

Work Authorization No. 6
Contract for Consulting/Professional Services Between the
City of Pompano Beach and McCafferty Brinson Consulting, LLC

Membrane Element Replacement
Pilot Test Unit Permitting and Extended Pilot Testing Services

Scope of Work

The services rendered pursuant to this Work Authorization No. 6 are in accordance with the terms and conditions of the Agreement for Consulting/Professional Services between the City of Pompano Beach (CITY) and McCafferty Brinson Consulting, LLC (CONSULTANT), dated January 19th 2016 and approved by City Ordinance No. 2016-26.

I. Background and General Description of Services

On April 5, 2016, the City of Pompano Beach authorized CONSULTANT under Work Authorization No. 1 to provide engineering services for the replacement of the 1,820 nanofiltration (NF) membrane elements in the 10 million gallon per day capacity NF process at the CITY's water treatment plant. NF elements typically have a useful service life of 5 to 7 years. The existing NF membrane elements have performed satisfactorily since they were installed in 2008, and the City's Capital Improvement Plan (CIP) has funds budgeted for replacement of the NF elements.

CONSULTANT's scope of services under Work Authorization No. 1 included the following tasks:

1. Schematic design of a new NF pilot test unit for the City's NF process
2. Technical Specifications for the new replacement NF elements
3. Permitting (notification to the Florida Department of Health in Broward County (FDHBC) of the City's intention to replace the NF elements)
4. Limited pilot-scale proof testing of the new membrane elements
5. Bidding services, and
6. Engineering services during the replacement period.

CONSULTANT has completed tasks 1 through 3 under Work Authorization No. 1. During the course of specifications development and fabrication by the City of the pilot test unit, the City decided to conduct additional pilot testing to evaluate different chemical pretreatment schemes in an effort to reduce long-term chemical usage rates and associated operating costs. Use of the pilot test unit for this purpose (i.e., operating the pilot unit with proposed modifications to the treatment process) will require a permit from the FDHBC for the pilot unit, and extended pilot testing.

This work authorization is for professional engineering services to obtain a FDHBC permit for the pilot test unit from the FDHBC, and to provide engineering support during pilot testing, including the additional pilot testing referenced above. The budget associated with

pilot testing referenced above (Task 4) in Work Authorization No. 1 will not be invoiced under Work Authorization No. 1.

II. Scope of Work

Task 1.0 – Pilot Test Unit Permitting

CONSULTANT shall prepare and submit an application for a Public Water System Construction Permit, with supporting documentation, for the pilot test unit. Based on discussions with the FDHBC, the application fee for this permit is expected to be \$4,150 (City shall issue the check for the application fee). CONSULTANT shall respond to up to two Requests for Additional Information (RFIs) from the FDHBC as necessary to clarify the original application.

Task 2.0 – Pilot Testing

The City intends to evaluate membrane element selections from two Membrane Element Manufacturers (MEMs). Testing of each membrane element selection will include 90 days of “prequalification” testing under current, typical full-scale plant operating conditions, utilizing the full-scale plant pretreatment scheme. Subsequent to the prequalification testing, the City will conduct an additional 30 days of testing to evaluate different chemical pretreatment schemes (including eliminating chemicals entirely) and recovery rates to optimize the membrane process. This scope of services provides for two continuous 120-day testing runs. CONSULTANT shall provide the following assistance associated with the proposed pilot testing:

- Assistance with loading of membrane elements and start-up of the pilot unit for each test run. This scope of services includes one 8-hour day for each run (total of 16 hours).
- Monitoring of operation of the pilot test unit during pilot testing. This scope of services includes one 4-hour site visit per week and 4 hours of engineering data review time per week over the course of pilot testing (total of 280 hours).
- Analysis of performance and water quality data during, and at the conclusion of each test run. CONSULTANT shall prepare and submit a brief letter report summarizing the data and conclusions for each of the two test runs.

III. Assumptions and Assistance to be Provided by City

Services and/or materials to be provided by the CITY and other related key assumptions include:

1. CITY staff will be available for discussions with CONSULTANT.
2. CONSULTANT will have access to the water treatment plant and pilot test unit during pilot testing.

3. For the estimated completion time below, it is assumed that the pilot test unit will be ready for operation when the permit is received. Also, it is assumed that a permit may be obtained within 60 days of application submittal.

IV. Budget

CONSULTANT shall perform the professional services provided herein for a not-to-exceed fee of **\$49,220.00**. CONSULTANT will invoice CITY monthly. CITY shall provide a written Notice to Proceed. The basis for proposed compensation is presented in Exhibit A.

IV. Completion Time

Due to permitting requirements and the fact that the City is assembling the pilot test unit, the project completion time is not within CONSULTANT's control. The following is a preliminary estimate of the project schedule based on the assumptions noted above:

<u>Milestone</u>	<u>Days from Previous Task</u>	<u>Days from NTP</u>
Notice to Proceed (NTP)	0	0
Submittal of permit application	30	30
Permit issuance (assumed)	60	90
Start first test run	14	104
Submit letter report first test run	134	238
Start second test run	7	245
Submit letter report second test run	134	379

"CONSULTANT":

Witnesses:

William H. Lynch
Andrew Louka

McCafferty Brinson Consulting, LLC

CONSULTANT Name

Frank A. Brinson
Signature

Frank A. Brinson, Manager

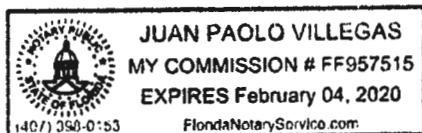
Name and Title

STATE OF FLORIDA

COUNTY OF BROWARD

The foregoing instrument was acknowledged before me this 7 day of February, 2017 by Frank A. Brinson, as Manager of McCafferty Brinson Consulting, LLC, a limited liability company, on behalf of the company. He/she is personally known to me or has produced _____ (type of identification) as identification.

NOTARY'S SEAL:



Juan Paolo V.
NOTARY PUBLIC, STATE OF FLORIDA

Juan Paolo Villegas
(Name of Acknowledger Typed, Printed or Stamped)

FF957515
Commission Number

"CITY":

Witnesses:

CITY OF POMPANO BEACH

By: _____
LAMAR FISHER, MAYOR

By: _____
DENNIS W. BEACH, CITY MANAGER

Attest:

ASCELETA HAMMOND, CITY CLERK

(SEAL)

Approved As To Form:

MARK E. BERMAN, CITY ATTORNEY

STATE OF FLORIDA
COUNTY OF BROWARD

The foregoing instrument was acknowledged before me this _____ day of _____, 2017 by **LAMAR FISHER** as Mayor, **DENNIS W. BEACH** as City Manager and **ASCELETA HAMMOND** as City Clerk of the City of Pompano Beach, Florida, a municipal corporation, on behalf of the municipal corporation, who are personally known to me.

NOTARY'S SEAL:

NOTARY PUBLIC, STATE OF FLORIDA

(Name of Acknowledger Typed, Printed or Stamped)

Commission Number

Exhibit A
City of Pompano Beach
Work Authorization No. 6
Membrane Element Replacement
Pilot Test Unit Permitting and Extended Pilot Testing Services

Engineering Budget Estimate

Task Description	Principal Engineer \$200 per hour		Engineer Intern \$85 per hour		Clerical \$50 per hour		Total Labor		Reimbursables	Subconsultant(1) \$130 per hour		Total Budget
	hours	budget	hours	budget	hours	budget	hours	budget		hours	budget	
1.0 Pilot Test Unit Permitting	8	\$1,600	32	\$2,720	4	\$200	44	\$4,520	\$100	0	\$0	\$4,620
2.0 Pilot Testing												
Assistance with loading and start-up	2	\$400	4	\$340	0	\$0	6	\$740	\$0	16	\$2,080	\$2,820
Monitoring of pilot testing	12	\$2,400	0	\$0	0	\$0	12	\$2,400	\$0	280	\$36,400	\$38,800
Analysis at conclusion and letter reports	4	\$800	0	\$0	0	\$0	4	\$800	\$100	16	\$2,080	\$2,980
Totals:	26	\$5,200	36	\$3,060	4	\$200	66	\$8,460	\$200			\$49,220

TOTAL NOT-TO-EXCEED FEE, USE: \$49,220

(1) William B. Suratt, P.E., membrane specialist consultant.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

4/18/2016

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 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 rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Corporate Insurance Advisors 1401 E Broward Blvd Suite 103 Ft. Lauderdale FL 33301	CONTACT NAME: Greta Nielsen PHONE (A/C No. Ext): (954) 315-5000 FAX (A/C No.): (954) 315-5050 E-MAIL ADDRESS: greta.nielsen@hotmail.com
INSURED McCafferty Brinson Consulting, Inc. 633 S. Andrews Ave. Suite 402 Fort Lauderdale FL 33301	INSURER(S) AFFORDING COVERAGE INSURER A: Crum & Forster Specialty Ins. INSURER B: Travelers Indemnity Company INSURER C: Transportation Insurance Co INSURER D: INSURER E: INSURER F:
	NAIC # 25658 20494

COVERAGES

CERTIFICATE NUMBER: 16-17

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 SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> \$2500 Deductible GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:		EPK112200	4/11/2016	4/11/2017	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 50,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 1,000,000 PRODUCTS - COM/PROP AGG \$ 1,000,000 Pollution Liability \$ 1,000,000
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS		BA-8810X181-16	4/26/2016	4/26/2017	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ PIP-Basic \$ 10,000
A	UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000		EFK105268	4/11/2016	4/11/2017	EACH OCCURRENCE \$ 2,000,000 AGGREGATE \$ 2,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N/A	WC431076569	10/30/2015	10/30/2016	PER STATUTE E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Professional Liability Claims Made		EPK112200	4/11/2016	4/11/2017	Each Claim \$1,000,000 Deductible \$2500

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

APPROVED
RISK MANAGEMENT

DATE:

BY:

CERTIFICATE HOLDER

CANCELLATION

Missy.Stanley@copbfl.com

City of Pompano Beach
Post Office Drawer 1300
Pompano Beach, FL 33061

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

Mark Schwartz/ANGELA

Mark R. Schwartz

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COMMENTS/REMARKS

(Incidental Contractors Pollution Liab. (ICPL)-Occurrence. ENV01 200 (04/07) Contractor's Pollution Liab. Endt. ENV01300 (08/10) Cov. D- Environmental Consultants Prof. Liab. RE: RLI#H-49-10 \$2,500 per Occ. Deductible Continuing Contract for Civil Engineering Services for Various City Projects. City of Pompano Beach is included as additional insured with respect to General Liability and Auto Liability as required by written contract.

#2

APPROVED
RISK MANAGEMENT

DATE: 05-16-16

BY: JTM.