



**AGREEMENT BETWEEN BROWARD COUNTY AND BLACK & VEATCH CORPORATION
FOR CONSULTANT SERVICES FOR
RETAIL POTABLE WATER AND WASTEWATER MASTER PLAN
(RFP # PNC2126569P1)**

This agreement (“Agreement”) is between Broward County, a political subdivision of the State of Florida (“County”), and Black & Veatch Corporation, a Delaware corporation (“Consultant”) (each a “Party” and collectively referred to as the “Parties”).

RECITALS

A. County is engaged in the process of planning for retail potable water and wastewater system improvements through the year 2045.

B. To complete this process, County requires Consultant to prepare a Retail Potable Water and Wastewater Master Plan to address the retail facilities within all four (4) County service areas.

C. Consultant represents that it is competent, and willing, to prepare such a Retail Potable Water and Wastewater Master Plan to meet County’s needs.

D. County has met the requirements of Section 287.055, Florida Statutes, the Consultants’ Competitive Negotiation Act, and has selected Consultant to perform the services stated herein.

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

ARTICLE 1. DEFINITIONS

1.1. **Applicable Law** means all applicable laws, codes, advisory circulars, rules, regulations, or ordinances of any federal, state, county, municipal, or other governmental entity, as may be amended.

1.2. **Board** means the Board of County Commissioners of Broward County, Florida.

1.3. **Code** means the Broward County Code of Ordinances.

1.4. **Contract Administrator** means the Director of Water and Wastewater Engineering Division, the Assistant Director of Water and Wastewater Engineering Division, or such other person designated by the Director of Water and Wastewater Engineering Division in writing. The Contract Administrator is the representative of County concerning the Project.

1.5. **County Business Enterprise** or **CBE** means an entity certified as meeting the applicable requirements of Section 1-81 of the Code.

1.6. **Notice to Proceed** means a written authorization to proceed with the Project, phase, or task, issued by the Contract Administrator.

1.7. **Project** means the completion by Consultant of a Retail Potable Water and Wastewater Master Plan document to provide recommendations for retail potable water and wastewater system improvements for the current condition and the future planning horizon of 2045 and addresses the retail facilities within all four Broward County Water and Wastewater service areas.

1.8. **Purchasing Director** means County's Director of Purchasing.

1.9. **Services** means the work set forth in the Scope of Services, attached as Exhibit A, and includes civil, structural, mechanical, and electrical engineering, architectural services, and other professional design services as applicable for the Project, as well as any Optional Services procured under this Agreement.

1.10. **Small Business Enterprise** or **SBE** means an entity certified as meeting the applicable requirements of Section 1-81 of the Code.

1.11. **Subconsultant** means an entity or individual, including subcontractors, providing Services to County through Consultant, regardless of tier.

ARTICLE 2. EXHIBITS

Exhibit A	Scope of Services
Exhibit B	Maximum Billing Rates
Exhibit B-1	Reimbursables for Direct Non-salary Expenses
Exhibit C	Minimum Insurance Requirements
Exhibit D	Work Authorization Form
Exhibit E	Schedule of Subconsultants
Exhibit F	CBE Subconsultants and Letters of Intent

ARTICLE 3. SCOPE OF SERVICES

3.1. Consultant shall provide all Services as set forth in Exhibit A, including all necessary, incidental, and related activities required for full and complete performance of this Agreement (the "Scope of Services").

3.2. This Agreement does not delineate every detail and minor work task required to be performed by Consultant to complete the Project. If Consultant determines that work should be performed to complete the Project and, in Consultant's opinion, that work is outside the level of effort originally anticipated, whether or not the Scope of Services identifies the work items, Consultant shall notify the Contract Administrator in writing in a timely manner before proceeding with the work. If Consultant proceeds with such work without notifying the Contract Administrator, the work shall be deemed to be within the original level of effort, whether or not

specifically addressed in the Scope of Services. Notice to the Contract Administrator does not constitute authorization or approval by County to Consultant to perform the work. Any such work that would entail additional compensation to Consultant by County, or additional time for performance, shall require an amendment to this Agreement pursuant to Section 6.1 or a Work Authorization pursuant to Section 6.2. Unless there is an executed amendment or Work Authorization or a dispute as set forth in Section 6.4, any work performed by Consultant outside the originally anticipated level of effort without prior written County approval shall be at no additional cost to County.

3.3. Exhibit A identifies the initial Services related to the Project. Additional negotiations may be required for other phases or additional services. County and Consultant may negotiate additional services, compensation, time of performance, and other related matters, including for other phases of the Project. Notwithstanding the foregoing, County shall have the right to terminate negotiations at any time at no cost to County and procure services for other Project phases from any other source.

3.4. County shall assist Consultant by placing at Consultant's disposal all information County has available pertinent to the Project, including previous reports and any other data relative to the Project. County shall arrange for access to, and make all provisions for, Consultant to enter upon public and private property as required for Consultant to perform its Services. County shall review any itemized deliverables and documents required to be submitted by Consultant and respond in writing with any comments within the time for such comments, if any, stated in Exhibit A.

ARTICLE 4. TIME FOR PERFORMANCE; DAMAGES

4.1. Consultant shall perform the Services within the time periods specified in Exhibit A. Time periods shall commence from the date of the applicable Notice to Proceed.

4.2. Consultant must receive a Notice to Proceed from the Contract Administrator prior to commencement of Services and any phase of Services under this Agreement. Prior to granting approval for Consultant to proceed to any phase, the Contract Administrator may, at the Contract Administrator's sole option, require Consultant to submit the itemized deliverables and documents identified in Exhibit A for the Contract Administrator's review.

4.3. If the Contract Administrator determines that Consultant is unable to timely complete all or any portion of the Services because of delays resulting from untimely review by County or other governmental agencies having jurisdiction over the Project and such delays are not the fault of Consultant, or because of delays caused by factors outside the control of Consultant, the Contract Administrator shall grant a reasonable extension of time for completion of the Services and shall provide reasonable compensation, if appropriate. It shall be the responsibility of Consultant to notify the Contract Administrator in writing whenever a delay in approval by a governmental agency is anticipated or experienced, and whenever a delay has been caused by factors outside of Consultant's control, and to inform the Contract Administrator of all facts and

details related to the delay. Consultant must provide such written notice to the Contract Administrator within three (3) business days after the occurrence of the event causing the delay.

4.4. If (a) Contractor fails to substantially complete the Project on or before the substantial completion date specified in its agreement with County, or (b) if Contractor is granted an extension of time beyond said substantial completion date and Consultant's Services are extended beyond the substantial completion date through no fault of Consultant, then Consultant shall be compensated in accordance with Article 5 for all Services rendered by Consultant beyond the substantial completion date.

4.5. Notwithstanding Section 4.4, if Contractor fails to substantially complete the Project on or before the substantial completion date specified in its agreement with County, and the failure to substantially complete is caused in whole or in part by Consultant, then Consultant shall pay to County its proportional share of any claim for damages to Contractor arising out of the delay. The provisions for the computation of delay costs, damages, or any other amounts, whether direct or indirect, in the agreement between the Contractor and County are incorporated herein. This section shall not affect the indemnification rights or obligations of either Party otherwise set forth in this Agreement.

4.6. If Services are scheduled to end due to the expiration of this Agreement, at the request of County, Consultant agrees to continue to provide Services for an extension period, not to exceed three (3) months, upon the same terms and conditions as contained in this Agreement. Consultant shall be compensated for such Services at the rate in effect when the extension is invoked by County. To exercise an extension authorized by this section, the Purchasing Director shall notify Consultant in writing prior to the end of the term of this Agreement stating the duration of the extension, which must be within the authority of the Purchasing Director or otherwise authorized by the Board.

ARTICLE 5. COMPENSATION AND METHOD OF PAYMENT

5.1. Amount and Method of Compensation. The amounts set forth in this Article 5 are the total compensation payable to Consultant and constitute a limitation upon County's obligation to compensate Consultant for deliverables under this Agreement, but do not constitute a limitation of any sort upon Consultant's obligation to perform all Services required under this Agreement.

5.1.1. Maximum Amount Not-To-Exceed Compensation. For Services identified in Exhibit A as payable on a "Maximum Amount Not-To-Exceed" basis, compensation to Consultant shall be based upon the Salary Costs as described in Section 5.2 up to a maximum not-to-exceed amount of \$0.00.

5.1.2. Lump Sum Compensation. For Services identified in Exhibit A as payable on a “Lump Sum” basis, compensation to Consultant shall be not more than a total lump sum of \$1,900,060.18.

5.1.3. Optional Services. County may procure Optional Services pursuant to Article 6 up to a maximum not-to-exceed amount of \$80,000.00. Unused Optional Services amounts shall be retained by County.

5.1.4. Reimbursable Expenses. County will reimburse authorized Reimbursable Expenses as defined in Section 5.3 up to a maximum not-to-exceed amount of \$19,340.00. Any unused amounts shall be retained by County.

5.1.5. Maximum Billing Rates. The maximum billing rates payable by County for each of Consultant’s employee categories are shown on Exhibit B and further described in Section 5.2.

5.1.6. Subconsultant Fees. Consultant shall bill County for Subconsultant fees using the employee categories for Salary Costs on Exhibit B and Reimbursable Expenses defined in Section 5.3. Consultant shall bill Subconsultant fees with no mark-up and within any applicable maximum not-to-exceed amount.

5.1.7. Phased Amounts. Payments for Services shall be paid out pursuant to the Project phasing specified in Exhibit A and shall not exceed the amount set forth below for the applicable phase. The invoiced fee amount for each phase shall be subject to retainage as set forth in Section 5.5.

Project Phase	Fee %	Phase Amount
Master Plan Development	100%	\$1,999,400.18

Total Services Fee 100% \$1,999,400.18

5.2. Salary Costs. The term “Salary Costs” as used herein shall mean the hourly rate actually paid to all personnel engaged directly on the Project, as adjusted by an overall multiplier that consists of the following: 1) a fringe benefits factor; 2) an overhead factor; and 3) an operating margin. Said Salary Costs are to be used only for time directly attributable to the Project. The fringe benefit and overhead rates shall be Consultant’s most recent and actual rates determined in accordance with Federal Acquisition Regulation (“FAR”) guidelines and audited by an independent Certified Public Accountant. For the purposes of this Agreement, the rates must be audited for fiscal periods of Consultant within eighteen (18) months preceding the execution date

of this Agreement. These rates shall remain in effect for the term of this Agreement except as provided for in the Agreement.

5.2.1. Consultant shall require all of its Subconsultants to comply with the requirements of Section 5.2.

5.2.2. Salary Costs for Consultant and Subconsultants as shown in Exhibit B are the maximum billing rates, which are provisional, subject to audit of actual costs, and if the audit discloses that the actual costs are less than the costs set forth on Exhibit B for Consultant or any Subconsultant, Consultant shall reimburse County based upon the actual costs determined by the audit. County may withhold the amount Consultant is required to reimburse County from any payment due Consultant.

5.2.3. Unless otherwise noted, the Salary Costs stated above are based upon Consultant's "home office" rates. Should it become appropriate during the course of this Agreement that a "field office" rate be applied, then it is incumbent upon Consultant to submit a supplemental Exhibit B reflective of such rates for approval by Contract Administrator and, upon such County approval, invoice County accordingly.

5.2.4. The total hours payable by County for any "exempt" or "nonexempt" personnel shall not exceed forty (40) hours per employee in any week. If the work requires Consultant's or Subconsultant's personnel to work in excess of forty (40) hours per week, any additional hours must be authorized in advance, in writing, by the Contract Administrator. If approved, Salary Costs for additional hours of service provided by nonexempt (hourly) employees or exempt (salaried) employees shall be invoiced at no more than one and one-half of the employee's hourly rate and in a manner consistent with Consultant's or Subconsultant's applicable certified FAR audit and all other provisions of Section 5.2. If a "Safe Harbor" rate is elected for use by Consultant or Subconsultant, then the additional hours are payable at no more than the employee's regular rate.

5.2.5. Consultant and any of its Subconsultants may alternatively use a "Safe Harbor" combined fringe benefit and overhead rate of 110% in lieu of providing fringe benefit and overhead cost factors certified by an independent Certified Public Accountant in accordance with the FAR guidelines. The Safe Harbor rate, once elected, shall remain in place for the entire term of this Agreement, and be applicable for use as "home" and "field" fringe benefit and overhead rates, if applicable, and shall not be subject to audit under this Agreement. All other provisions of Section 5.2 remain in place.

5.2.6 Indemnification Related to Paycheck Protection Program Forgiveness. If the State of Florida, federal government, or any other authority seeks recovery from County, whether through offset or any other means, of Paycheck Protection Program ("PPP") funds received by Consultant or any Subconsultant under the Coronavirus Aid, Relief, and Economic Security ("CARES") Act and/or any forgiveness of such funds pursuant to Section 1106 of the CARES Act, Consultant must indemnify and hold harmless County and

its employees and agents from any and all claims, causes of action, losses, fines, penalties, damages, judgments, and liabilities of any kind, including attorneys' fees, litigation expenses, and court costs, arising from or relating thereto.

5.3. Reimbursable Expenses. Reimbursement of any travel costs, travel-related expenses, or other direct non-salary expenses directly attributable to this Project permitted under this Agreement ("Reimbursable Expenses") shall be limited to those permitted under Section 112.061, Florida Statutes, except to the extent otherwise stated herein. County shall not be liable for any such expenses that have not been approved in writing in advance by the Contract Administrator. Reimbursable Expenses of Subconsultants must also comply with the requirements of this section.

5.4. Method of Billing.

1. For Maximum Amount Not-To-Exceed Compensation. Consultant shall submit billings that are identified by the specific project number on a monthly basis in a timely manner for all Salary Costs and Reimbursable Expenses attributable to the Project. These billings shall identify the nature of the work performed, the total hours of work performed, and the employee category of the individuals performing same. Billings shall itemize and summarize Reimbursable Expenses by category and identify the personnel incurring the expense and the nature of the work with which such expense was associated. Where prior written approval by Contract Administrator is required for Reimbursable Expenses, a copy of said approval shall accompany the billing for such reimbursable. Billings shall also indicate the cumulative amount of CBE participation to date. The statement shall show a summary of Salary Costs and Reimbursable Expenses with accrual of the total and credits for portions paid previously. External Reimbursable Expenses and Subconsultant fees must be documented by copies of invoices or receipts that describe the nature of the expenses and contain a project number or other identifier that clearly indicates the expense is identifiable to the Project. Subsequent addition of the identifier to the invoice or receipt by Consultant is not acceptable except for meals and travel expenses. Internal expenses must be documented by appropriate Consultant's cost accounting forms with a summary of charges by category. When requested, Consultant shall provide backup for past and current invoices that records hours and Salary Costs by employee category, Reimbursable Expenses by category, and Subconsultant fees on a task basis, so that total hours and costs by task may be determined.

2. For Lump Sum Compensation. Consultant shall submit billings that are identified by the specific project number on a monthly basis in a timely manner. These billings shall identify the nature of the work performed, the phase of work, and the estimated percent of work accomplished. Billings for each phase shall not exceed the amounts allocated to said phase. Billings shall also indicate the cumulative amount of CBE participation to date. The statement shall show a summary of fees with accrual of the total and credits for portions paid previously. When requested, Consultant shall provide

backup for past and current invoices that record hours, salary costs, and expense costs on a task basis, so that total hours and costs by task may be determined.

5.5. Method of Payment.

5.5.1. County shall pay Consultant within thirty (30) days after receipt of Consultant's proper invoice, as defined by County's Prompt Payment Ordinance, minus any applicable retainage or other deductions permitted by this Agreement.

5.5.2. Unless otherwise provided in this section, retainage in the amount of ten percent (10%) of each invoice shall be retained by County until satisfactory completion of the applicable phase. When the Services to be performed on all phases of the Project are fifty percent (50%) complete, upon written request by Consultant and written approval by the Contract Administrator that the Project is progressing in a satisfactory manner, the Contract Administrator, in the Contract Administrator's sole discretion, may authorize the reduction of retainage to five percent (5%) of each invoice for subsequent payments. No amount shall be withheld from payments for Reimbursable Expenses or for Services performed during the construction phase, if applicable.

5.5.3. Upon Consultant's completion of each phase to the satisfaction of the Contract Administrator, County shall remit to Consultant any amounts withheld as retainage for that phase. Final payment for the Project must be approved by the Purchasing Director.

5.5.4. Payment will be made to Consultant in the manner reasonably designated in writing by Consultant or, if not designated, at the following address: P.O. Box 505618, St. Louis, MO 63150-5618.

5.6. Fiscal Year. The continuation of this Agreement beyond the end of any County fiscal year is subject to both the appropriation and the availability of funds, pursuant to Chapter 129 and, if applicable, Chapter 212, Florida Statutes.

5.7. Payments to Subconsultants. Consultant must pay Subconsultants and suppliers providing Services under this Agreement within fifteen (15) days after receipt of payment from County for such subcontracted work or supplies. If Consultant withholds an amount as retainage from a Subconsultant or supplier, Consultant shall release such retainage and pay same within fifteen (15) days after receipt of payment of retained amounts from County. The Contract Administrator may, at its option, increase allowable retainage or withhold progress payments unless and until Consultant demonstrates timely payments of sums due to all Subconsultants and suppliers. Consultant shall include requirements substantially similar to those set forth in this section in its contracts with Subconsultants and suppliers.

5.8. Withholding by County; Overcharges. Notwithstanding any provision of this Agreement to the contrary, County may withhold payment, in whole or in part, (a) in accordance with Applicable Law, or (b) to the extent necessary to protect itself from loss on account of (i) inadequate or defective work that has not been remedied or resolved in a manner satisfactory

to the Contract Administrator, or (ii) Consultant's failure to comply with any provision of this Agreement. The amount withheld shall not be subject to payment of interest by County. In the event of an overcharge of any nature by Consultant in excess of five percent (5%) of the total amount billed in the invoice where the overcharge occurred, Consultant must refund the overbilled amount and pay liquidated damages in the amount of fifteen percent (15%) of the overbilled amount within thirty (30) days after demand by County as just compensation for damages incurred by County due to the overbilling, including, but not limited to, County's administrative costs and loss of potential investment returns (including interest).

ARTICLE 6. OPTIONAL AND ADDITIONAL SERVICES; CHANGES IN SCOPE OF SERVICES

6.1. County or Consultant may request changes that would increase, decrease, or otherwise modify the Scope of Services to be provided under this Agreement. Unless otherwise expressly permitted herein, such changes must be made in accordance with the provisions of the Broward County Procurement Code and must be contained in a written amendment.

6.2. If Services under this Agreement are identified as optional ("Optional Services"), County may select the type, amount, and timing of such services pursuant to a work authorization ("Work Authorization") in substantially the form attached as Exhibit D executed by Consultant and County pursuant to Section 6.3. No such selection, when combined with those Services required under this Agreement, may result in a payment obligation exceeding the applicable maximum amount stated in Article 5. A Work Authorization for Optional Services shall specify the scope of services and method of compensation applicable to that Work Authorization and the required completion date for the services.

6.3. Notwithstanding anything to the contrary in this Agreement, Work Authorizations (and amendments thereto) for Optional Services shall be executed on behalf of County as follows: (a) the Contract Administrator may execute Work Authorizations for which the total aggregate cost to County is less than \$50,000.00; (b) the Purchasing Director may execute Work Authorizations for which the total aggregate cost to County is within the Purchasing Director's delegated authority; and (c) any Work Authorization above the Purchasing Director's delegated authority requires express approval by the Board. Consultant shall not commence work on any Work Authorization until receipt of a purchase order and issuance of a Notice to Proceed by the Contract Administrator.

6.4. If a dispute between the Contract Administrator and Consultant arises over whether any work requested by County is within the scope of contracted Services and such dispute cannot be resolved by the Contract Administrator and Consultant, such dispute shall be promptly presented to the County Administrator or the County Administrator's designee for resolution, whose decision shall be in writing and shall be final and binding on the Parties. During the pendency of any dispute, Consultant shall promptly perform the disputed work.

ARTICLE 7. REPRESENTATIONS AND WARRANTIES

7.1. Representation of Authority. Consultant represents and warrants that this Agreement constitutes the legal, valid, binding, and enforceable obligation of Consultant, and that neither the execution nor performance of this Agreement constitutes a breach of any agreement that Consultant has with any third party or violates Applicable Law. Consultant further represents and warrants that execution of this Agreement is within Consultant's legal powers, and each individual executing this Agreement on behalf of Consultant is duly authorized by all necessary and appropriate action to do so on behalf of Consultant and does so with full legal authority.

7.2. Claims Against Consultant. Consultant represents and warrants that there is no action or proceeding, at law or in equity, before any court, mediator, arbitrator, governmental or other board or official, pending or, to the knowledge of Consultant, threatened against or affecting Consultant, the outcome of which may (a) affect the validity or enforceability of this Agreement, (b) materially and adversely affect the authority or ability of Consultant to perform its obligations under this Agreement, or (c) have a material and adverse effect on the consolidated financial condition or results of operations of Consultant or on the ability of Consultant to conduct its business as presently conducted or as proposed or contemplated to be conducted.

7.3. Solicitation Representations. Consultant represents and warrants that all statements and representations made in Consultant's proposal, bid, or other supporting documents submitted to County in connection with the solicitation, negotiation, or award of this Agreement, including during the procurement or evaluation process, were true and correct when made and are true and correct as of the date Consultant executes this Agreement, unless otherwise expressly disclosed in writing by Consultant.

7.4. Contingency Fee. Consultant represents and warrants that it has not employed or retained any person or entity, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement, and that it has not paid or agreed to pay any person or entity, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement. If this Agreement is subject to Section 287.055, Florida Statutes, the Parties agree and stipulate that the statutory language stated in Section 287.055(6)(a) is deemed included and fully incorporated herein.

7.5. Truth-In-Negotiation Representation. Consultant's compensation under this Agreement is based upon its representations to County, and Consultant certifies that the wage rates, factual unit costs, and other information supplied to substantiate Consultant's compensation, including, without limitation, in the negotiation of this Agreement, are accurate, complete, and current as of the date Consultant executes this Agreement. Consultant's compensation may be reduced by County, in its sole discretion, to correct any inaccurate, incomplete, or noncurrent information provided to County as the basis for Consultant's compensation in this Agreement.

7.6. Public Entity Crime Act. Consultant represents that it is familiar with the requirements and prohibitions under the Public Entity Crime Act, Section 287.133, Florida Statutes, and

represents that its entry into this Agreement will not violate that Act. Consultant further represents that there has been no determination that it committed a “public entity crime” as defined by Section 287.133, Florida Statutes, and that it has not been formally charged with committing an act defined as a “public entity crime” regardless of the amount of money involved or whether Consultant has been placed on the convicted vendor list.

7.7. Discriminatory Vendor and Scrutinized Companies Lists; Countries of Concern. Consultant represents that it has not been placed on the “discriminatory vendor list” as provided in Section 287.134, Florida Statutes, and that it is not a “scrutinized company” pursuant to Sections 215.473 or 215.4725, Florida Statutes. Consultant represents and certifies that it is not, and for the duration of the Agreement will not be, ineligible to contract with County on any of the grounds stated in Section 287.135, Florida Statutes. Consultant represents that it is, and for the duration of this Agreement will remain, in compliance with Section 286.101, Florida Statutes.

7.8. Verification of Employment Eligibility. Consultant represents that Consultant and each Subconsultant have registered with and use the E-Verify system maintained by the United States Department of Homeland Security to verify the work authorization status of all newly hired employees in compliance with the requirements of Section 448.095, Florida Statutes, and that entry into this Agreement will not violate that statute. If Consultant violates this section, County may immediately terminate this Agreement for cause and Consultant shall be liable for all costs incurred by County due to the termination.

7.9. Warranty of Performance. Consultant represents and warrants that it possesses the knowledge, skill, experience, and financial capability required to perform and provide all required and optional Services under this Agreement, and that each person and entity that will provide Services is duly qualified to perform Services by all appropriate governmental authorities, where required, and is sufficiently experienced and skilled in the area(s) for which such person or entity will render Services. Consultant represents and warrants that the Services shall be performed in a skillful and respectful manner, and that the quality of all Services shall equal or exceed prevailing industry standards for the provision of such services.

7.10. Prohibited Telecommunications Equipment. Consultant represents and certifies that Consultant and all Subconsultants do not use any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, as such terms are used in 48 CFR §§ 52.204-24 through 52.204-26. Consultant represents and certifies that Consultant and all Subconsultants shall not provide or use such covered telecommunications equipment, system, or services for the duration of this Agreement.

7.11. Criminal History Screening Practices. If this Agreement is subject to the requirements of Section 26-125(d) of the Code, Consultant represents and certifies that Consultant will comply with Section 26-125(d) of the Code for the duration of the Agreement.

7.12. Entities of Foreign Concern. The provisions of this section apply only if Consultant or any Subconsultant will have access to an individual’s personal identifying information under this

Agreement. Consultant represents and certifies: (i) Consultant is not owned by the government of a foreign country of concern; (ii) the government of a foreign country of concern does not have a controlling interest in Consultant; and (iii) Consultant is not organized under the laws of and does not have its principal place of business in a foreign country of concern. On or before the Effective Date, Consultant and any Subconsultant that will have access to personal identifying information shall submit to County executed affidavit(s) under penalty of perjury, in a form approved by County attesting that the entity does not meet any of the criteria in Section 287.138(2), Florida Statutes. Compliance with the requirements of this section is included in the requirements of a proper invoice for purposes of Section 5.4. Terms used in this section that are not otherwise defined in this Agreement shall have the meanings ascribed to such terms in Section 287.138, Florida Statutes.

7.13. Domestic Partnership Requirement. Unless this Agreement is exempt from the provisions of the “Broward County Domestic Partnership Act,” Section 16½-157 of the Code (“Act”), Consultant certifies and represents that it shall at all times comply with the provisions of the Act. The contract language referenced in the Act is deemed incorporated in this Agreement as though fully set forth in this section.

7.14. Breach of Representations. Consultant acknowledges that County is materially relying on the representations, warranties, and certifications of Consultant stated in this article, and County shall be entitled to exercise any or all of the following remedies if any such representation, warranty, or certification is untrue: (a) recovery of damages incurred; (b) termination of this Agreement without any further liability to Consultant; (c) set off from any amounts due Consultant the full amount of any damage incurred; and (d) debarment of Consultant.

ARTICLE 8. TERMINATION

8.1. Termination for Cause. This Agreement or any Work Authorization issued under this Agreement may be terminated for cause by the aggrieved Party if the Party in breach has not corrected the breach within ten (10) days after receipt of written notice from the aggrieved Party identifying the breach. This Agreement may be terminated for cause by County for reasons including, but not limited to, any of the following:

8.1.1. Consultant’s failure to suitably or continuously perform the Services in a manner calculated to meet or accomplish the objectives in this Agreement or Work Authorization, or repeated submission (whether negligent or intentional) for payment of false or incorrect bills or invoices;

8.1.2. By the County Administrator or the Director of Office of Economic and Small Business Development (“OESBD”) for fraud, misrepresentation, or material misstatement by Consultant in the award or performance of this Agreement or that violates any applicable requirement of Section 1-81 of the Code; or

8.1.3. By the Director of OESBD upon the disqualification of Consultant as a CBE or SBE if Consultant’s status as a CBE or SBE was a factor in the award of this Agreement, or upon

the disqualification of one or more of Consultant's CBE or SBE participants by County's Director of OESBD if any such participant's status as a CBE or SBE firm was a factor in the award of this Agreement.

Unless otherwise stated in this Agreement, if this Agreement was approved by Board action, termination for cause by County must be by action of the Board or the County Administrator; in any other instance, termination for cause may be by the County Administrator, the County representative expressly authorized under this Agreement, or the County representative (including any successor) who executed this Agreement on behalf of County. If County erroneously, improperly, or unjustifiably terminates this Agreement or any Work Authorization for cause, such termination shall be deemed a termination for convenience pursuant to Section 8.2 effective thirty (30) days after such notice was provided and Consultant shall be eligible for the compensation provided in Section 8.2 as its sole remedy.

8.2. Termination for Convenience; Other Termination. This Agreement or any Work Authorization may also be terminated for convenience by the Board with at least thirty (30) days advance written notice to Consultant. Consultant acknowledges that it has received good, valuable, and sufficient consideration for County's right to terminate this Agreement or any Work Authorization for convenience including in the form of County's obligation to provide advance notice to Consultant of such termination in accordance with this section. Termination for convenience by the Board shall be effective on the termination date stated in written notice provided by County, which termination date shall be not less than thirty (30) days after the date of such written notice. This Agreement or any Work Authorization may also be terminated by the County Administrator upon such notice as the County Administrator deems appropriate under the circumstances if the County Administrator determines that termination is necessary to protect the public health, safety, or welfare. If this Agreement or any Work Authorization issued under this Agreement is terminated by County pursuant to this section, Consultant shall be paid for any Services properly performed through the termination date specified in the written notice of termination, subject to any right of County to retain any sums otherwise due and payable, and County shall have no further obligation to pay Consultant for Services under this Agreement.

8.3. Notice of termination shall be provided in accordance with the "Notices" section of this Agreement except that notice of termination by the County Administrator to protect the public health, safety, or welfare may be oral notice that shall be promptly confirmed in writing.

8.4. In addition to any termination rights stated in this Agreement, County shall be entitled to seek any and all available contractual or other remedies available at law or in equity including recovery of costs incurred by County due to Consultant's failure to comply with any term(s) of this Agreement.

ARTICLE 9. INSURANCE

9.1. For the duration of the Agreement, Consultant shall, at its sole expense, maintain the minimum insurance coverages stated in Exhibit C in accordance with the terms and conditions of this article. Consultant shall maintain insurance coverage against claims relating to any act or

omission by Consultant, its agents, representatives, employees, or Subconsultants in connection with this Agreement. County reserves the right at any time to review and adjust the limits and types of coverage required under this article.

9.2. Consultant shall ensure that "Broward County" is listed and endorsed as an additional insured as stated in Exhibit C on all policies required under this article.

9.3. On or before the date this Agreement is fully executed or at least fifteen (15) days prior to commencement of Services, as may be requested by County, Consultant shall provide County with a copy of all Certificates of Insurance or other documentation sufficient to demonstrate the insurance coverage required in this article. If and to the extent requested by County, Consultant shall provide complete, certified copies of all required insurance policies and all required endorsements within thirty (30) days after County's request.

9.4. Consultant shall ensure that all insurance coverages required by this article remain in full force and effect without any lapse in coverage for the duration of this Agreement and until all performance required by Consultant has been completed, as determined by Contract Administrator. Consultant or its insurer shall provide notice to County of any cancellation or modification of any required policy at least thirty (30) days prior to the effective date of cancellation or modification, and at least ten (10) days prior to the effective date of any cancellation due to nonpayment, and shall concurrently provide County with a copy of its updated Certificates of Insurance evidencing continuation of the required coverage(s).

9.5. All required insurance policies must be placed with insurers or surplus line carriers authorized to conduct business in the State of Florida with an A.M. Best rating of A- or better and a financial size category class VII or greater, unless otherwise approved by County's Risk Management Division in writing.

9.6. If Consultant maintains broader coverage or higher limits than the insurance requirements stated in Exhibit C, County shall be entitled to all such broader coverages and higher limits. All required insurance coverages shall provide primary coverage and not require contribution from any County insurance, self-insurance or otherwise, which shall be in excess of and shall not contribute to the required insurance provided by Consultant.

9.7. Consultant shall declare in writing any self-insured retentions or deductibles over the limit(s) prescribed in Exhibit C and submit to County for approval at least fifteen (15) days prior to the date this Agreement is fully executed or commencement of Services. Consultant shall be solely responsible for and shall pay any deductible or self-insured retention applicable to any claim against County. County may, at any time, require Consultant to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention. Consultant agrees that any deductible or self-insured retention may be satisfied by either the named insured or County, if so elected by County, and Consultant agrees to obtain same in endorsements to the required policies.

9.8. Unless prohibited by the applicable policy, Consultant waives any right to subrogation that any of Consultant's insurers may acquire against County and agrees to obtain same in an endorsement of Consultant's insurance policies.

9.9. Consultant shall require that each Subconsultant maintains insurance coverage that adequately covers the Services provided by that Subconsultant on substantially the same insurance terms and conditions required of Consultant under this article. Consultant shall ensure that all such Subconsultants comply with these requirements and that "Broward County" is named as an additional insured under the Subconsultants' applicable insurance policies. Consultant shall not permit any Subconsultant to provide Services unless and until all applicable requirements of this article are satisfied.

9.10. If Consultant or any Subconsultant fails to maintain the insurance required by this Agreement, County may pay any costs of premiums necessary to maintain the required coverage and deduct such costs from any payment otherwise due to Consultant. If requested by County, Consultant shall provide, within one (1) business day, evidence of each Subconsultant's compliance with this article.

9.11. If any of the policies required under this article provide claims-made coverage: (1) any retroactive date must be prior to the date this Agreement is fully executed; (2) the required coverage must be maintained after termination or expiration of the Agreement for at least the duration stated in Exhibit C; and (3) if coverage is canceled or nonrenewed and is not replaced with another claims-made policy form with a retroactive date prior to the date this Agreement is fully executed, Consultant must obtain and maintain "extended reporting" coverage that applies after termination or expiration of the Agreement for at least the duration stated in Exhibit C.

ARTICLE 10. EQUAL EMPLOYMENT OPPORTUNITY AND CBE/SBE COMPLIANCE

10.1. Consultant and Subconsultants shall not discriminate on the basis of race, color, sex, religion, national origin, disability, age, marital status, political affiliation, sexual orientation, pregnancy, or gender identity and expression in the performance of this Agreement. Consultant shall include the foregoing or similar language in its contracts with any Subconsultants, except that any project assisted by the U.S. Department of Transportation funds shall comply with the nondiscrimination requirements in 49 C.F.R. Parts 23 and 26.

10.2. By January 1 of each year, Consultant must submit, and cause each of its Subconsultants to submit, an Ownership Disclosure Form (or such other form or information designated by County), available at <https://www.broward.org/econdev/Pages/forms.aspx>, identifying the ownership of the entity and indicating whether the entity is majority-owned by persons fitting specified classifications.

10.3. Consultant shall comply with all applicable requirements of Section 1-81 of the Code in the award and administration of this Agreement. Failure by Consultant to carry out any of the requirements of this article shall constitute a material breach of this Agreement, which shall

permit County to terminate this Agreement or exercise any other remedy provided under this Agreement or Applicable Law, all such remedies being cumulative.

10.4. Consultant must meet or exceed the required CBE goal by utilizing the CBE firms listed in Exhibit F (or a CBE firm substituted for a listed firm, if permitted) for twenty-five percent (25%) of total Services (the "Commitment") for the scope of work and the percentage of work amounts identified on each Letter of Intent. Promptly upon execution of this Agreement by County, Consultant shall enter into formal contracts with the CBE firms listed in Exhibit F and, upon request, shall provide copies of the contracts to the Contract Administrator and OESBD.

10.5. Each CBE firm utilized by Consultant to meet the CBE goal must be certified by OESBD. Consultant shall inform County immediately when a CBE firm is not able to perform or if Consultant believes the CBE firm should be replaced for any other reason, so that OESBD may review and verify the good faith efforts of Consultant to substitute the CBE firm with another CBE firm, as applicable. Whenever a CBE firm is terminated for any reason, Consultant shall provide written notice to OESBD and, upon written approval of the Director of OESBD, shall substitute another CBE firm in order to meet the CBE goal, unless otherwise provided in this Agreement or agreed in writing by the Parties. Such substitution shall not be required if the termination results from modification of the Scope of Services and no CBE firm is available to perform the modified Scope of Services; in which event Consultant shall notify County, and OESBD may adjust the CBE goal by written notice to Consultant. Consultant shall not terminate a CBE firm for convenience without County's prior written consent, which consent shall not be unreasonably withheld.

10.6. The Parties stipulate that if Consultant fails to meet the Commitment, the damages to County arising from such failure are not readily ascertainable at the time of contracting. If Consultant fails to meet the Commitment and County determines, in the sole discretion of the OESBD Program Director, that Consultant failed to make Good Faith Efforts (as defined in Section 1-81 of the Code) to meet the Commitment, Consultant shall pay County liquidated damages in an amount equal to fifty percent (50%) of the actual dollar amount by which Consultant failed to achieve the Commitment, up to a maximum amount of ten percent (10%) of the total contract amount, excluding costs and reimbursable expenses. An example of this calculation is stated in Section 1-81.7 of the Code. As elected by County, such liquidated damages amount shall be either credited against any amounts due from County, or must be paid to County within thirty (30) days after written demand. These liquidated damages shall be County's sole contractual remedy for Consultant's breach of the Commitment, but shall not affect the availability of administrative remedies under Section 1-81. Consultant acknowledges and agrees that the liquidated damages provided in this section are proportionate to an amount that might reasonably be expected to flow from a breach of the Commitment and are not a penalty. Any failure to meet the Commitment attributable solely to force majeure, changes to the scope of work by County, or inability to substitute a CBE Subconsultant where the OESBD Program Director has determined that such inability is due to no fault of Consultant, shall not be deemed a failure by Consultant to meet the Commitment.

10.7. Consultant acknowledges that the Board, acting through OESBD, may make minor administrative modifications to Section 1-81 of the Code, which shall become applicable to this Agreement if the administrative modifications are not unreasonable. Written notice of any such modification shall be provided to Consultant and shall include a deadline for Consultant to notify County in writing if Consultant concludes that the modification exceeds the authority under this section. Failure of Consultant to timely notify County of its conclusion that the modification exceeds such authority shall be deemed acceptance of the modification by Consultant.

10.8. County may modify the required participation of CBE firms in connection with any amendment, extension, modification, change order, or Work Authorization to this Agreement that, by itself or aggregated with previous amendments, extensions, modifications, change orders, or Work Authorizations, increases the initial Agreement price by ten percent (10%) or more. Consultant shall make a good faith effort to include CBE firms in work resulting from any such amendment, extension, modification, change order, or Work Authorization, and shall report such efforts, along with evidence thereof, to OESBD.

10.9. Consultant shall provide monthly utilization reports, using the form available at <https://www.broward.org/EconDev/SmallBusiness/Pages/Compliance.aspx>, to the Contract Administrator, to OESBD at SBCOMP@broward.org, and to the Small Business Specialist designated by the Contract Administrator. In addition, Consultant shall allow County to engage in onsite reviews to monitor Consultant's progress in achieving and maintaining the Commitment. The Contract Administrator in conjunction with OESBD shall perform such review and monitoring, unless otherwise determined by the County Administrator.

10.10. The presence of a "pay when paid" provision in a Consultant's contract with a CBE firm shall not preclude County or its representatives from inquiring into claims of nonpayment or exercising any right stated in Section 5.7.

ARTICLE 11. MISCELLANEOUS

11.1. Contract Administrator Authority. The Contract Administrator is authorized to coordinate and communicate with Consultant to manage and supervise the performance of this Agreement. Consultant acknowledges that the Contract Administrator has no authority to make changes that would increase, decrease, or otherwise materially modify the Scope of Services except as expressly set forth in this Agreement or, to the extent applicable, in the Broward County Procurement Code. Unless expressly stated otherwise in this Agreement or otherwise set forth in the Code or the Broward County Administrative Code, the Contract Administrator or designee may exercise ministerial authority in connection with the day-to-day management of this Agreement provided that such instructions and determinations do not change the Scope of Services. The Contract Administrator may also approve in writing minor modifications to the Scope of Services that do not increase the total cost to County or waive any rights of County. Consultant shall notify Contract Administrator in writing of Consultant's representative(s) to whom matters involving the Project shall be addressed.

11.2. Rights in Documents and Work. Any and all documents, reports, studies, photographs, surveys, drawings, maps, models, photographs, specifications, materials, data, or other work created by Consultant in connection with performing Services, in their native file format, whether finished or unfinished (“Documents and Work”), shall be owned by County, and Consultant hereby transfers to County all right, title, and interest, including any copyright or other intellectual property rights, in or to the Documents and Work. Upon expiration or termination of this Agreement, the Documents and Work shall become the property of County and shall be delivered by Consultant to the Contract Administrator within fifteen (15) days after expiration or termination. Any compensation due to Consultant may be withheld until all Documents and Work are received as provided in this Agreement. Consultant shall ensure that the requirements of this section are included in all agreements with all Subconsultant(s).

11.3. Public Records. Notwithstanding any other provision in this Agreement, any action taken by County in compliance with, or in a good faith attempt to comply with, the requirements of Chapter 119, Florida Statutes, shall not constitute a breach of this Agreement. If Consultant is acting on behalf of County as stated in Section 119.0701, Florida Statutes, Consultant shall:

11.3.1. Keep and maintain public records required by County to perform the services under this Agreement;

11.3.2. Upon request from County, provide County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time and at a cost that does not exceed that provided in Chapter 119, Florida Statutes, or as otherwise provided by Applicable Law;

11.3.3. Ensure that public records that are exempt or confidential and exempt from public record requirements are not disclosed except as authorized by Applicable Law for the duration of this Agreement and after completion or termination of this Agreement if the records are not transferred to County; and

11.3.4. Upon completion or termination of this Agreement, transfer to County, at no cost, all public records in possession of Consultant or keep and maintain public records required by County to perform the services. If Consultant transfers the records to County, Consultant shall destroy any duplicate public records that are exempt or confidential and exempt. If Consultant keeps and maintains the public records, Consultant shall meet all requirements of Applicable Law for retaining public records. All records stored electronically must be provided to County upon request in a format that is compatible with the information technology systems of County.

If Consultant receives a request for public records regarding this Agreement or the Services, Consultant must immediately notify the Contract Administrator in writing and provide all requested records to County to enable County to timely respond to the public records request. County will respond to all such public records requests.

Consultant must separately submit and conspicuously label as “RESTRICTED MATERIAL – DO NOT PRODUCE” any material (a) that Consultant contends constitutes or contains its trade secrets under Chapter 688, Florida Statutes, or (b) for which Consultant asserts a right to withhold from public disclosure as confidential or otherwise exempt from production under Florida public records laws (including Chapter 119, Florida Statutes) (collectively, “Restricted Material”). In addition, Consultant must, simultaneous with the submission of any Restricted Material, provide a sworn declaration or affidavit in a form acceptable to County from a person with personal knowledge attesting that the Restricted Material constitutes trade secrets or is otherwise exempt or confidential under Florida public records laws, including citing the applicable Florida statute and specifying the factual basis for each such claim. Upon request by County, Consultant must promptly identify the specific applicable statutory section that protects any particular document. If a third party submits a request to County for records designated by Consultant as Restricted Material, County shall refrain from disclosing such material unless otherwise ordered by a court of competent jurisdiction, authorized in writing by Consultant, or the claimed exemption is waived. Any failure by Consultant to strictly comply with the requirements of this section shall constitute Consultant’s waiver of County’s obligation to treat the records as Restricted Material. Consultant must indemnify and hold harmless County and its employees and agents from any and all claims, causes of action, losses, fines, penalties, damages, judgments, and liabilities of any kind, including attorneys’ fees, litigation expenses, and court costs, relating to nondisclosure of Restricted Material in response to a third-party request.

IF CONSULTANT HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO CONSULTANT’S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT [(954) 831-0795], [MIVELASQUEZ@BROWARD.ORG]@BROWARD.ORG, [2555 W. COPANS ROAD, POMPANO BEACH, FLORIDA 33069]

11.4. Audit Rights and Retention of Records. Consultant and all Subconsultants shall preserve all Contract Records (as defined below) for a minimum period of three (3) years after expiration or termination of this Agreement or until resolution of any audit findings, whichever is longer. This article shall survive any dispute or litigation between the Parties, and Consultant expressly acknowledges and agrees to be bound by this article throughout the course of any dispute or litigation with County. Contract Records shall, upon reasonable notice, be open to County inspection and subject to audit and reproduction during normal business hours. County audits and inspections pursuant to this section may be performed by any County representative (including any outside representative engaged by County). County may conduct audits or inspections at any time during the term of this Agreement and for a period of three (3) years after the expiration or termination of this Agreement (or longer if required by Applicable Law). County may, without limitation, verify information, payroll distribution, and amounts through interviews, written affirmations, and on-site inspection with Consultant’s employees, Subconsultants, vendors, or other labor.

Contract Records include any and all information, materials and data of every kind and character, including, without limitation, records, books, papers, documents, subscriptions, recordings, agreements, purchase orders, leases, contracts, commitments, arrangements, notes, daily diaries, drawings, receipts, vouchers, memoranda, e-mails, and any and all other documents that pertain to rights, duties, obligations, or performance under this Agreement. Contract Records include hard copy and electronic records, written policies and procedures, time sheets, payroll records and registers, cancelled payroll checks, estimating work sheets, correspondence, invoices and related payment documentation, cost and expense reports, general ledgers, insurance rebates and dividends, and any other records pertaining to rights, duties, obligations or performance under this Agreement, whether by Consultant or Subconsultants.

County shall have the right to audit, review, examine, inspect, analyze, and make copies of all Contract Records at a location within Broward County. Consultant hereby grants County the right to conduct such audit or review at Consultant's place of business, if deemed appropriate by County, with seventy-two (72) hours' advance notice. Consultant agrees to provide adequate and appropriate workspace. Consultant shall provide County with reasonable access to Consultant's facilities, and County shall be allowed to interview all current or former employees to discuss matters pertinent to the performance of this Agreement. Consultant shall make all Contract Records available electronically in common file formats or via remote access if, and to the extent, requested by County.

Consultant shall, by written contract, require all Subconsultants to agree to the requirements and obligations of this section.

Any incomplete or incorrect entry in such books, records, and accounts shall be a basis for County's disallowance and recovery of any payment upon such entry. If an audit or inspection reveals overpricing or overcharges to County of any nature by Consultant or its Subconsultants in excess of five percent (5%) of the total contract billings reviewed by County, Consultant shall make adjustments for the overcharges and pay liquidated damages pursuant to Section 5.8. Any adjustments or payments due as a result of such audit or inspection shall be made within thirty (30) days after presentation of County's findings to Consultant.

11.5. Subconsultants. Consultant shall utilize only the Subconsultants identified in Exhibit E, Schedule of Subconsultants, to provide the Services for this Project. Consultant shall obtain written approval of Contract Administrator prior to changing or modifying the Schedule of Subconsultants, which shall be automatically updated upon such written approval. Consultant shall bind in writing each and every approved Subconsultant to the terms stated in this Agreement, provided that this provision shall not, in and of itself, impose the insurance requirements set forth in Article 9 on Consultant's Subconsultants.

11.6. Assignment. Neither this Agreement nor any interest herein shall be assigned, transferred, or encumbered without the written consent of the other Party. Any assignment, transfer, encumbrance, or subcontract in violation of this section shall be void and ineffective, constitute a breach of this Agreement, and permit the non-assigning Party to immediately

terminate this Agreement, in addition to any other remedies available to the non-assigning Party at law or in equity. County reserves the right to condition its approval of any assignment, transfer, encumbrance, or subcontract upon further due diligence and an additional fee paid to County to reasonably compensate it for the performance of any such due diligence.

11.7. Indemnification of County. Consultant shall indemnify and hold harmless County and its current, past, and future officers and employees from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness or intentionally wrongful conduct of Consultant or other persons employed or utilized by Consultant in the performance of this Agreement. The provisions of this section shall survive the expiration or earlier termination of this Agreement. To the extent considered necessary by Contract Administrator and County Attorney, any sums due Consultant under this Agreement may be retained by County until all of County's claims subject to this indemnification obligation have been settled or otherwise resolved, and any amount withheld shall not be subject to payment of interest by County.

11.8. Prior Agreements. This Agreement represents the final and complete understanding of the Parties regarding the subject matter of this Agreement and supersedes all prior and contemporaneous negotiations and discussions regarding same. All commitments, agreements, and understandings of the Parties concerning the subject matter of this Agreement are contained herein.

11.9. Amendments. Unless otherwise expressly authorized herein, no modification, amendment, or alteration of any portion of this Agreement is effective unless contained in a written document executed with the same or similar formality as this Agreement and by duly authorized representatives of County and Consultant.

11.10. Notices. Unless otherwise stated herein, for notice to a Party to be effective under this Agreement, notice must be sent via U.S. first-class mail, hand delivery, or commercial overnight delivery, each with a contemporaneous copy via e-mail, to the addresses listed below and shall be effective upon mailing or hand delivery (provided the contemporaneous email is also sent). Addresses may be changed by the applicable Party providing notice of such change in accordance with this section.

FOR COUNTY:

Broward County Water and Wastewater Engineering Division
Attn: Rolando Nigaglioni, DBA, PE, BCEE, PMP
2555 W. Copans Road
Pompano Beach, Florida 33069
Email address: rnigaglioni@broward.org

FOR CONSULTANT:

Chris Barlow, PE, CDT
8461 Lake Worth Road, Suite 166
Lake Worth, FL 33467
Email address:barlowc@bv.com

11.11. Interpretation. The titles and headings contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation of this Agreement. All personal pronouns used in this Agreement shall include any other gender, and the singular shall include the plural, and vice versa, unless the context otherwise requires. Terms such as “herein” refer to this Agreement as a whole and not to any particular sentence, paragraph, or section where they appear, unless the context otherwise requires. Whenever reference is made to a section or article of this Agreement, such reference is to the section or article as a whole, including all subsections thereof, unless the reference is made to a particular subsection or subparagraph of such section or article. Any reference to “days” means calendar days, unless otherwise expressly stated. Any reference to approval by County shall require approval in writing, unless otherwise expressly stated.

11.12. Consultant’s Staff. Consultant will provide the key staff identified in its proposal for Project as long as said key staff are in Consultant’s employment. Consultant will obtain prior written approval of Contract Administrator to change key staff. Consultant shall provide Contract Administrator with such information as necessary for County to determine the suitability of proposed new key staff. Contract Administrator will be reasonable in evaluating key staff qualifications. If Contract Administrator desires to request removal of any of Consultant’s staff, Contract Administrator shall first meet with Consultant and provide reasonable justification for said removal; upon such reasonable justification, Consultant shall use good faith efforts to remove or reassign the staff at issue.

11.13. Drug-Free Workplace. To the extent required under Section 21.23(f), Broward County Administrative Code, or Section 287.087, Florida Statutes, Consultant certifies that it has and will maintain a drug-free workplace program for the duration of this Agreement.

11.14. Independent Contractor. Consultant is an independent contractor under this Agreement, and nothing in this Agreement shall constitute or create a partnership, joint venture, or any other relationship between the Parties. In providing Services under this Agreement, neither Consultant nor its agents shall act as officers, employees, or agents of County, except as authorized by the Contract Administrator for permitting, licensing, or other regulatory requirements. Consultant shall not have the right to bind County to any obligation not expressly undertaken by County under this Agreement.

11.15. Regulatory Capacity. Notwithstanding the fact that County is a political subdivision with certain regulatory authority, County’s performance under this Agreement is as a Party to this Agreement and in the capacity as owner of the Project. If County exercises its regulatory

authority, the exercise of such authority and the enforcement of Applicable Law shall have occurred pursuant to County's regulatory authority as a governmental body separate and apart from this Agreement, and shall not be attributable in any manner to County as a Party to this Agreement.

11.16. Sovereign Immunity. Except to the extent sovereign immunity may be deemed to be waived by entering into this Agreement, nothing herein is intended to serve as a waiver of sovereign immunity by County nor shall anything included herein be construed as consent by County to be sued by third parties in any matter arising out of this Agreement.

11.17. Third-Party Beneficiaries. Neither Consultant nor County intends to primarily or directly benefit a third party by this Agreement. Therefore, the Parties acknowledge that there are no third-party beneficiaries to this Agreement and that no third party shall be entitled to assert a right or claim against either of them based upon this Agreement.

11.18. Conflicts. Neither Consultant nor its employees shall have or hold any continuing or frequently recurring employment or contractual relationship that is substantially antagonistic or incompatible with Consultant's loyal and conscientious exercise of judgment and care related to its performance under this Agreement. During the term of this Agreement, none of Consultant's officers or employees shall serve as an expert witness against County in any legal or administrative proceeding in which they or Consultant is not a party, unless compelled by legal process. Further, such persons shall not give sworn testimony or issue a report or writing, as an expression of such person's expert opinion that is adverse or prejudicial to the interests of County in connection with any such pending or threatened legal or administrative proceeding unless compelled by legal process. The limitations of this section shall not preclude Consultant or any persons in any way from representing themselves, including giving expert testimony in support of such representation, in any action or in any administrative or legal proceeding. If Consultant is permitted pursuant to this Agreement to utilize Subconsultants to perform any Services required by this Agreement, Consultant shall require such Subconsultants, by written contract, to comply with the provisions of this section to the same extent as Consultant.

11.19. Materiality and Waiver of Breach. Each requirement, duty, and obligation set forth in this Agreement was bargained for at arm's-length and is agreed to by the Parties. Each requirement, duty, and obligation set forth in this Agreement is substantial and important to the formation of this Agreement, and each is, therefore, a material term. County's failure to enforce any provision of this Agreement shall not be deemed a waiver of such provision or modification of this Agreement. A waiver of any breach shall not be deemed a waiver of any subsequent breach and shall not be construed to be a modification of this Agreement. To be effective, any waiver must be in writing signed by an authorized signatory of the Party granting the waiver.

11.20. Compliance with Laws. Consultant and the Services must comply with all Applicable Law, including, without limitation, the Americans with Disabilities Act, 42 U.S.C. § 12101, Section 504 of the Rehabilitation Act of 1973, and the requirements of any applicable grant agreements.

11.21. Severability. If any part of this Agreement is found to be unenforceable by any court of competent jurisdiction, that part shall be deemed severed from this Agreement and the balance of this Agreement shall remain in full force and effect.

11.22. Joint Preparation. This Agreement has been jointly prepared by the Parties and shall not be construed more strictly against either Party.

11.23. Priority of Provisions. If there is a conflict or inconsistency between any term, statement, requirement, or provision of any document or exhibit attached to, referenced by, or incorporated in this Agreement and any provision within an article or section of this Agreement, the article or section shall prevail and be given effect.

11.24. Law, Jurisdiction, Venue, Waiver of Jury Trial. This Agreement shall be interpreted and construed in accordance with and governed by the laws of the State of Florida. The exclusive venue for any lawsuit arising from, related to, or in connection with this Agreement shall be in the state courts of the Seventeenth Judicial Circuit in and for Broward County, Florida. If any claim arising from, related to, or in connection with this Agreement must be litigated in federal court, the exclusive venue for any such lawsuit shall be in the United States District Court or United States Bankruptcy Court for the Southern District of Florida. **EACH PARTY HEREBY EXPRESSLY WAIVES ANY RIGHTS IT MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL LITIGATION RELATED TO THIS AGREEMENT. IF A PARTY FAILS TO WITHDRAW A DEMAND FOR A JURY TRIAL AFTER WRITTEN NOTICE BY THE OTHER PARTY, THE PARTY MAKING THE DEMAND FOR JURY TRIAL SHALL BE LIABLE FOR REASONABLE ATTORNEYS' FEES AND COSTS OF THE OTHER PARTY TO CONTEST THE DEMAND FOR JURY TRIAL, AND SUCH AMOUNTS SHALL BE AWARDED BY THE COURT IN ADJUDICATING THE MOTION.**

11.25. Reuse of Project. County may, at its option, reuse (in whole or in part) the resulting end-product or deliverables resulting from Consultant's Services (including, but not limited to, drawings, specifications, other documents, and services as described herein and in Exhibit A); and Consultant agrees to such reuse in accordance with this provision. If the Contract Administrator elects to reuse the services, drawings, specifications, and other documents, in whole or in part, prepared by Consultant pursuant to this Agreement, Consultant will be paid a reuse fee to be negotiated between Consultant and County, subject to approval by the proper awarding authority. Each reuse assignment shall include any modifications to the drawings, specifications, and other documents required to adapt the design documents to the new use. This reuse may include preparation of reverse plans, changes to the program, provision for exceptional site conditions, preparation of documents for off-site improvements, provisions for revised solar orientation, provisions for revised vehicular and pedestrian access, and modifications to building elevations, ornament, or other aesthetic features. In all reuse assignments, Consultant shall revise the design documents to comply with building codes and other jurisdictional requirements current at the time of reuse for the new use or site location. The terms and conditions of this Agreement shall remain in force for each reuse project, unless otherwise agreed by the Parties in writing.

11.26. Payable Interest.

11.26.1. Payment of Interest. Unless prohibited by Applicable Law, County shall not be liable for interest to Consultant for any reason, whether as prejudgment interest or for any other purpose, and Consultant waives, rejects, disclaims, and surrenders any and all entitlement to interest in connection with a dispute or claim arising from, related to, or in connection with this Agreement.

11.26.2. Rate of Interest. If the preceding subsection is inapplicable or is determined to be invalid or unenforceable by a court of competent jurisdiction, the annual rate of interest payable by County under this Agreement, whether as prejudgment interest or for any other purpose, shall be, to the full extent permissible under Applicable Law, one quarter of one percent (0.25%) simple interest (uncompounded).

11.27. Incorporation by Reference. Any and all Recital clauses stated above are true and correct and are incorporated in this Agreement by reference. The attached Exhibits are incorporated into and made a part of this Agreement.

11.28. Counterparts and Multiple Originals. This Agreement may be executed in multiple originals, and may be executed in counterparts, whether signed physically or electronically, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

11.29. Polystyrene Food Service Articles. Consultant shall not sell or provide for use on County property expanded polystyrene products or food service articles (e.g., Styrofoam), unencapsulated expanded polystyrene products, or single-use plastic straws or stirrers, as set forth in more detail in Section 27.173, Broward County Administrative Code.

(The remainder of this page is intentionally left blank.)

IN WITNESS WHEREOF, the Parties hereto have made and executed this Agreement: BROWARD COUNTY, through its BOARD OF COUNTY COMMISSIONERS, signing by and through its Mayor or Vice-Mayor authorized to execute same by Board action on the ____ day of _____, 20__, and CONSULTANT, signing by and through its _____, duly authorized to execute same.

COUNTY

ATTEST:

BROWARD COUNTY, by and through its Board of County Commissioners

By: _____
Broward County Administrator, as
ex officio Clerk of the Broward County
Board of County Commissioners

By: _____
Mayor
____ day of _____, 20__

Approved as to form by
Andrew J. Meyers
Broward County Attorney
115 South Andrews Avenue, Suite 423
Fort Lauderdale, Florida 33301
Telephone: (954) 357-7600

Matthew
By: **Haber** _____
Matthew Haber (Date)
Assistant County Attorney

Digitally signed by
Matthew Haber
Date: 2024.02.01
14:06:05 -05'00'

MICHAEL
By: **KERR** _____
Michael J. Kerr (Date)
Deputy County Attorney

Digitally signed by MICHAEL
KERR
Date: 2024.02.01 14:21:36
-05'00'

MH/tb
PNC2126569P BCF 202
01/31/2024

#1082746v3

**AGREEMENT BETWEEN BROWARD COUNTY AND BLACK & VEATCH CORPORATION
FOR CONSULTANT SERVICES FOR
RETAIL POTABLE WATER AND WASTEWATER MASTER PLAN
(RFP # PNC2126569P1)**

CONSULTANT

BLACK & VEATCH CORPORATION

By: Rafael E. Frias III, PE
Authorized Signer

Digitally signed by Rafael E. Frias III, PE
DN: C=US, E=FriasRE@bv.com, O=Black
& Veatch Corporation, CN=Rafael E. Frias
III, PE
Date: 2024.02.01 09:37:42-05'00'

Rafael E. Frias III, PE, Vice President

Print Name and Title

February 1 day of February 2024

WITNESS:

Hines, Jaclyn
Signature

Digitally signed by Hines, Jaclyn
Date: 2024.02.01 09:59:21-05'00'

Jaclyn Hines

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Exhibit A Scope of Services

CONSULTANT SERVICES FOR RETAIL POTABLE WATER AND WASTEWATER MASTER PLAN PNC2126569P1 November 14, 2023

PREAMBLE

The Retail Potable Water and Wastewater Master Plan (Master Plan) is a planning document that will provide recommendations to Broward County Water and Wastewater Services (County) for retail potable water and wastewater system improvements for the current condition and the future planning horizon year of 2045, including the interim years 2025, 2030, 2035, and 2040. The Master Plan will address the retail facilities within all four County service areas (each service area is referred to as a “District” and the four Districts are 1, 2, 3A, and 3BC). Black & Veatch (Consultant) will perform engineering services to complete the Master Plan as further defined in the following Scope of Services.

SCOPE OF SERVICES

Task 1 – Data Collection and Project Initiation Meeting

Sub-Task 1.01 – Project Controls and Team Coordination

Consultant will undertake Project controls and coordination, including all efforts required for Project execution, trend management, coordination support, sub-consultant management and coordination, as applicable, and other requirements needed to complete the sub-tasks under Task 1 described below. Consultant will also develop a spreadsheet containing review comments and a trend log (Project trend register) to track comments and decisions throughout the Project and update the Project trend register monthly. Consultant will develop and maintain the Project execution schedule (Project schedule).

Sub-task 1.02 – Data Collection Review

Consultant will provide County with a data and documentation request list prior to the Project Kickoff Meeting. This request will be refined and resubmitted based on Project Kickoff Meeting discussion. The status of data transmittals will be tracked by Consultant until available items are received. The Consultant will review the data upon receipt and will work with County until the available needed data have been collected.

Example data that may be requested for review is identified below.

1. The current versions of the following existing documents:
 - a) SFWMD, Lower East Coast Water Supply Plan

- b) Broward County Water Supply facilities Work Plan
 - c) Broward County WWS Master Plans
 - d) 2022 Wastewater Needs Assessment (HB53)
 - e) Broward County WWS Capital Improvement Plan
 - f) Large subdivision plans
2. Basis of design documentation and record information for existing water treatment plants and wastewater treatment facilities
 3. Existing water use and operating permits
 4. Existing SCADA and system operational data
 5. Historical flow and water quality data from South Florida Water Management District, Florida Department of Environmental Protection, and Broward County
 6. Geodatabase for the Broward County WWS existing Geographic Information System (GIS)
 7. Hydraulic model(s) for Broward County WWS existing water distribution and wastewater collection
 8. Broward County WWS billing data

Sub-task 1.03 – Project Kickoff Meeting

Consultant will conduct a Project Kickoff Meeting with County, at a time convenient to Contract Administrator, to discuss Project requirements, review pertinent available data, review Project staffing and organization, and present the initial work schedule.

Consultant will review the existing relevant data found on the construction records for the facilities, operating records, history of repairs, etc. Consultant will prepare minutes of the meeting for distribution to attendees, subject to review and approval by Contract Administrator.

Sub-task 1.04 – Bi-Weekly Progress Meetings

Consultant will conduct a virtual Progress Meeting with County's Project Manager and core team on a bi-weekly basis throughout the duration of the Project. Additionally, Consultant's Project Manager will join the monthly operations project call to update County on the status of the Project.

Consultant's Deliverables:

- a) Data Collection Log
- b) Project Kickoff Meeting Agenda and Meeting Minutes

Task 2 – Population, Demand, and Flow Projections

Sub-Task 2.01 – Project Controls and Team Coordination

Consultant will undertake Project controls and coordination, including all efforts required for Project execution, trend management, coordination support, sub-consultant management and coordination, as applicable, and other requirements needed to complete the sub-tasks under Task 2 described in the following sections. Consultant will also develop a spreadsheet containing

review comments and a trend log (Project trend register) to track comments and decisions throughout the Project and update the Project trend register monthly. Consultant will develop and maintain the Project execution schedule (Project schedule).

Sub-task 2.02 – Population Estimates and Projections

Consultant will develop population estimates within County’s entire service area for the existing (base) year and population projections through year 2065 including the interim years 2025, 2030, 2035, 2040, 2045, 2050, 2055, 2060, and 2065. Information beyond the available projections of 2045 will be interpolated from the available data by Consultant.

Historic Population Estimates – Consultant will review data from County’s previous planning documents, current planning documents, and population estimates from the 2020 US Census and Bureau of Economic and Business Research (BEBR) for the various Districts for the last 10 years building upon the information in the previous master plans to determine the historic population and demographics.

Service Area Population Projections – Consultant will gather and review available population projection data for the Districts from County’s Planning, Development, and GIS Section and other available sources to determine population projection qualities in 5-year increments from 2025 through 2065. Population estimates will be presented by Consultant separated both by District and by Utility Analysis Zones (UAZ). County will provide the boundary of the Districts and the UAZs in a shapefile or geodatabase format or other mutually agreed-upon format.

Sub-task 2.03 – Water Demand Estimates and Projections

Existing System Demands – Consultant will summarize the existing Water Treatment Plant (WTP) flow records for each WTP and water pump stations by District to obtain the following:

1. Average annual daily demand (AAD), sometimes referred to as average daily demand;
2. Maximum month daily demand (MMDD);
3. Maximum day demand (MDD);
4. Peak Hour Demand (PHD); and
5. Non-Revenue Water (NRW).

Peaking Factors and Diurnal Patterns – Consultant will use at least 5 years, and up to 10 years, of archived SCADA data, and other system operational records collected by County, to calculate historic ADD and MDD peaking factors (MDD/ADD, PHD/ADD) and diurnal flow patterns, subject to review and approval by Contract Administrator. This data will be used by Consultant to determine the per capita demands, peaking factors, and diurnal patterns used for system analysis.

Future System Demands – Consultant will apply the per capita demands and various peaking factors determined above to the projected population estimates to calculate the projected water demands in 5-year increments from 2025 through 2065.

Spatial Distribution of Demands – To facilitate the optimization of alternatives described further in this Scope of Services, demands for the existing customers will be spatially linked by Consultant to the available geocoded water consumption data and future demands will be linked by Consultant to traffic analysis zone (TAZ) shapefiles and the UAZ shapefiles.

Sub-task 2.04 – Wastewater Demand Estimates and Projections

Existing System Flows – Consultant will summarize the existing flow records and available historic wastewater conveyance data points to document the flow conditions within each District. When data is not available, the Ten State Standards methods for estimating peaking factors will be used by Consultant. Data to be included by Consultant include, but are not limited to, the following:

1. Average annual daily flows (AADF) – inclusive of base sanitary flows and groundwater infiltration,
 - a. Base Sanitary flows (BSF), and
 - b. Groundwater Infiltration flows (GWI);
2. 3-month average peak flows (3MADF) and peaking factor;
3. Maximum month average flows (MMDF) and peaking factors; and
4. Peak hour flows (PHF) .

Diurnal Patterns – Consultant will use archived SCADA data for flow and wet well level data and/or other system operational records collected by County to calculate diurnal flow patterns for each District under dry and wet weather conditions.

Future System Flows – Consultant will apply the per capita flows and various peaking factors determined above to the projected population estimates to calculate the projected wastewater flows in 5-year increments from 2025 through 2065.

Spatial Distribution of System Dry Weather Flows – To facilitate the optimization of alternatives discussed further in this scope of services, dry weather flows for the existing customers will be spatially linked by Consultant to geocoded water consumption data and flow data. Dry weather loadings will be separated by Consultant into base sanitary loadings (contributions directly from customers) and groundwater infiltration (non-time varying loadings derived from groundwater entering the sewer via defects during dry weather).

Sub-task 2.05 – Population, Demand and Flow Projection Workshop

Consultant will conduct a 4-hour workshop, at a time convenient to Contract Administrator, to review the draft results of the population, demand, and flow projections. The purpose of the workshop will be to review the draft results and obtain consensus from County prior to completing the draft technical memorandum. Consultant will prepare an agenda before the workshop and prepare meeting minutes to distribute to meeting attendees after the workshop, each of which will be subject Contract Administrator’s review and written approval.

Sub-task 2.06 – Population, Demand, and Flow Projection Technical Memorandum

Consultant will prepare and submit to County a Draft Population, Demand, and Flow Projection Technical Memorandum for review and comment by County. Consultant will address all County comments on the Draft Population, Demand, and Flow Projection Technical Memorandum and submit a Final Population, Demand, and Flow Projection Technical Memorandum, which will be subject Contract Administrator’s review and written approval.

Consultant’s Deliverables:

- a) Population, Demand, and Flow Projection Workshop Agenda and Meeting Minutes
- b) Draft and Final Population, Demand, and Flow Projection Technical Memoranda

Task 3 – Water Distribution System Capacity Assessment

Sub-Task 3.01 – Project Controls and Team Coordination

Consultant will undertake Project controls and coordination, including all efforts required for Project execution, trend management, coordination support, sub-consultant management and coordination, as applicable, and other requirements needed to complete the sub-tasks under Task 3 described in the following sections. Consultant will also develop a spreadsheet containing review comments and a trend log (Project trend register) to track comments and decisions throughout the Project and update the Project trend register monthly. Consultant will develop and maintain the Project execution schedule (Project schedule).

Sub-task 3.02 – Model Update and Calibration

Update the Hydraulic Model(s) – Consultant will update the existing hydraulic model(s) in InfoWater Pro using County’s distribution system maps (in GIS format) and inventory data to add potable water mains and facilities constructed since the most recent model update and to delete any mains or facilities, which have been permanently removed from service. This will create the existing system model used for calibration by Consultant.

Demand Allocation – Consultant will update the model demands based on Consultant’s existing demand analysis.

Model Calibration Plan – Consultant will develop the hydraulic model(s) calibration plan including identification of needed system operations data (i.e., SCADA, potential pressure monitoring locations using the 5 to 20 Consultant-provided pressure loggers, and potential flow monitoring locations using County SCADA locations or rented flow monitors) as well as the timing/duration of data collection. The model calibration plan submitted by Consultant will include, but not be limited to, identification of strategic pressure and flow monitoring locations, if necessary, based on current SCADA monitoring locations and input from County staff. The model calibration plan submitted by Consultant will include, but not be limited to, identification of the calibration period, necessary SCADA data, pressure and flow monitoring locations, calibration goals and

expected accuracy. The goal will be to use the same calibration period for all of the Districts, however, that decision will be determined during preparation of the model calibration plan.

Consultant will prepare and submit to County a Draft Model Calibration Plan for County's review and comment. Consultant will address all County comments on the Draft Model Calibration Plan and submit a Final Model Calibration Plan, which will be subject Contract Administrator's review and written approval.

Model Calibration – Following submission by Consultant and approval by Contract Administrator of the Final Model Calibration Plan, and agreed upon calibration goals, the hydraulic model(s) will be calibrated by Consultant using a 48-hour extended period simulation (EPS) with 5-minute increments. Operational controls for the EPS will be created by Consultant in the model to reflect pump station and system operation during the calibration period. Consultant will compare model results to the field data and make appropriate adjustments to model input parameters to ensure the model simulates actual system conditions within reasonable accuracy tolerances for system planning purposes. If any model calibration points do not meet agreed upon model calibration goals, appropriate explanations for these discrepancies will be documented by Consultant and, if appropriate, recommendations for additional field testing/monitoring will be provided by Consultant to County for future calibration efforts.

A 2-hour workshop will be conducted by Consultant with County staff, at a time convenient to Contract Administrator, to review the hydraulic calibration results, and for Consultant to document the calibration process, collected field data, any adjustments made to model input parameters (to better correlate the model results with the field data), field data to final model output data comparisons, and any needed explanations for calibration discrepancies. Consultant will prepare an agenda before the workshop and prepare meeting minutes to distribute to meeting attendees after the workshop, subject to review and approval by Contract Administrator.

Baseline Model Development – The hydraulic model(s) will be updated by Consultant for projects that are nearing completion of design/construction to develop a "base year" model (projects to be implemented in the next 2-3 years). The demands from the calibrated model will be scaled by Consultant to match the base year demands as developed in the Population, Demand, and Flows Projection task. County will provide information for these projects including, but not limited, to GIS layers, record/design drawings and design reports. Operational controls such as pump station setpoints, valve positions, etc. will be established in the model by Consultant to reflect current operation if different from the calibration period.

Sub-task 3.03 – Water Capacity Assessment and Improvements

Performance Criteria Development – Consultant will develop the water system assessment and performance criteria as well as the desired level of service (LOS) to be provided by the system, which will set the system performance goals for the distribution system evaluation and improvement alternatives. Consultant will prepare the initial recommended performance criteria

with background rationale before the Water Model Calibration workshop and present the information to County staff during the Water Model Calibration Workshop to select the agreed upon performance criteria.

Pumping and Storage Capacity – Consultant will conduct capacity assessments of the distribution system storage and pumping facilities for each planning year (i.e., 2025, 2030, 2035, 2040, and 2045) using spreadsheets to evaluate the adequacy of existing facilities and to identify any deficiencies in capacity based on the performance criteria. Additional assessments will be completed by Consultant in the following subtask to identify any portions of the system that may not have sufficient storage or pumping capacity available due to hydraulic limitations in County's distribution system.

Transmission and Distribution Capacity Assessment – Consultant will use the hydraulic model(s), demands, and diurnal patterns developed in previous tasks to analyze capacity adequacy of County's water storage, transmission, and distribution system under peak demand conditions for MDD and PHD using steady-state (SS) and EPS for each planning year (i.e., 2025, 2030, 2035, 2040, and 2045). Consultant's analyses and evaluations will address and evaluate future CIP projects for County. Consultant's analyses will include recommendations for the system capacity improvements needed to meet the needs of County's future system.

Fire Flow – Consultant will analyze capacity adequacy of County's transmission and distribution system under MDD + Fire Flow (FF) using steady state (SS) for each planning year (i.e., 2025, 2030, 2035, 2040, and 2045). Consultant's analyses will include recommendations for the system capacity improvements needed to meet the fire flow needs of County's future system. Consultant's recommended improvements will focus on residential needs and major commercial corridors which will be determined with County.

Water Age – Consultant will use the hydraulic model(s) to analyze water age using a SS and an EPS model under ADD conditions for each planning year (i.e., 2025, 2030, 2035, 2040, and 2045). Consultant's analyses will include recommendations for improvements needed to improve water age to meet the needs of County's future system.

Asset Failure / Resilience Assessment – Consultant will assess the distribution system's ability to meet customer demands during scenarios where critical facilities and pipelines are out of service. Consultant will work with County to identify which five scenarios, from the following emergency scenarios to evaluate during the 2025 and 2045 planning years: fire flow, active emergency interconnect, a case of high service pump station failure at each plant, and a hypothetical main break at the largest transmission corridors. The selection of scenarios to evaluate will be subject to review and written approval by Contract Administrator. Consultant's assessment will be based on desktop evaluations only, which do not include condition or operability assessments.

Capacity Assessment Workshop – Consultant will conduct a 2-hour workshop with County, at a time convenient to Contract Administrator, to review the results of Consultant's capacity

assessment and operational scheme upon which to base the capital improvement program. Consultant will prepare an agenda before the workshop and, afterward, meeting minutes to distribute to meeting attendees after the workshop, subject to review and approval by Contract Administrator.

Improvement Phasing – Consultant will use the hydraulic model(s) to assess the trigger and implementation requirement of each recommended improvement. Consultant will begin with the base planning year and add the identified improvements until the performance criteria are met. Immediate and short-term improvements will be included by Consultant in these evaluations to ensure that they remain reasonable considering the long-term strategy. The process will be repeated by Consultant for all planning years to develop the necessary improvements for each planning year and thus the required implementation year for each improvement. The planning years will include 2025 (Base), 2030, 2035, 2040, and 2045. As a result of this Improvement Phasing exercise, a Prioritized 20-year Capital Improvement list will be developed by Consultant. This list will not include a cost estimate for the improvements. In addition, recommendations for prioritization in this task will be made by Consultant based on the degree of deviation from County standard hydraulic performance criteria and will not include asset age, condition, or other risk factors.

Sub-task 3.04 – Water Capacity Assessment & Improvements Technical Memorandum

The Consultant will prepare and submit to County a Draft Water Capacity Assessment and Improvements Technical Memorandum for review and comment by County. Consultant will address all County comments on the Draft Water Capacity Assessment and Improvements Technical Memorandum and submit a Final Water Capacity Assessment and Improvements Technical Memorandum, which will be subject to Contract Administrator’s review and written approval.

Sub-task 3.05 – Water Model Maintenance Standard Operating Procedure

Consultant will prepare and submit to County a Draft Water Model Maintenance Standard Operating Procedure (SOP) for review and comment by County. Consultant will address all County comments on the Draft Water Model Maintenance SOP and submit a Final Water Model Maintenance SOP, which will be subject to Contract Administrator’s review and written approval.

Consultant’s Deliverables:

- a) Draft and Final Model Calibration Plan
- b) Calibration Workshop Agenda and Meeting Minutes
- c) Capacity Assessment Workshop Agenda and Meeting Minutes
- d) Draft and Final Water Capacity Assessment and Improvements Technical Memoranda
- e) Updated Hydraulic Model(s)
- f) Prioritized 20-year Capital Improvement List

g) Draft and Final Water Model Maintenance SOP

Task 4 – Wastewater Collection System Capacity Assessment

Sub-Task 4.01 – Project Controls and Team Coordination

Consultant will undertake Project controls and coordination, including all efforts required for Project execution, trend management, coordination support, sub-consultant management and coordination, as applicable, and other requirements needed to complete the sub-tasks under Task 4 described in the following sections. Consultant will also develop a spreadsheet containing review comments and a trend log (Project trend register) to track comments and decisions throughout the Project and update the Project trend register monthly. Consultant will develop and maintain the Project execution schedule (Project schedule).

Sub-task 4.02 – Model Update and Calibration

Update the Hydraulic Model(s) – Consultant will convert the existing hydraulic model(s) to InfoWorks ICM and update them using County’s collection system maps (GIS) and inventory data to add gravity and force mains and other facilities constructed since the most recent model update and to delete any mains or facilities which have been permanently removed from service. The dry weather flows will be updated by Consultant to match the base year flows as developed in the wastewater flow projections task.

Flow Allocation – Consultant will update the hydraulic model(s) demands based on existing flow analysis. It is assumed approximately 100% of the billing meter accounts already have x-y coordinate locations and are included in a shapefile or geodatabase layer.

Model Calibration Plan – Consultant will develop a hydraulic model(s) calibration plan which will include identification of needed system operations data (i.e., SCADA, wet well levels, flow meters, and other monitoring locations) and timing/duration of data collection. Consultant’s model calibration plan will include identification of strategic monitoring locations based on the following:

1. Available Water Environment Federation (WEF) guidance,
2. Existing monitoring locations, and
3. Input from County staff.

The Draft Model Calibration Plan submitted by Consultant will include identifying calibration goals aligned to County’s expected long-term use of the model. Consultant will prepare and submit to County a Draft Model Calibration Plan for review and comment by County. Consultant will address all County comments on the Draft Model Calibration Plan and submit a Final Model Calibration Plan, which will be subject Contract Administrator’s review and written approval.

Model Calibration – Following the submission by Consultant and approval by Contract Administrator of the Final Model Calibration Plan, and agreed upon calibration goals, wastewater

hydraulic model(s) will be calibrated by Consultant using a 1 to 2-week extended period simulation (EPS) with 5-min resolution for both dry and wet weather conditions. If identified in the Final Model Calibration Plan, a multiple month EPS will be applied by Consultant to validate the calibrated model at select locations. Consultant will compare the model results to the field data and make appropriate adjustments to model input parameters to ensure the model simulates actual system conditions within reasonable accuracy tolerances for system planning purposes. The calibration period will be limited to the availability and time of the field data collection. If any model calibration points do not meet model calibration goals, appropriate explanations for these discrepancies will be documented by Consultant and, if appropriate, recommendations for additional field testing/monitoring will be provided by Consultant to County.

Consultant will conduct A 2-hour workshop with County, at a time convenient to Contract Administrator, to review the hydraulic calibration results, and to document the calibration process, collected field data, adjustments made to model input parameters to better correlate the model results with the field data, field data to final model output data comparisons, and any needed explanations for calibration discrepancies. Consultant will prepare an agenda before the workshop and prepare meeting minutes to distribute to meeting attendees after the workshop, subject to review and approval by Contract Administrator.

Baseline Model Development – The hydraulic model(s) will be updated by Consultant for projects that are nearing completion of design/construction to develop a “base year” model (projects to be implemented in the next 2-3 years). The flows from the calibrated model will be scaled by Consultant to match the base year demands as developed in the Population, Demand, and Flows Projection task. Operational controls such as pump station setpoints, valve positions, etc. will be established by Consultant in the model to reflect current operation if different from the calibration period.

Sub-task 4.03 – Wastewater Capacity Assessment & Improvements

Performance Criteria Development – Consultant will develop the wastewater system assessment and performance criteria as well as the desired LOS to be provided by the system, which will set the system performance goals for the collection system evaluation and improvement alternatives provided by Consultant. Consultant will prepare the initial recommended performance criteria with background rationale before the Wastewater Model Calibration Workshop and present the information to County during the Wastewater Model Calibration Workshop to select the performance criteria, which will be subject to Contract Administrator’s review and written approval.

Capacity Assessment & Improvements - Consultant will use the hydraulic model(s) to analyze capacity adequacy of the wastewater conveyance / transmission system under dry weather flows and peak wet weather flows for each planning year (i.e., 2025, 2030, 2035, 2040, and 2045)

including developing preliminary conveyance and transmission plans to integrate flows from any new County service areas into the collection system.

Consultant will coordinate with County to determine the future system assumptions surrounding impacts from sea level rise, saltwater intrusion, and inflow/infiltration reduction efforts within the collection system. These assumptions will be reflected by Consultant in each planning year (i.e., 2025, 2030, 2035, 2040, and 2045) and may be different for each year.

Recommended improvements will be developed by Consultant to address the capacity restrictions such as velocities, pressures, surcharged gravity mains, and inflow and infiltration, which trigger an improvement. Consultant's analyses will include recommendations for the system capacity improvements needed to meet the needs of County's future system. The collection system evaluations conduct by Consultant will consider and evaluate on-going and future CIP projects as well as the potential to incorporate any septic tank conversions. This analysis by Consultant will include recommendations the system capacity improvements needed to meet the needs of County's future system.

Asset Failure / Resilience Assessment – Consultant will assess the collection system's ability to meet dry and wet weather flows during scenarios where critical facilities and pipelines are out of service. Consultant will work with County to identify which five scenarios from the following emergency scenarios to evaluate during the 2025 and 2045 planning years: force main breaks, lift station failures, major gravity intercept overflows, etc. The selection of scenarios to evaluate will be subject to review and written approval by Contract Administrator. This assessment will be based on desktop evaluations only, which do not include condition or operability assessments.

Capacity Assessment Workshop – Consultant will conduct a 2-hour workshop with County, at a time convenient to Contract Administrator, to review the results of the capacity assessment and operational scheme upon which to base the capital improvement program. Consultant will prepare an agenda before the workshop and meeting minutes to distribute to meeting attendees after the workshop, subject to review and approval by Contract Administrator.

Improvement Phasing – Consultant will use the hydraulic model(s) to assess the project trigger and implementation requirement of each improvement. Consultant will begin with the base planning year and add the identified improvements until the performance criteria are met. Immediate and short-term improvements will be included by Consultant in these evaluations to ensure that they remain reasonable considering the long-term strategy. The process will be repeated by Consultant for all planning years to develop the necessary improvements for each planning year and thus the required implementation year for each improvement. The planning years will include 2025 (Base), 2030, 2035, 2040, and 2045. As a result of this Improvement Phasing exercise, a Prioritized 20-year Capital Improvement list will be developed by Consultant. This list will not include a cost estimate for the improvements. In addition, prioritization of the recommended improvements in this task will be made by Consultant based on the degree of

deviation from County standard hydraulic performance criteria and will not include asset age, condition, or other risk factors.

Sub-task 4.04 – Wastewater Capacity Assessment & Improvements Technical Memorandum

Consultant will prepare and submit to County a Draft Wastewater Capacity Assessment and Improvements Technical Memorandum for review and comment by County. Consultant will address all County comments on the Draft Wastewater Capacity Assessment and Improvements Technical Memorandum and submit a Final Wastewater Capacity Assessment and Improvements Technical Memorandum, which will be subject Contract Administrator’s review and written approval.

Sub-task 4.05 – Wastewater Model Maintenance SOP

Consultant will prepare and submit to County a Draft Wastewater Model Maintenance SOP for review and comment by County. Consultant will address all County comments on the Draft Wastewater Model Maintenance SOP and submit a Final Wastewater Model Maintenance SOP, which will be subject Contract Administrator’s review and written approval.

Consultant’s Deliverables:

- a) Draft and Final Model Calibration Plan
- b) Calibration Workshop Agenda and Meeting Minutes
- c) Capacity Assessment Workshop Agenda and Meeting Minutes
- d) Wastewater Capacity Assessment and Improvements Technical Memorandum
- e) Updated Hydraulic Model(s)
- f) Prioritized 20-year Capital Improvement List
- g) Wastewater Model SOP

Task 5 – Facility Renewal and Replacement

Sub-Task 5.01 – Project Controls and Team Coordination

Consultant will undertake Project controls and coordination, including all efforts required for Project execution, trend management, coordination support, sub-consultant management and coordination, as applicable, and other requirements needed to complete the sub-tasks under Task 5 described in the following sections. Consultant will also develop a spreadsheet containing review comments and a trend log (Project trend register) to track comments and decisions throughout the Project and update the Project trend register monthly. Consultant will develop and maintain the Project execution schedule (Project schedule).

Sub-task 5.02 – Review of Pump Station (“PS”) Asset Inventory and Hierarchy

Consultant will review County’s existing wastewater pumping station asset inventory data and asset hierarchy from the current County’s computerized maintenance management system

("CMMS") system, Maximo. Consultant will recommend twenty pump stations for condition assessment for County's approval.

Sub-task 5.03 – Establish Condition Assessment Criteria and Condition Rating System

Consultant, in consultation with County, will develop assessment criteria and a standardized rating system to guide in the assessment of the twenty wastewater pumping stations and six water repump stations. A rating system will be used by Consultant to assign a physical condition of an asset (negligible, minor, moderate, major, and severe condition) based on the probability of failure and such that recommendations can be prioritized as part of County's Capital Improvement Program. A discipline-specific rating system will be developed by Consultant as needed to accurately capture the condition of an asset, with such need subject to Contract Administrator's review and written approval.

Consultant will review previous assessment reports provided by County to gain an understanding of how assets were assessed in the past, including the Regional Transmission Master Plan.

Sub-task 5.04 – Prepare Field Inspection Plan

Consultant will develop a Field Inspection Plan to outline the sequence of field activities, determine the location, type of testing, and degree of testing required for Consultant to evaluate the condition of the pump stations. In the Field Inspection Plan, Consultant will identify methods to manage the inspection data to ensure information obtained from the Project is appropriately and consistently recorded. The field inspections schedule and the necessary logistics will be coordinated with County Operations staff based on their availability.

Consultant will use a field inspection tool (e.g., Survey123 or similar) to collect the appropriate field data. The field inspection tool used by Consultant will include a hand-held tablet to capture data using a configured software. Consultant will prepare condition assessment forms by asset type in the field inspection tool. Asset Identity Documents (IDs) from the existing asset inventory will be used by Consultant for the condition assessment data. Digital output from the inspection tool will be provided to County in an Excel spreadsheet.

The inspection protocol will be utilized by Consultant to gather useful data for describing the condition and projecting the remaining useful life of the pump stations. The Field Inspection Plan will be developed by Consultant to cover condition assessments at each site and will be submitted to County for review and approval.

The Field Inspection Plan will include, but not be limited to, the following:

- A. Safety Plan
- B. Schedule
- C. Forms and Equipment
- D. Inspection methods and locations/quantity of measurements
- E. Data Management

Sub-task 5.05 – Stage 1 – Conduct Multi-Discipline Inspections

Consultant will assemble a multi-discipline team to conduct a condition assessment of existing assets at each pumping station. Consultant's inspections will predominately rely on visual inspection of deficiencies or deteriorated conditions. General operability checks will be completed by Consultant with County Operations and Maintenance (O&M) staff. The intent of the condition assessment is to provide observations related to existing condition and remaining useful life of the various facilities. Assessments will include a compliance review of Florida Department of Environmental Protection (FDEP) regulations. Depending on the assets at each pumping station, Consultant's assessments may include:

1. *Architectural assessment.* Inspection of buildings including building envelope and roof. Review buildings for code compliance.
2. *Structural assessment.* Evaluate structural condition of concrete surfaces with respect to corrosion, cracks, spalls; structural steel and miscellaneous metals with regards to visible rust and integrity; brick masonry distress; and overall condition of the structure. pH and hammer testing of concrete may be conducted where feasible during the visit.
3. *Building mechanical assessment.* Inspection of building mechanical equipment, including the heating, ventilation, and air conditioning (HVAC) system, odor control systems, and plumbing. Review of compliance to National Fire Protection Agency (NFPA) 820.
4. *Mechanical assessment.* Evaluate the condition of major mechanical piping and equipment associated with the pump stations.
5. *Electrical assessment.* Inspection of electrical equipment and evaluation of potential National Electrical Code (NEC) compliance issues. Assessment will include variable frequency drives (VFDs), motors, switchgear, motor control center (MCCs), electrical panels, transformers, and other visible electrical equipment.
6. *Instrumentation and Controls (I&C) assessment.* Inspection of condition of local instrumentation elements, indicators, transmitters, control panels, and valve controls.

During the field inspections, Consultant will interview County O&M staff to gain their perspective on water and wastewater pumping station operations and capture maintenance history at each site.

The inspections under this Sub-task will be Stage 1 inspections involving visual inspection and interview of staff. No operational testing, disassembly or confined space entry is anticipated unless performed by County.

Sub-task 5.06 – Facility Renewal and Replacement Planning & Decision Tree Development

Short-term Improvement Identification – Based on field inspections, Consultant will assess the reliability of each pumping station and associated facilities and develop alternatives and recommendations for repair/rehabilitation improvements.

Long-term Improvement Phasing – Consultant will use the trends observed from the data collected from the wastewater pump stations to develop recommendations for repair/rehabilitation for all pump stations for all planning years; specifically, to develop recommendations for the necessary improvement projects for each planning year and thus the required implementation year for each improvement. Planning years will include 2025 (Base), 2030, 2035, 2040, and 2045.

Decision Support Trees – In coordination with County, Consultant will develop a decision tree to support renewal and replacement planning for water repump stations and wastewater pump stations. The decision tree submitted by Consultant will identify priority groups based on the condition assessment trends and additional selected criteria to determine appropriate management strategies such as replacement, inspection, monitoring, or no action. Results from the condition assessment will be used by Consultant to support the decision tree development.

Sub-task 5.07 – Facility Renewal and Replacement Technical Memorandum

Consultant will prepare and submit to County a Draft Facility Renewal and Replacement Technical Memorandum for review and comment by County. The Consultant will address all County comments on the Facility Renewal and Replacement Technical Memorandum and submit a Final Facility Renewal and Replacement Technical Memorandum, which will be subject to Contract Administrator’s review and written approval.

Consultant’s Deliverables:

- a) Condition Assessment Criteria and Condition Rating System
- b) Field Inspection Plan
- c) Survey 123 Field Notes
- d) Facility Condition Assessment Technical Memorandum
- e) Prioritized 20-year Capital Improvement List

Task 6 – Pipeline Risk Assessments

Sub-Task 6.01 – Project Controls and Team Coordination

Consultant will undertake Project controls and coordination, including all efforts required for Project execution, trend management, coordination support, sub-consultant management and coordination, as applicable, and other requirements needed to complete the sub-tasks under Task 6 described in the following sections. Consultant will also develop a spreadsheet containing review comments and a trend log (Project trend register) to track comments and decisions throughout the Project and update the Project trend register monthly. Consultant will develop and maintain the Project execution schedule (Project schedule).

Sub-task 6.02 – Data Quality Analyses

Consultant will review the GIS network and pipe attribute data for the water mains, gravity mains and force mains provided by County for consistency and completeness appropriate to support

the risk-based prioritization analysis. At a minimum, the following pipe attribute data will be reviewed by Consultant to support the risk prioritization: unique identification, installation date, material, and diameter. Consultant will provide a summary of the findings and provide a list of the pipe records where the attribute data should be reviewed and/or updated. Based on information provided by County, the GIS data, installation year is included for the majority of the pipes (about 99%), material is missing for about 1% of the pipes, and diameter is missing for less than 1% of the pipes.

Based on the data gap results from the data attribute analysis, Consultant will develop a methodology to populate pipe attribute data gaps for the installation date, where this information is not complete in the GIS for pipe segments included in the analysis.

Sub-task 6.03 – Service Life Estimation

Consultant will use industry standards, feedback from County staff, and professional judgement to estimate the average life expectancy for each material type within the water distribution and wastewater collection systems for use in developing related risk criteria.

Sub-task 6.04 – Risk Framework Development

In coordination with County, Consultant will develop initial, individual water main, gravity main, and force main likelihood of failure (LOF) and consequence of failure (COF) criteria to determine the risk (e.g., pipe size, work history, water complaint history, break history, age, proximity to critical customer, max/min operating pressures, soil corrosion, CCTV O&M and structural scores, SSOs, etc.) and respective scoring methodology.

A main break analysis will be performed by Consultant to identify the number of breaks per water pipe segment and develop cohort break rates.

In consultation with County, Consultant will define the foundation for how the risk model will be set-up and delivery of results including review of risk classifications/management strategy groups for planning level renewal and replacement (R&R) needs, typically set-up as a 5x5 risk matrix with defined groupings. The risk framework and selected risk criteria will be coordinated by Consultant for use in all risk assessments. Consultant will submit a data request to County for available data to support the risk criteria review and development.

Sub-task 6.05 – Water Risk Model Development and Execution

In conjunction with the above Risk Framework Development task, Consultant will develop the water risk model to determine LOF and COF scores for each individual water main segment included in the analysis from information acquired from County's GIS. Using the LOF and COF scores, Consultant will calculate overall risk scores and assign the risk classification per water main pipe segment in the GIS. Consultant will present initial results and final results for Contract Administrator's review and written approval. An excel spreadsheet-based risk model tool and GIS toolbox, or other method accepted by County, will be provided to County by Consultant.

Sub-task 6.06 – Gravity Sewer Risk Model Development and Execution

In conjunction with the above Risk Framework Development task, Consultant will develop the gravity main risk model to determine LOF and COF scores for each individual gravity main segment included in the analysis from information acquired from County's GIS. Using the LOF and COF scores, Consultant will calculate overall risk scores and assign the risk classification per gravity main pipe segment in the GIS. Consultant will present initial results and final results for Contract Administrator's review and written approval. An excel spreadsheet-based risk model tool and GIS toolbox, or other method accepted by County, will be provided to County by Consultant.

Sub-task 6.07 – Force Main Risk Model Development and Execution

In conjunction with the above Risk Framework Development task, Consultant will develop the force main risk model to determine LOF and COF scores for each individual force main segment included in the analysis from information acquired from County's GIS. Using the LOF and COF scores, Consultant will calculate overall risk scores and assign the risk classification per force main pipe segment in the GIS. Consultant will present initial results and final results for for Contract Administrator's review and written approval. An excel spreadsheet-based risk model tool and GIS toolbox, or other method accepted by County, will be provided to County by Consultant.

Sub-task 6.08 – Pipeline Renewal and Replacement Planning and Decision Tree Development

In consultation with County, Consultant will develop a decision tree to support renewal and replacement planning for each of County's respective systems, water main, gravity main, and force main. The decision tree submitted by Consultant will identify priority groups based on the risk classification and additional selected criteria to determine appropriate management strategies such as replacement, inspection, monitoring, or no action within each County system. Results from the risk prioritization models will be used by Consultant to support the decision tree development. Upon completion of the decision tree, Consultant will assign the management strategy to each pipe segment within each system.

Sub-task 6.09 – Pipeline Renewal and Replacement Technical Memorandum

Consultant will prepare and submit to County a Draft Pipeline Renewal and Replacement Technical Memorandum for review and comment by County. Consultant will address all County comments on the Draft Pipeline Renewal and Replacement Technical Memorandum and submit a Final Pipeline Renewal and Replacement Technical Memorandum, which will be subject to Contract Administrator's review and written approval. Consultant will develop an ArcGIS on-line dashboard presenting the risk results summary to support review of the final results. Access to the ArcGIS on-line dashboard will be provided by Consultant to County staff selected by Contract Administrator (using, where possible, existing County ArcGIS on-line accounts, if available) for the duration of the Project.

Sub-task 6.11 – Training

Consultant will provide a half-day training to County, at a time convenient to Contract Administrator, on the development and use of County's specific B&V risk model spreadsheet tool. The first part of the training will include an overview of risk model spreadsheet tool intended for non-users to better understand the tool. The remaining time will be focused on custom tutorials created by Consultant to train users from County on how the risk model spreadsheet tool was developed, how to use the B&V risk model spreadsheet tool, and how to maintain and update the risk model spreadsheet tool for future fiscal years.

Consultant's Deliverables:

- a) Updated GIS files
- b) Water Main, Gravity Sewer and Force Main Risk Models
- c) ArcGIS Dashboards
- d) Pipeline Decision Support Trees
- e) Draft and Final Pipeline Renewal and Replacement Technical Memorandum
- f) Risk Model Spreadsheet Tool Training Presentation Handouts

Task 7 – Capital Improvement Planning (“CIP”)

Sub-Task 7.01 – Project Controls and Team Coordination

Consultant will undertake Project controls and coordination, including all efforts required for Project execution, trend management, coordination support, sub-consultant management and coordination, as applicable, and other requirements needed to complete the sub-tasks under Task 7 described in the following sections. Consultant will also develop a spreadsheet containing review comments and a trend log (Project trend register) to track comments and decisions throughout the Project and update the Project trend register monthly. Consultant will develop and maintain the Project execution schedule (Project schedule).

Sub-task 7.02 – Opinions of Probable Construction Costs

Consultant will prepare unit cost information and assumptions for each type of improvement previously identified as part of the Project. County will provide Consultant with all current water and sewer construction bids for the past 3 years. Consultant will fill any gaps in construction bid data with information from other Florida utilities and data from Consultant's cost estimating department. This unit cost information will be used by Consultant to develop planning-level opinions of probable construction costs including both capital and O&M costs. The unit cost information will be added by Consultant to the Integrated Capital Improvement Project (iCIP) Cost Estimating Tool to support the calculation and organization of CIP project costs.

Sub-task 7.03 – CIP Project Prioritization and Scheduling

Consultant will define an initial prioritization and implementation schedule for Consultant's recommended CIP projects. Consultant will develop a draft 5-year implementation schedule for improvements recommended between fiscal years 2025 and 2030. Consultant's implementation

schedule will consider financial constraints and other prioritization criteria and goals defined by Consultant with Contract Administrator approval. Project costs will be applied by Consultant at the appropriate time in the implementation schedule, and total annual capital costs and O&M costs will be determined by Consultant for fiscal years 2025 to 2030. Consultant will also identify CIP projects that are recommended for implementation between fiscal years 2031 and 2040 and between fiscal years 2041 and 2045.

Consultant will use the iCIP Cost Estimating Tool to support the organization, prioritization, and scheduling of the recommended CIP projects. The iCIP Cost Estimating Tool will maintain a record of the project ID, size, location, description, and other project information, including but not limited to project costs and schedules. The iCIP tool will be used during the Project Validation and Prioritization Workshop (to be performed as part of sub-task 7.04) to support refinements to the scheduling of the projects for each fiscal year five-year planning period (2025, 2030, 2035, 2040 or 2045). Consultant will prepare an agenda before the workshop and prepare meeting minutes to distribute to meeting attendees after the workshop, subject to review and approval by Contract Administrator.

The iCIP Cost Estimating Tool with the final CIP projects will be delivered to County by Consultant at the end of the Project for its use in updating and maintaining its CIP into the future.

Sub-task 7.04 – Project Validation and Prioritization Workshop

Consultant will conduct a workshop with County, at a time convenient to Contract Administrator, to review the list of project improvements. The justification for each improvement project will be reviewed and discussed, as well as the priority ranking for each project as compared to previously identified evaluation criteria. Opinions of probable project cost and the proposed implementation schedule will also be reviewed. Consultant will prepare an agenda before the workshop and prepare meeting minutes to distribute to meeting attendees after the workshop, subject to review and approval by Contract Administrator.

Consultant’s Deliverables:

- a) Opinions of Probable Construction Cost tables for improvement projects
- b) Prioritized CIP projects in shapefile or geodatabase format
- c) Integrated Capital Improvement Project (iCIP) Cost Estimating Tool
- d) Project Validation and Prioritization Workshop Agenda/Meeting Minutes

Task 8 – Emergency Response Plan

Sub-Task 8.01 – Project Controls and Team Coordination

Consultant will undertake Project controls and coordination, including all efforts required for Project execution, trend management, coordination support, sub-consultant management and coordination, as applicable, and other requirements needed to complete the sub-tasks under Task 8 described in the following sections. Consultant will also develop a spreadsheet containing

review comments and a trend log (Project trend register) to track comments and decisions throughout the Project and update the Project trend register monthly. Consultant will develop and maintain the Project execution schedule (Project schedule).

Sub-task 8.02 – Standard Operating Procedures Workshop

Consultant will conduct a workshop with County, at a time convenient to Contract Administrator, to review the asset failure scenarios included in the water and wastewater capacity analysis tasks and the pipeline risk assessment task to jointly determine which scenarios will be included in the SOP. Consultant will prepare an agenda before the workshop and prepare meeting minutes to distribute to meeting attendees after the workshop, subject to review and approval by Contract Administrator.

Sub-task 8.03 – Develop Standard Operating Procedures

Consultant will develop a minimum of ten, and up to fifteen, SOPs for County to implement in the event of an emergency related to the Retail Water and Wastewater Systems. Each SOP developed by Consultant will establish procedures for implementing the emergency response plan including but not limited to the following:

1. Location of Emergency and Key Isolation Valves;
2. Pipeline Routes and Connecting Assets;
3. Existing Pipeline Conditions (as shown in County’s GIS database);
4. Emergency Contact Information;
5. BCWWS Staff Roles and Levels of Involvement;
6. Coordination with the Regional Users;
7. Bypass Pumping Procedures and Details;
8. Repair Methods and Details;
9. Opinions of Probable Cost to Procure Repair Materials; and
10. When the DFS or SCADA is breached, disconnect from County network and operate in local or auto local until the issue is resolved.

Consultant will prepare and submit to County a draft of each such SOP for review and comment by County. The Consultant will address all County comments on each Draft SOP and submit Final SOPs, which will each be subject to Contract Administrator’s review and written approval.

Consultant’s Deliverables:

- a) Standard Operating Procedures Workshop Agenda/Meeting Minutes
- b) Draft and Final SOPs

Task 9 – Retail Master Plan Report Documentation

Sub-Task 9.01 – Project Controls and Team Coordination

Consultant will undertake Project controls and coordination, including all efforts required for Project execution, trend management, coordination support, sub-consultant management and coordination, as applicable, and other requirements needed to complete the sub-tasks under Task 9 described in the following sections. Consultant will also develop a spreadsheet containing review comments and a trend log (Project trend register) to track comments and decisions throughout the Project and update the Project trend register monthly. Consultant will develop and maintain the Project execution schedule (Project schedule).

Sub-task 9.02 – Draft Retail Water and Wastewater Master Plan

Consultant will prepare and submit to County the Draft Retail Water and Wastewater Master Plan, which will incorporate the final versions of the various technical memoranda prepared during previous phases of work. The Draft Retail Water and Wastewater Master Plan will include, but not be limited to the following:

1. Descriptions of the evaluations performed and the resulting recommendations;
2. Year by year recommendations for system and facility improvements between 2025 and 2030, and define longer term improvements recommended through 2045;
3. System maps and figures to support Consultant’s recommendations; and
4. Summaries of Consultant’s recommended improvements will be provided.

One hard copy and one electronic copy of the Draft Retail Water and Wastewater Master Plan will be provided to County by Consultant. The updated hydraulic model(s) and CIP planning tools will also be provided to County by Consultant.

Sub-task 9.03 – Draft Retail Water and Wastewater Master Plan Review Workshop

Consultant will conduct a review workshop with County, at a time convenient to Contract Administrator, to present the Draft Retail Water and Wastewater Master Plan and receive County’s comments. Consultant will prepare an agenda before the workshop and prepare meeting minutes to distribute to meeting attendees after the workshop, subject to review and approval by Contract Administrator.

Sub-task 9.04 – Final Retail Water and Wastewater Master Plan

Consultant will address and incorporate all County comments from the review workshop in the Final Retail Water and Wastewater Master Plan. Four hard copies signed and sealed, and one electronic copy with electronic seal and signature of the Final Retail Water and Wastewater Master Plan report will be provided to County by Consultant.

Consultant’s Deliverables:

- a) Draft Retail Water and Wastewater Master Plan
- b) Draft Retail Water and Wastewater Master Plan Workshop Meeting Minutes
- c) Final Retail Water and Wastewater Master Plan

Task 10 – Additional Services

Subtask 10.1 – Optional Additional Services

Consultant will provide additional services related to Tasks 1 through 9, as requested by the Contract Administrator, which are related to but beyond the level of effort of the Scope of Services outlined above. Services provided under this Task will be billed on an hourly basis up to the specified amount as authorized by County via Work Authorization, subject to the limits set forth in this Agreement. Services performed under this Task must be initiated by Work Authorization from County and a written Notice to Proceed issued by the Contract Administrator.

Assumptions:

1. County will make available existing record drawings for the retail water and wastewater pump stations.
2. Design, permitting, bidding support, and construction phase services are not included in this Scope of Services.
3. Consultant will not share or publish GIS, or other utility data, with outside groups, the general public, vendors, or individuals not participating in this Project, or for purposes other than completion of this Project, without written consent from County.

Time for Performance:

Consultant will complete each task within the following time frames and the eighteen-month Project schedule. Several tasks will be performed by Consultant concurrently to enable the Consultant to meet the eighteen-month Project schedule.

Task	Days from Notice to Proceed to Completion
Task 1 – Data Collection and Project Initiation Meeting	547 (18 months, Apr '24 – Sep '25)
Task 2 – Population, Demand, and Flow Projections	128 (4 months, Apr '24 – Aug'24)
Task 3 – Water Distribution System Capacity Assessment	330 (10 months, Jul '24 – Feb '25)
Task 4 – Wastewater Collection System Capacity Assessment	424 (14 months, Jul '24 – May '25)
Task 5 – Facility Renewal and Replacement	380 (12 months, Sep '24 – Apr '25)
Task 6 – Pipeline Risk Assessment	381 (12 months, Sep '24 – Apr '25)
Task 7 – Capital Improvement Planning (CIP)	476 (16 months, Jun '25 – Jul '25)
Task 8 – Emergency Response Plan	473 (16 months, Apr '25 – Jul '25)

Task 9 – Draft and Final Retail Water and Wastewater Master Plan Development	547 (18 months, Jul '25 – Sep '25)
Task 10 – Additional Services	547 (18 months, Apr '24 – Sep '25)

**Exhibit B
Maximum Billing Rates**

Project No: PNC2126569P1
 Project Title: Consultant Services for Retail Potable Water and Wastewater Master Plan
 Consultant: Black & Veatch Corporation

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM HOURLY RATE (\$/HR)
Sr. Technical Advisor	\$ 97.72		3.07		\$ 300.00
Project Director	\$ 97.72		3.07		\$ 300.00
Sr. Project Manager	\$ 97.72		3.07		\$ 300.00
Sr. Planning Manager	\$ 97.72		3.07		\$ 300.00
Sr. Project Engineer	\$ 97.20		3.07		\$ 298.40
Sr. Hydraulic Modeler	\$ 94.19		3.07		\$ 289.16
Technical Advisor	\$ 93.71		3.07		\$ 287.69
Planning Manager	\$ 86.80		3.07		\$ 266.48
Project Engineer	\$ 85.47		3.07		\$ 262.39
Operations Specialist	\$ 82.86		3.07		\$ 254.38
Asset Management Consultant	\$ 78.88		3.07		\$ 242.16
Staff Engineer III	\$ 78.02		3.07		\$ 239.52
Engineering Manager	\$ 75.98		3.07		\$ 233.26
Sr. Estimator	\$ 75.92		3.07		\$ 233.07
Sr. Designer	\$ 62.53		3.07		\$ 191.97
GIS Consultant	\$ 59.45		3.07		\$ 182.51
Hydraulic Modeler	\$ 58.42		3.07		\$ 179.35
Staff Engineer II	\$ 51.10		3.07		\$ 156.88
Sr. Project Controls	\$ 48.47		3.07		\$ 148.80
Technician	\$ 39.37		3.07		\$ 120.87
Staff Engineer	\$ 37.06		3.07		\$ 113.77
Accountant	\$ 36.68		3.07		\$ 112.61
Biller	\$ 28.82		3.07		\$ 88.48
Administrative Assistant	\$ 28.60		3.07		\$ 87.80

Multiplier of 3.07 is calculated as follows:

OVERHEAD = HOURLY RATE x OVERHEAD (167.575%)

FRINGE = HOURLY RATE x FRINGE (0.0%), included in overhead

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) x OPERATING MARGIN (14.734%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

Maximum Billing Rates

Project No: PNC2126569P1
 Project Title: Consultant Services for Retail Potable Water and Wastewater Master Plan
 Consultant/ Subconsultant: Carollo Engineers

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE
					(\$/HR)
Senior Principal Engineer	\$97.72		3.07		\$300.00
Senior Project Manager	\$97.72		3.07		\$300.00
Project Manager	\$87.30		3.07		\$268.01
Specialist	\$79.70		3.07		\$244.68
Technical Advisor	\$97.72		3.07		\$300.00
Quality Manager	\$76.00		3.07		\$233.32
Task Manager	\$74.40		3.07		\$228.41
Supervisory Engineer	\$62.90		3.07		\$193.10
Senior Engineer	\$56.00		3.07		\$171.92
Lead Engineer	\$51.40		3.07		\$157.80
Project Engineer	\$48.70		3.07		\$149.51
Senior Staff Professional	\$44.90		3.07		\$137.84
Staff Professional	\$41.00		3.07		\$125.87
GIS Services Manager	\$75.80		3.07		\$232.71
GIS Specialist	\$37.50		3.07		\$115.13
Sr. Administrative Assistant	\$36.80		3.07		\$112.98
Administrative Assistant	\$31.20		3.07		\$95.78

Multiplier of 3.07 is calculated as follows:

OVERHEAD = HOURLY RATE x OVERHEAD (120.10%)

FRINGE = HOURLY RATE x FRINGE (53.31%)

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) x OPERATING MARGIN (12.28%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

Maximum Billing Rates

Project No: PNC2126569P1
 Project Title: Consultant Services for Retail Potable Water and Wastewater Master Plan
 Consultant/ Florida Technical Consultants
 Subconsultant:

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE (\$/HR)
Principal	77.00		2.38		\$183.26
Project Manager	60.50		2.38		\$143.99
Senior GIS Analyst	66.00		2.38		\$157.08
Project Engineer	44.00		2.38		\$104.72
Project GIS Analyst	44.00		2.38		\$104.72

Multiplier of 2.38 is calculated as follows:

$$\text{OVERHEAD} = \text{HOURLY RATE} \times \text{OVERHEAD (60.64)\%}$$

$$\text{FRINGE} = \text{HOURLY RATE} \times \text{FRINGE (56.01) \%}$$

$$\text{OPERATING MARGIN} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE}) \times \text{OPERATING MARGIN (10.00)\%}$$

$$\text{MULTIPLIER} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE} + \text{OPERATING MARGIN}) / \text{HOURLY RATE} = 2.38$$

Maximum Billing Rates

Project No: RFP No. PNC2126569P1
 Project Title: Consultant Services for Retail Potable Water and Wastewater Master Plan
 Consultant/ Metco Services Southeast, LLC
 Subconsultant:

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE (\$/HR)
General Manager	\$82.00		2.62		\$214.84
Associate	\$63.16		2.62		\$165.48
Senior Project Engineer-Electrical/I&C	\$54.00		2.62		\$141.48
Senior Project Engineer-Mechanical/HVAC	\$60.00		2.62		\$157.20
Project Engineer	\$52.00		2.62		\$136.24
Sr Designer/CAD Drafter	\$42.00		2.62		\$110.04
CAD Drafter	\$32.00		2.62		\$83.84
Senior Administrative Assistant	\$28.96		2.62		\$75.88

Multiplier of 2.62 is calculated as follows:

OVERHEAD = HOURLY RATE x OVERHEAD (98.6%)

FRINGE = HOURLY RATE x FRINGE (36.5%)

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) x OPERATING MARGIN (11.5%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE = 2.62

Maximum Billing Rates

Project No: RFP No. PNC2126569P1
 Project Title: Consultant Services for Retail Potable Water and Wastewater Master Plan
 Consultant/ MUEngineers, Inc.
 Subconsultant:

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE (\$/HR)
Principal	\$95.19		2.31		\$219.89
VP of Engineering	\$67.16		2.31		\$155.14
VP of Operations	\$68.75		2.31		\$158.81
Engineering Manager	\$58.17		2.31		\$134.37
Project Manager	\$55.00		2.31		\$127.05
Project Engineer	\$42.31		2.31		\$97.74
Structural Designer	\$37.02		2.31		\$85.52
Revit Technician	\$32.79		2.31		\$75.74
Structural Inspector	\$38.50		2.31		\$88.94
Administration	\$42.31		2.31		\$97.74

Multiplier of 2.31 is calculated as follows:

OVERHEAD = HOURLY RATE x OVERHEAD (110.00%)

FRINGE = HOURLY RATE x FRINGE (0.0%), included in overhead

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) x OPERATING MARGIN (10.0%)

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

Notes:

Consultant/Subconsultant **MUEngineers, Inc**, has elected to use “Safe Harbor” combined fringe benefit and overhead rate of 110% in accordance with Section 5.2.5.

Maximum Billing Rates

Project No: PNC2126569P1
 Project Title: Consultant Services for Retail Potable Water and Wastewater Master Plan
 Consultant/
 Subconsultant Name: Thompson & Associates, Inc., Civil Engineering

TITLE	MAXIMUM HOURLY RATE (\$/HR)	X	MULTIPLIER	=	MAXIMUM BILLING RATE (\$/HR)
PRINCIPAL	\$122.89		3.02		\$300.00
SR. PROJECT MANAGER	\$97.84		3.02		\$295.48
PROJECT MANAGER	\$76.68		3.02		\$231.57
ENGINEER	\$58.17		3.02		\$175.67
SR. ENGINEERING TECHNICIAN	\$44.95		3.02		\$135.75
ENGINEERING TECHNICIAN	\$37.02		3.02		\$111.80
CAD TECHNICIAN	\$22.00		3.02		\$66.44
RESIDENT PROJECT REPRESENTATIVE	\$31.13		3.02		\$94.01
ADMINISTRATIVE ASSISTANT	\$26.44		3.02		\$79.85

Multiplier of 3.02 is calculated as follows:

OVERHEAD = HOURLY RATE X OVERHEAD (142.83)%

FRINGE = HOURLY RATE X FRINGE (59.02) %

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) X OPERATING MARGIN (0.00)%

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE **3.02**

*MAXIMUM BILLING RATE CAPPED AT \$300.00

Maximum Billing Rates

Project No: PNC2126569P1
 Project Title: Consultant Services for Retail Potable Water and Wastewater Master Plan
 Consultant/]
 Subconsultant:

			MULTIPLIER		MAXIMUM BILLING RATE
TITLE	MAXIMUM HOURLY RATE (\$/HR)	X		=	(\$/HR)
[Insert staff titles]	\$0.00				\$0.00
	\$0.00				\$0.00
	\$0.00				\$0.00
	\$0.00				\$0.00
	\$0.00				\$0.00
	\$0.00				\$0.00
	\$0.00				\$0.00

Multiplier of X.XX is calculated as follows:

$$\text{OVERHEAD} = \text{HOURLY RATE} \times \text{OVERHEAD (X.XX\%)}$$

$$\text{FRINGE} = \text{HOURLY RATE} \times \text{FRINGE (X.XX\%)}$$

$$\text{OPERATING MARGIN} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE}) \times \text{OPERATING MARGIN (X.XX\%)}$$

$$\text{MULTIPLIER} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE} + \text{OPERATING MARGIN}) / \text{HOURLY RATE}$$

[DELETE IF NOT APPLICABLE]

Notes:

Consultant/Subconsultant **[AS APPLICABLE]** has elected to use "Safe Harbor" combined fringe benefit and overhead rate of 110% in accordance with Section 5.2.5.

Exhibit B-1
Reimbursables for Direct Non-Salary Expenses

Reimbursable	Maximum Reimbursable
Flow Monitoring Rental Fee	\$10,000
Total Maximum Reimbursables:	\$10,000

Exhibit C Minimum Insurance Requirements

INSURANCE REQUIREMENTS

Project: Consulting Services for Retail Master Plan Update
Agency: Water and Wastewater Services


TYPE OF INSURANCE	ADDL INSD	SUBR WVD	MINIMUM LIABILITY LIMITS		
				Each Occurrence	Aggregate
GENERAL LIABILITY - Broad form <input checked="" type="checkbox"/> Commercial General Liability <input checked="" type="checkbox"/> Premises-Operations <input type="checkbox"/> XCU Explosion/Collapse/Underground <input checked="" type="checkbox"/> Products/Completed Operations Hazard <input checked="" type="checkbox"/> Contractual Insurance <input checked="" type="checkbox"/> Broad Form Property Damage <input checked="" type="checkbox"/> Independent Contractors <input checked="" type="checkbox"/> Personal Injury Per Occurrence or Claims-Made: <input checked="" type="checkbox"/> Per Occurrence <input type="checkbox"/> Claims-Made Gen'l Aggregate Limit Applies per: <input type="checkbox"/> Project <input type="checkbox"/> Policy <input type="checkbox"/> Loc. <input type="checkbox"/> Other _____	☑	☑	Bodily Injury		
			Property Damage		
			Combined Bodily Injury and Property Damage	\$1,000,000	\$2,000,000
			Personal Injury		
			Products & Completed Operations		
AUTO LIABILITY <input checked="" type="checkbox"/> Comprehensive Form <input checked="" type="checkbox"/> Owned <input checked="" type="checkbox"/> Hired <input checked="" type="checkbox"/> Non-owned <input checked="" type="checkbox"/> Any Auto, If applicable <i>Note: May be waived if no driving will be done in performance of services/project.</i>			Bodily Injury (each person)		
			Bodily Injury (each accident)		
			Property Damage		
			Combined Bodily Injury and Property Damage	\$500,000	
<input type="checkbox"/> EXCESS LIABILITY / UMBRELLA Per Occurrence or Claims-Made: <input type="checkbox"/> Per Occurrence <input type="checkbox"/> Claims-Made <i>Note: May be used to supplement minimum liability coverage requirements.</i>					
<input checked="" type="checkbox"/> WORKER'S COMPENSATION <i>Note: U.S. Longshoremen & Harbor Workers' Act & Jones Act is required for any activities on or about navigable water.</i>	N/A	*☑	Each Accident	STATUTORY LIMITS	
<input checked="" type="checkbox"/> EMPLOYER'S LIABILITY			Each Accident	\$500,000	
<input checked="" type="checkbox"/> PROFESSIONAL LIABILITY (ERRORS & OMISSIONS) All consulting, engineering, surveying, and design professionals.	N/A		Each Claim:	\$2,000,000	
			*Maximum Deductible:	\$100,000	
<input type="checkbox"/> POLLUTION/ENVIRONMENTAL LIABILITY			Each Claim:		
			*Maximum Deductible:	\$10,000	
<p><u>Description of Operations:</u> "Broward County" shall be listed as Certificate Holder and endorsed as an additional insured for liability, except as to Professional Liability. County shall be provided 30 days written notice of cancellation, 10 days' notice of cancellation for non-payment. Contractors insurance shall provide primary coverage and shall not require contribution from the County, self-insurance or otherwise. Any self-insured retention (SIR) higher than the amount permitted in this Agreement must be declared to and approved by County and may require proof of financial ability to meet losses. Contractor is responsible for all coverage deductibles unless otherwise specified in the agreement. For Claims-Made policies insurance must be maintained and evidence of insurance must be provided for at least three (3) years after completion of the contract of work. *Waiver of subrogation is required for Workers Compensation if any portion of the work/services will be performed on County Property.</p>					
CERTIFICATE HOLDER: Broward County 115 South Andrews Avenue Fort Lauderdale, Florida 33301			 Digitally signed by COLLEEN A. POUNALL Date: 2022.12.16 10:11:40 -0500 <hr/> Risk Management Division		

Exhibit D
Work Authorization No. [] under
Agreement PNC2126569P1 between Broward County and BLACK & VEATCH CORPORATION
for CONSULTANT SERVICES FOR RETAIL POTABLE WATER AND WASTEWATER MASTER PLAN

1. This Work Authorization is issued pursuant to the Agreement between Broward County (“County”) and [] (“Consultant”) (collectively referred to as the “Parties”) for [] (the “Agreement”), dated [].

2. This Work Authorization directs Consultant to provide the services described in Exhibit A of this Work Authorization and is issued pursuant to Article 6 of the Agreement.

3. Compensation and Method of Payment.

3.1 Payment for the services authorized by this Work Authorization shall be in accordance with Article 5 of the Agreement and the agreed method of compensation is as follows (check those boxes that apply):

3.1.1 Maximum Amount Not-To-Exceed Compensation. County shall pay Consultant for the performance of Services identified in Exhibit A to this Work Authorization as payable on a “Maximum Amount Not-To-Exceed” basis based upon the Salary Costs as described in Section 5.2 of the Agreement and Exhibit B of this Work Authorization, up to a maximum not-to-exceed amount of \$[].

3.1.2 Lump Sum Compensation. County shall pay Consultant for the performance of all Services identified in Exhibit A to this Work Authorization as payable on a “Lump Sum” basis and as set forth in Exhibit B of this Work Authorization, in a total lump sum amount of \$[].

3.1.3 Reimbursable Expenses. County has established a maximum not-to-exceed amount of \$[] for potential Reimbursable Expenses for work under this Work Authorization, which may be utilized pursuant to Section 5.3 of the Agreement. County will retain any unused amounts of those reimbursable expenses.

4. Consultant shall perform the services described in Exhibit A within:

[] calendar days (“Time for Performance”);

the time periods specified in the Project Schedule included in Exhibit A (“Time for Performance”); said time periods shall commence from the date of the Notice to Proceed for such services.

5. CBE Goals.

5.1 In an effort to assist County in achieving its overall goal as set forth in the Agreement, Consultant agrees to meet the following CBE participation goals by utilizing the CBE firms for the work and dollar values described in Section 5.2 below: **[25]**%.

5.2 In performing services for this Project, County and Consultant hereby incorporate Consultant's participating CBE firms, addresses, scope of work, and dollar value identified in Exhibit C to this Work Authorization, which is incorporated herein.

6. The terms and conditions of the Agreement are hereby incorporated into this Work Authorization. Nothing contained in this Work Authorization shall alter, modify, or change in any way the terms and conditions of the Agreement.

7. This Work Authorization is effective upon complete execution by County and Consultant. This Work Authorization may be executed in multiple originals, and may be executed in counterparts, whether signed physically or electronically, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

(The remainder of this page is intentionally left blank.)

IN WITNESS WHEREOF, the Parties have made and executed this Work Authorization No. [_____]: BROWARD COUNTY, by and through its [_____], as authorized pursuant to Section 6.3 of the Agreement, and [_____], signing by and through its [_____], duly authorized to execute same.

COUNTY

BROWARD COUNTY, by and through
its [_____]

By _____

____ day of _____, 20__.

Approved as to form by
Andrew J. Meyers
Broward County Attorney
115 South Andrews Avenue, Suite 423
Fort Lauderdale, Florida, 33301
Telephone: (954) 357-7600

By _____

Name _____ Date _____
Senior/Assistant County Attorney

By _____

Name _____ Date _____
Senior/Assistant County Attorney

CONSULTANT

WITNESS:

[Insert Consultant Name]

(Signature)

By _____
Authorized Signer

Print Name

____ day of _____, 20__.

**Exhibit E
Schedule of Subconsultants**

RFP No: PNC2126569P1
Project Title: Consultant Services for Retail Potable Water and Wastewater Master Plan

No.	Firm Name	Discipline
1.	Thompson & Associates, Inc.	Emergency Response Planning Condition Assessment/Mechanical (process)
2.	Florida Technical Consultants, LLC	GIS
3.	Metco Services Southeast, LLC	HVAC, Electrical, I&C
4.	MUEngineers, Inc.	Structural Engineering
5.	Carollo Engineers	System Capacity Services, Including Population Projections, Water Hydraulic Modeling, and Demand Projections.

Exhibit F
CBE Subconsultants and Letters of Intent

RFP No: PNC2126569P1

Project Title: Consultant Services for Retail Potable Water and Wastewater Master Plan

No.	Firm Name	Discipline
1.	Thompson & Associates, Inc.	Emergency Response Planning Condition Assessment/Mechanical (process)
2.	Florida Technical Consultants, LLC	GIS
3.	Metco Services Southeast, LLC	HVAC, Electrical, I&C
4.	MUEngineers, Inc.	Structural Engineering