D

### SCHEDULE 2

#### LETTER OF INTENT TO PERFORM AS AN SBE OR M/WBE SUBCONTRACTOR

PROJECT NO. WUD 13-060

PROJECT NAME: SW Belle Glade Water Main  
Replacement Project Zone 1, Phase 2, Construction  
Phase Services

TO: Keshavarz & Associates, Inc.  
(Name of Prime Bidder)

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

Small Business Enterprise X Minority Business Enterprise X

Black      Hispanic      Women      Caucasian      Other (Please Specify) X

Date of Palm Beach County Certification: May 15, 2013

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

Line Item/Lot No.	Item Description	Qty / Units	Unit Price	Total Price
<u>1</u>	<u>CPS – Water and Wastewater</u>	<u>1.00</u>	<u>          </u>	<u>\$ 267,652.00</u>
<u>2</u>	<u>Preparation of Record Drawings</u>	<u>1.00</u>	<u>          </u>	<u>\$ 156,294.00</u>
<u>3</u>	<u>Reimbursable Expenses</u>	<u>1.00</u>	<u>          </u>	<u>\$ 6,500.00</u>

at the following price

\$ 430,446.00

(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: \$                     

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

Keshavarz & Associates, Inc.  
(Print Name of SBE-M/WBE Subcontractor)

By:   
(Signature)

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

Date: 8/27/14

**ATTACHMENT - E**

# AUTHORIZATION STATUS REPORT

## SUMMARY AND STATUS OF REQUESTS FOR AUTHORIZATIONS

Auth. No.	Description	Status	Project Total Amount	Date Approved	WUD No. Assigned	K&A Project No.
1	Aerial Crossing Replacements in Belle Glade – Priority 1	30%	\$ 87,468.00	8/6/2014	14-092	14-1047
2	SW Belle Glade Watermain Replacement, Zone 2 EAST	Pending	\$ 82,231.00		14-015	13-1026
3	SW Belle Glade Watermain Replacement, Zone 2 WEST	Pending	\$ 49,906.00		14-015	13-1026
4	SW Belle Glade Water Services Replacement Project, Zone 1, Phase 2 Construction Phase Services	Pending	\$430,446.00		13-060	13-1010
Total			\$ 650,051.00			



ATTACHMENT - F

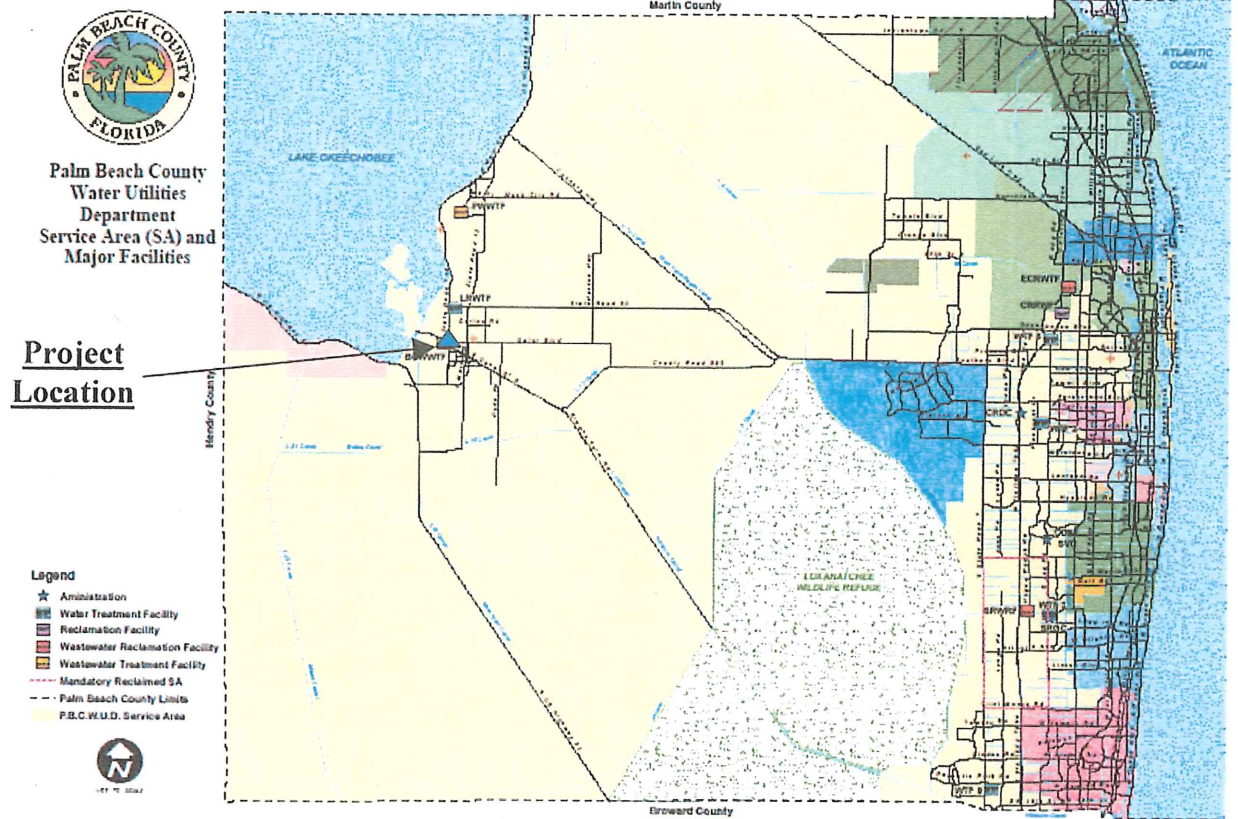
AUTHORIZATION STATUS REPORT  
UTILITY DISTRIBUTION & COLLECTION SYSTEM CONSULTING SERVICES

SUMMARY OF  
SBE / MINORITY BUSINESS TRACKING SYSTEM

	Total	SBE
Current Proposal		
Value of CSA No. 4	\$ 430,446.00 /	
Value of MWBE Letters of Intent	\$ 430,446.00 /	\$430,446.00
Actual Percentage	100% /	100%
Pending Proposals		
Value of CSA No. 2 and 3	\$132,137.00 /	
Value of MWBE Letters of Intent	\$132,137.00 /	\$132,137.00
Actual Percentage	100%	100%
Signed Authorizations		
Total Value of Authorization No. 1	\$ 87,468.00 /	
Total Value of MWBE Signed Subcontracts	\$ 81,068.00 /	\$ 81,068.00
Actual Percentage	92.68% /	92.68%
Signed Authorizations Plus Current Proposals		
Total Value of Authorizations	\$ 650,051.00 /	
Total Value of Subcontracts & Letters of Intent	\$643,651.00 /	\$643,651.00
Actual Percentage	99.01% /	99.01%
GOAL	95%	95%

# ATTACHMENT G

## LOCATION MAP



Attachment H

Project Name: SW Belle Glade Water Main Replacement, Zone 1, Phase 2

Project Engineer: Keshavarz & Associates, Inc.

Telephone: (561) 689-8600

WUD #13-060

Initial Submittal Date:

Plan Reviewer:

Record Drawing (As-Built) Checklist

GENERAL REQUIREMENTS:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	As-Built drawings signed & Sealed	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Number of As-Built drawings submitted, 4 copies REQ'D on initial submittal with 2 copies on subsequent submittals	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	"Record Drawing" called out on each As-Built drawing	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Project Name	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Project Address	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Location Map with SEC., TWP. & RGE.	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	WUD No. shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Datum of Elevations shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	State Plane Coordinates (SPC) shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Property corners with SPC	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Plat Book & Page shown (when applicable)	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	PBCUE ORB & PG shown (when applicable)	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Sample Points labeled	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	*Valve MFR, FH MFR & model called out (*Contractor should be required to provide a list of Manufacturers for installed facilities)	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Manhole corrosion barrier system & Applicator shown (N/A)	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	*Interceptor MFR, model & capacity shown (See above)	<input type="checkbox"/>	<input type="checkbox"/> _____

WATER MAIN REQUIREMENTS:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Verify WM As-Built locations with Approved design locations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Valves numbered	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Fire hydrants numbered	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	** (Limited) All fittings shown with SPC & elevations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Top of pipe called out w/SPC every 100'	<input type="checkbox"/>	<input type="checkbox"/> _____

\*\*We propose to use linear dimensions along pipes between fittings in such cases that fittings are separated by relatively short distances, i.e. from a constructed Tee through the constructed valve and fire hydrant assembly. Additionally, we propose to use linear dimensions and/or "Swing Tie" dimensions to permanent objects (i.e. pavement edges, manholes, catch basins, building structures...) in order to facilitate legibility issues due to text clutter caused by the combination of As-Built data with design data.

WATER MAIN REQUIREMENTS continued:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Grade elevations shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 3' MIN cover on all water mains***	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	WM pipe material shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	All crossings with As-Built data	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify all crossing separations met Department standards *** ( 6')	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 40' MIN Hor. SEP to storm pipes, exfiltration trenches, buildings, walls, roof overhangs & canopies ( 6')	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 40' MIN Hor. SEP to sewer mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 3' MIN Hor. SEP to drainage structures & reclaim water mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 4' MIN Hor. SEP to power poles, light poles and other utility lines	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 16" Ø & larger and 4" Ø & smaller mains are DIP	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	FH & fire sprinkler branches are DIP	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify valves are not installed in curbs or parking spaces	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	ARV MH w/SPC & As-Built elevations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	No new high points created in WM	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Each end of main casing is As-Built	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Bollards shown for FH requiring them	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify valve LOC. on fire hydrants	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify valve LOC. on fire line DDCV	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify DDCV size w/Fire Marshal approval	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify main blow-offs in grass area	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Meter control valve shown /SPC	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Which meter serves which lot shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Abandoned in place/removed sections Of pipe clearly shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Water service taps 18"/10' MIN SEP	<input type="checkbox"/>	<input type="checkbox"/> _____

\*\*\* See Task 2 of proposal for Record Data Acquisition procedures.



WATER MAIN REQUIREMENTS continued:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Verify water service & sewer lateral SEP (See Task 2 of proposal for Record Data Acquisition procedures)	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Existing water service plugged w/SPC	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Meter location, 18" MAX from ROW line in non-exclusive UE or 4' MAX within a PBCUE	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Individual meter for commercial establishments with an interceptor	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Residential fire line with 1" meter shown	<input type="checkbox"/>	<input type="checkbox"/> _____

GRAVITY SEWER REQUIREMENTS:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Verify gravity main As-Built locations with approved design locations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Grade elevations shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Gravity main pipe material shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify gravity main slopes	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	All crossings with As-Built data	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify all crossing separations met Department standards	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	20' DIP section centered on crossings with less than 18" MIN SEP	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 10' MIN Hor. SEP to water mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 15' MIN Hor. SEP to buildings, walls, roof overhangs & canopies	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 10' MIN Hor. SEP to exfiltration trenches	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 3' MIN Hor. SEP to drainage structures & reclaim water mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 4' MIN Hor. SEP to storm pipes, power poles, light poles & other utility lines	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify MIN SEP to top of bank on canals, lakes and their structures	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify lateral 5' MIN SEP from water services, blow-offs, hydrants, power poles light poles, catch basins, walls and other structures	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	MH RIM & inverts w/As-Built data & SPC	<input type="checkbox"/>	<input type="checkbox"/> _____

GRAVITY SEWER REQUIREMENTS continued:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	****Verify MH spacing does not exceed 400' Show As-Built dimensions between MH's	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify MH flow direction is at 90° MIN (Not necessary, resolved during design phase)	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify MH in pavers or grass are shown with concrete collars	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify MH inside drops	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	MH inverts shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify clean-out locations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify Interceptors maintain 10' MIN SEP from all PBCWUD owned facilities	<input type="checkbox"/>	<input type="checkbox"/> _____

FORCE MAIN REQUIREMENTS:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Verify force main As-Built locations with approved design locations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify Public LS PBCUE is 40' x 30' MIN	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify Public LS driveway is 30' MIN from edge of ROW, pavement to gates	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	PVT LS flushing connection w/SPC	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify water service provided to any LS	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Grade elevations shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Force main pipe material shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	All crossings with As-Built data	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify cover over FM, 36" MIN	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify all crossing separations met Department standards	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 10' MIN Hor. SEP to water mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 15' MIN Hor. SEP to buildings, walls, roof overhangs & canopies	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 10' MIN Hor. SEP to exfiltration trenches	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 3' MIN Hor. SEP to drainage structures & reclaim water mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 4' MIN Hor. SEP to storm pipes, power poles, light poles & other utility lines	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Valves on 3" Ø FM or larger shall be gate valves (GV)	<input type="checkbox"/>	<input type="checkbox"/> _____

\*\*\*\*Manhole spacing was resolved during the design phase; design plans typically show distance between manholes as part of distance/slope text associated with pipe between structures.

FORCE MAIN REQUIREMENTS continued:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Verify in-line valves installed on FM 16" Ø or smaller near each side of canal crossing and/or major road crossing	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify in-line valves installed at 2000' MAX intervals on transmission force mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify valves are not installed in curbs or parking spaces	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify all valves numerically numbered	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	ARV BH w/SPC & As-Built elevations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	No new high points created in FM	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Each end of main casing is As-Built	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Abandoned in place/removed sections of pipe clearly shown	<input type="checkbox"/>	<input type="checkbox"/> _____

✓  
Ricky  
OK

**CONSULTANT SERVICES AUTHORIZATION NO. 5**

**Project No. WUD 14-015**  
**Budget Line Item No. 4011-721-W038-6543**

**Project Title: Belle Glade Water Main Replacement Project – SE Avenue G**

**District No.: 6**

**THIS AUTHORIZATION #5** to the Contract for Consulting/Professional Services dated June 3<sup>rd</sup>, 2014 with an effective date of June 4<sup>th</sup>, 2014 (R2014-0824), 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 95% SBE participation overall. This Consultant Services Authorization includes 100% overall participation. The cumulative SBE participation, including this authorization is 99.21% overall. Additional authorization will be utilized to meet or exceed the stated overall participation goal.

- 1. CONSULTANT: Keshavarz & Associates, Inc.
- 2. ADDRESS: 711 N Dixie Highway, Suite 201, West Palm Beach, FL 33401
- 3. Description of Services to be provided by the Consultant:  
Construction Phase Services for the Belle Glade Water Main Replacement Project - SE Avenue G.

**See ATTACHMENT A.**

- 4. Services completed by the Consultant to date (Summary and Status of Authorizations):  
  
**See ATTACHMENT E.**

- 5. Consultant shall begin work promptly on the requested services.
- 6. The compensation to be paid to the Consultant for providing the requested services shall be:
  - A. Computation of time charges plus expenses, not to exceed \$ \_\_\_\_\_
  - B. Fixed price of \$ 167,722.00
- 7. This Authorization may be terminated by the County without cause or prior notice. In the event of termination not the fault of the Consultant, the Consultant shall be compensated for all services performed through the date of termination, together with reimbursable expenses (if applicable) then due.

\_\_\_\_\_

Project No. WUD 14-015 Consultant Services Authorization No. 5

**Project Title Belle Glade Water Main Replacement Project - SE Avenue G – Construction Phase Services**

8. As described in Section 7.5 of the CONTRACT, SBE participation is included in Attachment D under this Authorization. The attached Schedule 1 defines the SBE applied to this Authorization and Schedule 2 establishes the SBE contribution from each subconsultant (Letter of Intent to perform as an SBE).
9. EXCEPT AS HEREBY AMENDED, CHANGED OR MODIFIED, all other terms, conditions and obligations of the Contract dated June 3<sup>rd</sup>, 2014 remain in full force and effect.

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

JCS

ATTEST:

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

Signed: \_\_\_\_\_  
Shelley Vana, Mayor

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

\_\_\_\_\_ Date

Approved as to Form and Legal  
Sufficiency

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

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

**CONSULTANT  
CONTRACTOR:**  
Keshavarz & Associates, Inc.

ATTEST:

Witness \_\_\_\_\_

\_\_\_\_\_  
(Signature)

Deborah L. Fulgenzi, Administrator  
(Name and Title)

Maziar Keshavarz, P.E., President  
(Name and Title)

(CORPORATE SEAL)

8/27/14  
Date

## LIST OF ATTACHMENTS

Project No. WUD 14-015 Consultant Services Authorization No. 5

Project Title Belle Glade Water Main Replacement Project - SE Avenue G – Construction Phase Services

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

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**ATTACHMENT A**  
**CONSULTANT SERVICE AUTHORIZATION NO. 5**  
**PALM BEACH COUNTY WATER UTILITIES DEPARTMENT**  
**ENGINEERING/PROFESSIONAL SERVICES**  
**SCOPE OF WORK**  
**FOR**  
**Construction Phase Services**  
**Belle Glade Water Main Replacement Project - SE Avenue G**  
**WUD 14-015**

**INTRODUCTION**

Palm Beach County (COUNTY) entered into an agreement entitled Contract for Engineering/ Professional Services - Palm Beach County Utilities Department Project No. WUD 14-005 (CONTRACT) with Keshavarz & Associates, Inc. (CONSULTANT) to provide engineering services for various general activities on (Reference Document R2014-0824). This Consultant Service Authorization will be performed under that CONTRACT.

This Consultant Services Authorization encompasses providing construction phase services associated with the water and wastewater components for a project known as "Belle Glade Water Main Replacement Project - SE Avenue G".

**BACKGROUND**

PBCWUD (OWNER) wishes to improve the City of Belle Glade Water System infrastructure. The construction of the systems was designed by CONSULTANT. This Consultant Services Authorization is for the **Construction Phase Services for Belle Glade Water Service Replacement Project - SE Avenue G**.

**SCOPE OF SERVICES**

CONSULTANT shall act as the "Engineer of Record" (EOR) during construction of the Water and Wastewater components and perform customary construction administration services, field observations, provision of "plan revision" services as necessary, and coordinate with all relevant entities involved;

CONSULTANT shall perform all field and office services to acquire record survey data from the completed components and produce certifiable "Record Drawings" for those components designed by CONSULTANT.

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## Task 1

### **CONSTRUCTION PHASE SERVICES relating to Water and Wastewater Components for SE Avenue G**

This proposal includes provision of field and office construction observation and administration services to properly observe the substantial conformance of construction with the approved plans prepared by CONSULTANT. These services shall be performed as needed to the level determined by CONSULTANT to enable CONSULTANT to provide proper technical advocacy for OWNER during construction and also the required Certifications of Completion to the applicable jurisdictional agencies for water and wastewater components only. Liaison services with regulating agencies and COUNTY's contractor (CONTRACTOR) of choice will also be included towards that goal.

This proposal is based on an estimated period of One Hundred Eighty (180) Calendar Days for construction and finalization of the infrastructure improvements commencing with the CONTRACTOR's receipt of "Notice of Commencement" from the COUNTY and ending with the issuance of the last "Construction Completion Statement" by CONSULTANT. CONSULTANT's time frame of services is 15 days prior to and 15 days preceding those dates for a total of Two Hundred Ten (210) Calendar Days.

While the necessary steps outlined in this proposal will be performed under the lump sum fee listed in this proposal, the activities due to the delayed project completion or re-testing/re-visits due to failed first time attempts by the Contractor could result in additional fees.

This Scope of Services and Schedule of Compensation is based upon all infrastructure improvements being completed in a single phase currently identified as "SE Avenue G Watermain Replacement" unless specifically mentioned herein.

**I(a). COUNTY Representation and Contract Administration Services:** CONSULTANT, in this case, will ultimately certify the compliance of constructed facilities with the approved plans, but will also act as the COUNTY's main agent and contact with the CONTRACTOR and regulating agencies in reference to the subject project's water and wastewater components. While CONSULTANT's role is not one of "Construction Management", it is one of technical advocacy and comprehensive representation of the OWNER and COUNTY's interests. COUNTY will not have any responsibility as to coordinating the activities required to construct and release the subject facilities. While COUNTY will perform the "Bid Phase" services and enter the "Agreement to Construct" (contract with the CONTRACTOR selected by CONSULTANT and COUNTY) for the entire "SE Avenue G Watermain Replacement", CONSULTANT shall be given the authority and responsibility to carry out the required administrative and observation services from award of contract to final releases and payment to CONTRACTOR on the water and wastewater construction.

**I(b). Bid Tabulation and Package, and Construction Specifications:** CONSULTANT shall provide assistance to the COUNTY during the bid phase, including assistance in determination of project schedule, project advertisement and launch process. The CONSULTANT shall also provide assistance to the COUNTY during the Bid Phase to include the provision of responses to "Requests for Information (RFI)"s and attendance of the Pre-Bid Meeting and Bid Opening.

**I(c). Project Start Up, Orientation and Pre-Construction Meeting:** CONSULTANT shall conduct a pre-construction meeting with COUNTY, chosen CONTRACTOR, and other pertinent parties in attendance. At the time of the pre-construction meeting, the plans will be issued for construction purposes. CONSULTANT shall be responsible for preparing and issuing the meeting minutes. This task will also include all CONSULTANT's efforts in connection with the initial construction phase orientation, coordination with the COUNTY and Contractor and resulting in a pre-construction meeting.

**I(d). Shop Drawing Review:** CONSULTANT shall review and evaluate shop drawings, diagrams, illustrations, catalog data, product schedules, samples, results of tests and inspections, and other data which the CONTRACTOR is required to submit, to show that the materials proposed to be used in the work are in substantial compliance with the CONSULTANT's drawings and specifications. All suggested "Substitutions" presented by CONTRACTOR for project's materials and fabrication will also be evaluated if submitted at this stage or throughout the course of the project.

**I(e). Routine and Regular Construction Observation:** CONSULTANT will make routine and regular visits to the project site for the purpose of observing progress and general quality of the ongoing work and to determine if the work is proceeding in substantial compliance with the construction drawings and specifications related to the water and wastewater components.

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CONSULTANT shall review the Contractor's initial project construction schedule, and review the schedule at appropriate intervals (no less than monthly) throughout the construction period. This effort is directed toward assisting COUNTY in knowing that the completed project will conform with requirements contained in the approved drawings, specifications and regulatory agency permits. CONSULTANT will not be responsible for the work of the CONTRACTOR or others. CONSULTANT will not be responsible for construction means, methods, sequences, procedures, schedule or safety measures. CONSULTANT will not provide full time construction observation, but will keep in close contact with CONTRACTOR and COUNTY's Project Manager with respect to the project's progress, including regular monthly progress meetings to the level necessary to provide CONSULTANT the opportunity to be present at the site during critical stages of construction by giving proper notice prior to the specific activity. CONSULTANT shall be responsible to inform all pertinent parties who are tasked with the responsibility of observing the construction of the water and wastewater components of this project upon learning of the plan to execute various relevant tasks by the CONTRACTOR. Those entities are anticipated to be:

- Palm Beach County Water Utilities Department (COUNTY)
- Palm Beach County Fire Rescue
- Palm Beach County Engineering / Land Development
- South Florida Conservancy District
- City of Belle Glade
- Florida Power & Light Company
- AT&T

Following each field observation, a report shall be prepared by the CONSULTANT and provided to the COUNTY and CONTRACTOR. The following outlines a general schedule of the CONSULTANT's required field observations and other activities for each site component:

CIVIL WORKS relating to the Water and Wastewater, SE Avenue G.

- Water main installation, including excavation trenching, soil removal, fill, filter fabric, poly-bagging and backfilling operations;
- Water service wet taps off existing water mains;
- Aerial crossing construction
- Pavement restoration of driveways, roadways and water services
- Residential water services;
- Connections to existing water mains
- Cannon flushing
- Pressure and leakages tests
- Bacteriological testing
- Plugging, capping and abandonment of existing water mains in place after Health Department clearance
- Erosion control devices/measures
- Removal and reinstallation of dry utilities
- Review backfill density test reports prepared by others for compliance with design specifications when necessary
- Open cuts of roads and all proposed impacts to road right-of-way for compliance with design documents
- Observe milling and overlaying of pavement
- Review "Record Drawings", generate comments if necessary and assist CONTRACTOR in providing "Close Out" documentation
- Attend semi-final walk through(s) with pertinent regulating agency and CONTRACTOR and prepare punch list of items to complete work
- Attend one final walk through(s) of paving, grading and drainage components with pertinent regulating agency

**I(f). Requests for Information:** The CONSULTANT shall provide resolution of and assistance with Requests for Information (RFI)'s from the CONTRACTOR or COUNTY.

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**I(g). Pay Applications:** The CONSULTANT shall review the CONTRACTOR's monthly pay applications and provide recommendation for payment based on the construction completion percentage on a set date each month as determined by the COUNTY.

**I(h). Final "Construction Completion Statements":** Final Completion Statements shall be prepared for various project components designed and observed during construction by CONSULTANT as may be required by regulating agencies to release and transfer those systems to "Operation Phase".

CONSULTANT shall attend final walk through(s) with the applicable agencies. Completion statements shall be provided by CONSULTANT to regulatory agencies for SE Avenue G only.

## **Task 2     Preparation of "Record Drawings", SE Avenue G:**

CONSULTANT shall perform field and office surveying services to acquire record survey data from the completed components and produce certifiable "Record Drawings" for those components designed by CONSULTANT.

CONSULTANT shall utilize a Global Positioning System (GPS) to locate the installed watermain and other relevant appurtenances horizontally and vertically with the expected deviations to be within 0.00' +/- 0.12' of horizontal and 0.00' +/- 0.40' of vertical distance. For maximum accuracy, CONSULTANT will begin and end each session of GPS data acquisition by re-tying the closest control point/benchmark in order to gauge vertical deviations and manually adjust those deviations associated with the GPS collected point based on the average difference between the published value of the control/benchmark and the re-tied value. CONSULTANT shall also use GPS to locate existing ground (finish grade) at the same time the pipe is located to facilitate the determination of depth of cover. All conflict pipe crossings will be physically measured by CONSULTANT's forces and the clearance/ separation between the bottom of one pipe(s) and the top of the other pipe(s) will be depicted on the Record Drawings as such. Additionally, CONSULTANT has the ability to utilize conventional survey methods, i.e. total station, differential leveling or level laser, for appurtenances associated with the aerial crossings or for other facilities that the COUNTY and/or CONSULTANT require more stringent vertical accuracy.

Under this proposal, CONSULTANT shall only be responsible to coordinate with CONTRACTOR and COUNTY, acquire field data and produce Record Drawings for the following infrastructure elements:

- Potable water and fire protection system including: DIP watermain, PVC watermain, sample points, fire hydrants and valves. The plugs and cap points of existing watermain which will be left in place are included.

CONSULTANT shall prepare the Record Drawings for sufficiency from the regulatory process approval standpoint, as well as clarity and completeness from the engineering standpoint. All necessary coordination with CONSULTANT's Survey Division and relating agencies is included in this task.

See Attachment 'H', Record Drawings (As Built) Checklist that has been revised for this project.

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**ATTACHMENT B**

KESHAVARZ & ASSOCIATES, INC.  
Palm Beach County Water Utilities Department

**August 27, 2014**

**K&A Project No.13-1025**

**WUD No. 14-015**

**Belle Glade Water Services Replacement Project - SE Avenue G - Construction Phase Services**

WORK ELEMENT	Senior Project Manager \$/hr	Sr Project Engineer \$/hr	Engr/ Surv CAD Tech \$/hr	Const Project Manager \$/hr	Senior PSM \$/HR	Survey Crew \$/hr	Admin. \$/hr	Totals by Task
	\$175.00	\$125.00	\$82.00	\$102.00	\$120.00	\$145.00	\$75.00	
<b>Task 1: Construction Phase Services, Water and Wastewater SE Avenue G</b>								\$113,574.00 ✓
1(a) Client representation and contract administration services	24.0	18.0	0.0	34.0	0.0	0.0	8.0	\$10,518.00 ✓
1(b) Bid phase assistance, bid RFI's, pre bid and bid opening meetings	12.0	0.0	0.0	0.0	0.0	0.0	0.0	\$2,100.00 ✓
1(c) Project Start Up, Orientation and Pre- construction meeting	16.0	14.0	0.0	22.0	0.0	0.0	2.0	\$6,944.00 ✓
1(d) Shop Drawing Review	6.0	12.0	0.0	24.0	0.0	0.0	0.0	\$4,998.00 ✓
1(e) Routine and Regular Construction Observation	12.0	20.0	0.0	568.0	0.0	0.0	32.0	\$64,936.00 ✓
1(f) Requests for Information	16.0	12.0	20.0	38.0	0.0	0.0	2.0	\$9,966.00 ✓
1(g) Pay Applications	6.0	8.0	0.0	24.0	0.0	0.0	8.0	\$5,098.00 ✓
1(h) Final "Construction Competition Statements" and Processing	16.0	14.0	0.0	32.0	0.0	0.0	16.0	\$9,014.00 ✓
<b>Task 2: Preparation of "Record Drawings", Phase II</b>	4.00	4.00	158.00	36.00	28.00	208.00	8.00	\$51,948.00 ✓
<b>TOTAL Hours</b>	112.00	102.00	178.00	778.00	28.00	208.00	76.00	\$165,522.00 ✓
<b>FEE Estimate</b>	\$19,600.00	\$12,750.00	\$14,596.00	\$79,356.00	\$3,360.00	\$30,160.00	\$5,700.00	
<b>Reimbursables, Copies, Prints, Deliveries</b>								\$2,200.00
<b>TOTAL SERVICES &amp; Reimbursables</b>				\$167,722.00 ✓				

ATTACHMENT - C

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>
TASK 1: CONSTRUCTION PHASE SERVICES FOR WATER AND WASTEWATER SYSTEMS	180 CALENDAR DAYS
TASK 2: PREPARATION OF RECORD DRAWINGS	210 CALENDAR DAYS

ATTACHMENT D

SCHEDULE #1

## LIST OF PROPOSED SBE-M/WBE PRIME/SUBCONSULTANTS

PROJECT NAME: SW Belle Glade WM Improvement - Zone 2 & WM Improvement along SE Avenue G - Construction

PROJECT NUMBER: 14-015

NAME OF PRIME BIDDER Keshavarz & Associates, Inc.

ADDRESS: 711 N. Dixie Highway, Suite 201, West Palm Beach, FL 33401

CONTACT PERSON: Maziar Keshavarz, P.E.

PHONE NO 561-689-860C      FAX NO. 561-689-7476

BID OPENING DATE: \_\_\_\_\_

DEPARTMENT Water Utilities

PLEASE IDENTIFY ALL APPLICABLE CATEGORIES

Name, Address and Telephone Number of Minority Consultant	(Check one or both Categories)		Dollar Amount				
	Minority Business	Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)
Keshavarz & Associates, Inc. 711 N Dixie Hwy, #201, WPB FL 33401 (561) 689-8600	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	\$	\$	\$		\$167,722
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
PRIME CONSULTANT TO COMPLETE:	TOTAL		\$ -	\$ -	\$ -	\$ -	\$ 167,722.00
BID PRICE:	\$167,722.00	Total Value of SBE Participation:	\$ 167,722.00				

NOTE:

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

## ATTACHMENT D

### SCHEDULE 2

#### LETTER OF INTENT TO PERFORM AS AN SBE OR M/WBE SUBCONTRACTOR

PROJECT NO. WUD 14-015

PROJECT NAME: Belle Glade Water Main Replacement Project – SE Avenue G

TO: Keshavarz & Associates, Inc.  
(Name of Prime Bidder)

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

Small Business Enterprise X

Minority Business Enterprise X

Black      Hispanic      Women      Caucasian      Other (Please Specify) X

Date of Palm Beach County Certification: May 15, 2013

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

Line Item/Lot No.	Item Description	Qty / Units	Unit Price	Total Price
<u>1</u>	<u>CPS – Water and Wastewater</u>	<u>1.00</u>	<u>          </u>	<u>\$113,574.00</u>
<u>2</u>	<u>Preparation of Record Drawings</u>	<u>1.00</u>	<u>          </u>	<u>\$ 51,948.00</u>
<u>3</u>	<u>Reimbursable Expenses</u>	<u>1.00</u>	<u>          </u>	<u>\$ 2,200.00</u>

at the following price

\$ 167,722.00  
(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: \$                     

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

Keshavarz & Associates, Inc.  
(Print Name of SBE-M/WBE Subcontractor)

By:   
(Signature)

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

Date: 8/27/14

**ATTACHMENT - E**

# AUTHORIZATION STATUS REPORT

## SUMMARY AND STATUS OF REQUESTS FOR AUTHORIZATIONS

Auth. No.	Description	Status	Project Total Amount	Date Approved	WUD No. Assigned	K&A Project No.
1	Aerial Crossing Replacements in Belle Glade – Priority 1	30%	\$ 87,468.00	8/6/2014	14-092	14-1047
2	SW Belle Glade Watermain Replacement, Zone 2 EAST	Pending	\$ 82,231.00		14-015	13-1026
3	SW Belle Glade Watermain Replacement, Zone 2 WEST	Pending	\$ 49,906.00		14-015	13-1026
4	SW Belle Glade Water Services Replacement Project, Zone 1, Phase 2 Construction Phase Services	Pending	\$430,446.00		13-060	13-1010
5	Belle Glade Water Services Replacement – SE Avenue G, Construction Phase Services	Pending	\$167,722.00		14-015	13-1025
Total			\$ 817,773.00			

**ATTACHMENT - F**

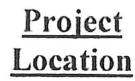
**AUTHORIZATION STATUS REPORT  
UTILITY DISTRIBUTION & COLLECTION SYSTEM CONSULTING SERVICES**

**SUMMARY OF  
SBE / MINORITY BUSINESS TRACKING SYSTEM**

	Total	SBE
<b>Current Proposal</b>		
Value of CSA No. 5	\$ 167,722.00	
Value of M/WBE Letters of Intent	\$ 167,722.00	\$167,722.00
Actual Percentage	100%	100%
<b>Pending Proposals</b>		
Value of CSA No. 2, 3, 4	\$562,583.00	
Value of M/WBE Letters of Intent	\$562,583.00	\$562,583.00
Actual Percentage	100%	100%
<b>Signed Authorizations</b>		
Total Value of Authorization No. 1	\$ 87,468.00	
Total Value of M/WBE Signed Subcontracts	\$ 81,068.00	\$ 81,068.00
Actual Percentage	92.68%	92.68%
<b>Signed Authorizations Plus Current Proposals</b>		
Total Value of Authorizations	\$ 817,773.00	
Total Value of Subcontracts & Letters of Intent	\$ 811,373.00	\$643,651.00
Actual Percentage	99.21%	99.21%
<b>GOAL</b>	<b>95%</b>	<b>95%</b>



### LOCATION MAP



Attachment H

Project Name: Belle Glade Water Main Replacement, SE Avenue G  
Project Engineer: Keshavarz & Associates, Inc.  
Telephone: (561) 689-8600

WUD #14-015  
Initial Submittal Date:  
Plan Reviewer:

Record Drawing (As-Built) Checklist

GENERAL REQUIREMENTS:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	As-Built drawings signed & Sealed	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Number of As-Built drawings submitted, 4 copies REQ'D on initial submittal with 2 copies on subsequent submittals	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	"Record Drawing" called out on each As-Built drawing	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Project Name	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Project Address	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Location Map with SEC., TWP. & RGE.	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	WUD No. shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Datum of Elevations shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	State Plane Coordinates (SPC) shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Property corners with SPC	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Plat Book & Page shown (when applicable)	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	PBCUE ORB & PG shown (when applicable)	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Sample Points labeled	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	*Valve MFR, FH MFR & model called out (*Contractor should be required to provide a list of Manufacturers for installed facilities)	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Manhole corrosion barrier system & Applicator shown (N/A)	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	*Interceptor MFR, model & capacity shown (See above)	<input type="checkbox"/>	<input type="checkbox"/> _____

WATER MAIN REQUIREMENTS:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Verify WM As-Built locations with Approved design locations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Valves numbered	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Fire hydrants numbered	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	** (Limited) All fittings shown with SPC & elevations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Top of pipe called out w/SPC every 100'	<input type="checkbox"/>	<input type="checkbox"/> _____

\*\*We propose to use linear dimensions along pipes between fittings in such cases that fittings are separated by relatively short distances, i.e. from a constructed Tee through the constructed valve and fire hydrant assembly. Additionally, we propose to use linear dimensions and/or "Swing Tie" dimensions to permanent objects (i.e. pavement edges, manholes, catch basins, building structures...) in order to facilitate legibility issues due to text clutter caused by the combination of As-Built data with design data.

WATER MAIN REQUIREMENTS continued:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Grade elevations shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 3' MIN cover on all water mains***	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	WM pipe material shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	All crossings with As-Built data	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify all crossing separations met Department standards *** ( 6')	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 10' MIN Hor. SEP to storm pipes, exfiltration trenches, buildings, walls, roof overhangs & canopies ( 6')	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 10' MIN Hor. SEP to sewer mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 3' MIN Hor. SEP to drainage structures & reclaim water mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 4' MIN Hor. SEP to power poles, light poles and other utility lines	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 16" Ø & larger and 4" Ø & smaller mains are DIP	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	FH & fire sprinkler branches are DIP	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify valves are not installed in curbs or parking spaces	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	ARV MH w/SPC & As-Built elevations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	No new high points created in WM	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Each end of main casing is As-Built	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Bollards shown for FH requiring them	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify valve LOC. on fire hydrants	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify valve LOC. on fire line DDCV	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify DDCV size w/Fire Marshal approval	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify main blow-offs in grass area	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Meter control valve shown /SPC	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Which meter serves which lot shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Abandoned in place/removed sections Of pipe clearly shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Water service taps 18"/10' MIN SEP	<input type="checkbox"/>	<input type="checkbox"/> _____

\*\*\* See Task 2 of proposal for Record Data Acquisition procedures.

WATER MAIN REQUIREMENTS continued:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Verify water service & sewer lateral SEP (See Task 2 of proposal for Record Data Acquisition procedures)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Existing water service plugged w/SPC	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Meter location, 18" MAX from ROW line in non-exclusive UE or 4' MAX within a PBCUE	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Individual meter for commercial establishments with an interceptor	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Residential fire line with 1" meter shown	<input type="checkbox"/>	<input type="checkbox"/>

GRAVITY SEWER REQUIREMENTS:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Verify gravity main As-Built locations with approved design locations	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Grade elevations shown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Gravity main pipe material shown	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Verify gravity main slopes	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	All crossings with As-Built data	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Verify all crossing separations met Department standards	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	20' DIP section centered on crossings with less than 18" MIN SEP	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Verify 10' MIN Hor. SEP to water mains	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Verify 15' MIN Hor. SEP to buildings, walls, roof overhangs & canopies	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Verify 10' MIN Hor. SEP to exfiltration trenches	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Verify 3' MIN Hor. SEP to drainage structures & reclaim water mains	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Verify 4' MIN Hor. SEP to storm pipes, power poles, light poles & other utility lines	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Verify MIN SEP to top of bank on canals, lakes and their structures	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Verify lateral 5' MIN SEP from water services, blow-offs, hydrants, power poles light poles, catch basins, walls and other structures	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	MH RIM & inverts w/As-Built data & SPC	<input type="checkbox"/>	<input type="checkbox"/>

GRAVITY SEWER REQUIREMENTS continued:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	****Verify MH spacing does not exceed 400' Show As-Built dimensions between MH's	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify MH flow direction is at 90° MIN (Not necessary, resolved during design phase)	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify MH in pavers or grass are shown with concrete collars	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify MH inside drops	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	MH inverts shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify clean-out locations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify Interceptors maintain 10' MIN SEP from all PBCWUD owned facilities	<input type="checkbox"/>	<input type="checkbox"/> _____

FORCE MAIN REQUIREMENTS:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Verify force main As-Built locations with approved design locations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify Public LS PBCUE is 40' x 30' MIN	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify Public LS driveway is 30' MIN from edge of ROW, pavement to gates	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	PVT LS flushing connection w/SPC	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify water service provided to any LS	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Grade elevations shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Force main pipe material shown	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	All crossings with As-Built data	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify cover over FM, 36" MIN	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify all crossing separations met Department standards	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 10' MIN Hor. SEP to water mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 15' MIN Hor. SEP to buildings, walls, roof overhangs & canopies	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 10' MIN Hor. SEP to exfiltration trenches	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 3' MIN Hor. SEP to drainage structures & reclaim water mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify 4' MIN Hor. SEP to storm pipes, power poles, light poles & other utility lines	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Valves on 3" Ø FM or larger shall be gate valves (GV)	<input type="checkbox"/>	<input type="checkbox"/> _____

\*\*\*\*Manhole spacing was resolved during the design phase; design plans typically show distance between manholes as part of distance/slope text associated with pipe between structures.

FORCE MAIN REQUIREMENTS continued:

REQ'D	N/R	DESCRIPTION	SUFFICIENT	DEFICIENT w/COMMENTS AS REQUIRED
<input type="checkbox"/>	<input type="checkbox"/>	Verify in-line valves installed on FM 16" Ø or smaller near each side of canal crossing and/or major road crossing	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify in-line valves installed at 2000' MAX intervals on transmission force mains	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify valves are not installed in curbs or parking spaces	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Verify all valves numerically numbered	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	ARV BH w/SPC & As-Built elevations	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	No new high points created in FM	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Each end of main casing is As-Built	<input type="checkbox"/>	<input type="checkbox"/> _____
<input type="checkbox"/>	<input type="checkbox"/>	Abandoned in place/removed sections of pipe clearly shown	<input type="checkbox"/>	<input type="checkbox"/> _____