

**DESIGN PROFESSIONAL SERVICES AGREEMENT**  
**PROJECT NO. 81000819 / CONTRACT NO. 1443**  
**WASTEWATER SCADA**  
**WATER SERVICES DEPARTMENT**

This design professional services agreement is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation ("City"), and Black & Veatch Corporation ("Design Professional"). City and Design Professional agree as follows:

**PART I**  
**SPECIAL TERMS AND CONDITIONS**

**Sec. 1. Project description.**

- A. The services to be provided under this Agreement are for the following project (Project) and purpose: Develop an approach that adapts and separates water and wastewater Supervisory Control and Data Acquisition (SCADA) systems while expanding the existing capability to improve operations. It is also the basis for additional automation schemes. The Design Professional will develop the Conceptual Design Report, preliminary and final construction bidding documents, Construction Phase and Resident Phase Services, and follow-up auditing. The project consists of the central platform and communications backbone for up to 5 sites. The Engineer may be requested to provide additional design and construction phases related to further expansion.

**Sec. 2. Services to be performed by Design Professional.** Design Professional shall perform the following Scope of Services:

- A. Design Professional shall perform Scope of Services listed on Attachment A.
- B. Submit all documents, including plans, design drawings, specifications, reports, maps, models and renderings in the form requested by City. A list with the specific requirements is included in Attachment B.
- C. City shall have the right to inspect and review the work being done and to consult with Design Professional at any reasonable time. Conferences will be held at the request of City or Design Professional.
- D. If it is determined to be in the best interest of the work, Design Professional shall replace the project manager or any other employee of the Design Professional, Subcontractors, Suppliers or other persons or organizations performing or furnishing any of the work on the project upon written request by the City.

**Sec. 3. Term.** Unless sooner terminated as provided herein, and unless specific dates for providing services are identified in this Agreement, this Agreement shall remain in force for a period which may reasonably be required for the completion of the services to be provided by Design Professional under the Scope of Services. Work under this agreement shall begin upon written Notice to Proceed.

#### **Sec. 4. Compensation and Reimbursables.**

A. The maximum amount that City shall pay Design Professional under this Agreement is \$1,370,672.00, as follows:

1. \$842,258.00 for the services performed by Design Professional under this Agreement.
2. For Design Professional services described in the Scope of Services, City shall pay Design Professional compensation amounting to actual salary of personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and schedule of position classifications and the salary range for each position is included as a part of **Attachment C**.
3. Actual reasonable expenses incurred by Design Professional directly related to Design Professional's performance under this Agreement, to include only the following, in an amount not to exceed \$293,414.00. The following are the reimbursable expenses that City has approved: Subcontractor direct costs paid by Design Professional, outside reproduction of final deliverables, local transportation in the project area, and non-local travel expenses for the cyber security specialist. Subcontractors office personnel labor costs shall be included in the unit prices for field investigation work.
4. Design Professionals' maximum amount shown in Sec. 4, Compensation and Reimbursables, includes a total allowance amount of Two Hundred Thirty-Five Thousand Dollars (\$235,000.00) for Optional Services not yet authorized by the City that may be required throughout the course of work. This allowance amount will not be utilized by Design Professional unless specifically authorized in writing by the City to perform Optional Services. Optional Services will not be performed, nor is the Design Professional approved to utilize any allowance monies unless the City provides written authorization to Design Professional that includes the scope of work for each optional task to be performed and a maximum billing limit for compensation that has been mutually agreed upon.
5. Compensation for all Optional Services will be based on the actual salary of office personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and schedule of position classifications and the salary range for each position is included as a part of **Attachment C**. The amount billed for each Optional Service shall not exceed the amount established for it without further written authorization. Additional amounts for Optional Services may be authorized, if deemed by CITY to be necessary, as the work progresses.
6. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Agreement.

B. Method of Payment.

Design Professional shall invoice City monthly setting forth the total effort expended on an hourly basis and all actual reasonable expenses incurred and allowed under this Agreement. Each invoice shall provide the subtotal of the hours and costs invoiced by the Design Professional for each Task Series identified in **Attachment A** and a sum total of hours and costs for each invoice period. Design Professional shall submit a copy of invoices received

from its subcontractors with labor hours per person, salary rate per person, effective salary multiplier, and direct expenses for each Task Series. Design Professional shall also submit monthly project status report with each monthly invoice containing the information defined in Attachment A. City, upon approving the invoice, shall remit payment.

**C. Condition Precedent to Payment.**

1. It shall be a condition precedent to payment of any invoice from Design Professional that Design Professional is in compliance with, and not in breach or default of, all terms, covenants and conditions of this Agreement. If damages are sustained by City as a result of breach or default by Design Professional, City may withhold payment(s) to Design Professional for the purpose of offset until such time as the exact amount of damages due City from Design Professional may be determined.
2. No request for payment will be processed unless the request is in proper form, correctly computed, accompanied by a monthly status report, and is approved as payable under Agreement. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Agreement.
3. No request for payment will be processed unless it is accompanied by a copy of the most recent 00485.01 M/WBE Monthly Utilization Report submitted to the City's Human Relations Department.

**Sec. 5. Notices.** All notices required by this Agreement shall be in writing and sent to the following:

**City:**

**Water Services Department**

Terry Leeds, Director

4800 E. 63<sup>rd</sup> Street

Kansas City, MO 64130

Phone: (816) 513-0528

Facsimile: (816) 513-0288

E-mail address: [terry.leeds@kcmo.org](mailto:terry.leeds@kcmo.org)

**Design Professional:**

**Black & Veatch Corporation**

Contact: Patrick O'Neill, Client Director

Address: 8400 Ward Parkway, Kansas City, MO 64114

Phone: (913) 458-4308

E-mail address: [oneillpa@bv.com](mailto:oneillpa@bv.com)

All notices are effective (a) when delivered in person, (b) upon confirmation of receipt when transmitted by facsimile transmission or by electronic mail, (c) upon receipt after dispatch by registered or certified mail, postage prepaid, (d) on the next business day if transmitted by overnight courier (with confirmation of delivery), or (e) three (3) business days after the date of mailing, whichever is earlier.

**Sec. 6. Merger.** This Agreement consists of Part I, Special Terms and Conditions and any Attachments and any documents incorporated by reference; and Part II, Standard Terms and Conditions. This Agreement, including any Attachments and incorporated documents, constitutes the entire agreement between City and Design Professional with respect to this subject matter.

**Sec. 7. Conflict Between Agreement Parts.** In the event of any conflict or ambiguity between the Special Terms and Conditions of Part I and the Standard Terms and Conditions of Part II of this Agreement, Part I will be controlling.

**Sec. 8. Responsibilities of City. City shall:**

- A. Make available to Design Professional all existing records, maps, plans, and other data possessed by City when such are necessary, advisable, or helpful to Design Professional in the completion of the work under this Agreement.
- B. Designate in writing a person to act as City representative with respect to the work to be performed under this Agreement; with such person having complete authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to the materials, equipment elements and systems pertinent to the work covered by this Agreement, and the responsibility to be available to inspect and review the work and to consult with Design Professional at any reasonable time.
- C. Provide standard City forms as required.
- D. Provide City – Licensed Geographical Information System Data set forth in Attachment D, incorporated into this Agreement.

**Sec. 9. Attachments to Part I.** The following documents are attachments to Part I of this Agreement and are attached hereto and incorporated herein by this reference:

**Attachment A – Scope of Services**

**Attachment B – Electronic Format Requirements**

**Attachment C – Engineering Fee Summary and Schedule of Position Classifications**

**Attachment D - Licensed Geographical Information System Data**

**Attachment E – HRD Documents**

- 1. 00450 HRD Form 08: Contractor Utilization Plan/Request for Waiver
- 2. 00450.01: Letter of Intent to Subcontract
- 3. 00460 HRD Form 10: Timetable for MBE/WBE Utilization
- 4. 00470 HRD Form 11: Request for Modification or Substitution
- 5. 01290.14: Contractor Affidavit for Final Payment
- 6. 01290.15: Subcontractor Affidavit for Final Payment

**Attachment F – Employee Eligibility Verification Affidavit**

**Attachment G – Non-Construction Subcontractors Listing**

**Sec. 10. Subcontracting.** Design Professional agrees that it will only subcontract with the subcontractor(s) it has listed on the "Subcontractor List Non-Construction", contained in Attachment G.

**Sec. 11. Minority and Women's Business Enterprises.** City is committed to ensuring that minority and women's business enterprises (M/WBE) participate to the maximum extent possible in the performance of City contracts. If M/WBE participation goals have been set for this Agreement, Design Professional agrees to comply with all requirements of City's M/WBE Program as enacted in City's Code Sections 3-421 through 3-469 and as hereinafter amended. Design Professional shall make its Design Prof. Service Agreement Part I 102014

good faith efforts in carrying out this policy by implementing its contractor utilization plan, which is attached as **Attachment E**. If Design Professional fails to achieve the M/WBE goals stated in its contractor utilization plan, as amended, the City will sustain damages, the exact extent of which would be difficult or impossible to ascertain or estimate at the time of execution of this contract. Therefore, in order to liquidate those damages, the monetary difference between the amount of the M/WBE goals set forth in this contractor utilization plan, as amended, and the amount actually paid to qualified MBEs and WBEs for performing a commercially useful function will be deducted from the Design Professional's payments as liquidated damages. In determining the amount actually paid to qualified MBEs and WBEs, no credit will be given for the portion of participation that was not approved by the Director of City's Human Relations Division, unless the Director determines that the Design Professional acted in good faith. No deduction for liquidated damages will be made when, for reasons beyond the control of the Design Professional, the M/WBE participation stated in the Contractor Utilization Plan, as amended and approved by the Director, is not met.

**Sec. 12. Professional services certification.** Code Section 2-83, prohibiting Agreements with certain attorneys, architects, engineers and other professionals thereunder, shall apply to this Agreement. Design Professional certifies that it is not an architect, engineer, or other professional, exclusive of medical doctors or appraisers, who at the time of the issuance of the Agreement, serves as an expert witness for any litigation against City, and that it will not serve as an expert witness for any litigation against City during the term of this Agreement.

**Sec. 13. Effectiveness; Date.** This Agreement will become effective when the City's Director of Finance has signed it. The date this Agreement is signed by the City's Director of Finance will be deemed the date of this Agreement.

Each party is signing this Agreement on the date stated opposite that party's signature.

**THIS AGREEMENT CONTAINS INDEMNIFICATION PROVISIONS**

**DESIGN PROFESSIONAL**

I hereby certify that I have authority to execute  
this document on behalf of Design Professional

Date: 6/7/2018

By: Patrick O'Neill

Name: Patrick O'Neill

Title: Associate Vice President

Date: 6/28/18

**KANSAS CITY, MISSOURI**

By: Terry Leeds

Name: Terry Leeds

Title: Director of Water Services

Approved as to form:

[Signature]  
Assistant City Attorney

I hereby certify that there is a balance, otherwise unencumbered, to the credit of the appropriation to which the foregoing expenditure is to be charged, and a cash balance, otherwise unencumbered, in the Treasury, to the credit of the fund from which payment is to be made, each sufficient to meet the obligation hereby incurred.

Kathryn Beel 7/2/18  
for Director of Finance Date



## **PART II**

### **STANDARD TERMS AND CONDITIONS**

#### **Sec. 1. General Indemnification.**

A. For purposes of this Section 1 only, the following terms shall have the meanings listed:

1. **Claims** means all claims, damages, liability, losses, costs and expenses, court costs and reasonable attorneys' fees, including attorneys' fees incurred by the City in the enforcement of this Indemnity obligation.

2. **Design Professional's Agents** means Design Professional's officers, employees, subcontractors, subconsultants, successors, assigns, invitees, and other agents.

3. **City** means City, its Program Manager/Construction Advisor and any of their agents, officials, officers and employees.

B. Design Professional's obligations under this Section with respect to indemnification for acts or omissions, including negligence, of City shall be limited to the coverage and limits of General (not Professional) Liability insurance that Design Professional is required to procure and maintain under this Agreement. Design Professional affirms that it has had the opportunity to recover the costs of the liability insurance required in this Agreement in its contract price.

C. Design Professional shall defend, indemnify and hold harmless City from and against all Claims arising out of or resulting from all acts or omissions in connection with this Agreement caused in whole or in part by Design Professional or Design Professional's Agents, regardless of whether or not caused in part by an act or omission, including negligence, of City. Design Professional is not obligated under this Section to indemnify City for the sole negligence of City.

D. Nothing in this section shall apply to indemnification for professional negligence which is specified in a separate provision of this Agreement.

E. In no event shall the language in this section constitute or be construed as a waiver or limitation of the City's rights or defenses with regard to sovereign immunity, governmental immunity, or other official immunities and protections as provided by the federal and state constitutions or by law.

#### **Sec. 2. Indemnification for Professional Negligence.**

Design Professional shall indemnify, and hold harmless City and any of its agencies, officials, officers, or employees from and against all claims, damages, liability, losses, costs, and expenses, including court costs and reasonable attorneys' fees, to the extent caused by any negligent acts, errors, or omissions of the Design Professional, its officers, employees, subconsultants, subcontractors, successors, assigns, invitees and other agents, in the performance of professional services under this Agreement. Design Professional is not obligated under this Section to indemnify City for the negligent acts of City or any of its agencies, officials, officers, or employees.

#### **Sec 3. Insurance.**

A. Design Professional shall procure and maintain in effect throughout the duration of this Agreement, and for a period of two (2) years thereafter, insurance coverage not less than the types and amounts specified below. In the event that additional insurance, not specified herein, is required during the term of this Agreement, Design Professional shall supply such insurance at City's cost. Policies containing a Self-Insured Retention are unacceptable to City unless City approves in writing the Design Professional Self-Insured Retention.

1. Commercial General Liability Insurance: with limits of \$1,000,000 per occurrence and \$2,000,000 aggregate, written on an "occurrence" basis. The policy shall be written or endorsed to include the following provisions:

a. Severability of Interests Coverage applying to Additional Insureds

b. Per Project Aggregate Liability Limit or, where not available, the aggregate limit shall be \$2,000,000

c. No Contractual Liability Limitation Endorsement

d. Additional Insured Endorsement, ISO form CG20 10, or its equivalent

2. Worker's Compensation Insurance: as required by statute, including Employers Liability with limits of:

Workers Compensation Statutory  
Employers Liability

\$100,000 accident with limits of:  
\$500,000 disease-policy limit  
\$100,000 disease-each employee

3. Commercial Automobile Liability Insurance: with a limit of \$1,000,000 written on an "occurrence" basis, covering owned, hired, and non-owned automobiles. If the Design Professional owns vehicles, coverage shall be provided on an "any auto" basis. If the Design Professional does not own any vehicles, coverage shall be provided on a "hired autos" and "nonowned autos" basis. The insurance will be written on a Commercial Business Auto form, or an acceptable equivalent, and will protect against claims arising out of the operation of motor vehicles, as to acts done in connection with the Agreement, by Design Professional.

4. Professional Liability Insurance with limits Per Claim/Annual Aggregate of \$1,000,000.

B. The Commercial General Liability Insurance specified above shall provide that City and its agencies, officials, officers, and employees, while acting within the scope of their authority, will be named as additional insureds for the services performed under this Agreement. Design Professional shall provide to City at execution of this Agreement a certificate of insurance showing all required endorsements and additional insureds. The certificates of insurance will contain a provision stating that should any of the policies described in the certificate be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

C. The Commercial General Liability and Commercial Automobile Liability Insurance specified above shall contain a cross-liability or severability of interest clause or endorsement and shall contain a provision or endorsement that the costs of providing the insureds a defense and appeal, including attorneys' fees, as insureds, shall be supplementary and shall not be included as part of the policy limits but shall remain the insurer's responsibility. Insurance covering the specified additional insureds shall be primary insurance, and all other insurance carried by the additional insureds shall be excess insurance. With respect to Commercial Automobile Liability, Commercial General Liability, and any Umbrella Liability Insurance, Design Professional shall require its insurance carrier(s) to waive all rights of subrogation against City and its agencies, officials, officers, and employees.

D. All insurance coverage must be written by companies that have an A.M. Best's rating of "A-V" or better, and are licensed or approved by the State of Missouri to do business in Missouri.

E. Design Professional's failure to maintain the required insurance coverage will not relieve Contractor of its contractual obligation to indemnify the City pursuant to Sections 1 and 2. If the coverage afforded is cancelled



or changed or its renewal is refused, Design Professional shall give at least 30 days prior written notice to City. In the event of Design Professional's failure to maintain the required insurance in effect, City may order Design Professional to immediately stop work, and upon ten (10) days notice and an opportunity to cure, may pursue its remedies for breach of this Agreement as provided for herein and by law.

F. In no event shall the language in this Section constitute or be construed as a waiver or limitation of the City's rights or defenses with regard to sovereign immunity, governmental immunity, or other official immunities and protections as provided by the federal and state constitutions or by law.

#### **Sec. 4. Design Standards and Endorsement.**

A. Except as otherwise directed in writing by City, in the performance of services under this Agreement, Design Professional shall comply with all design standards required by federal, state, local laws or codes including but not limited to all applicable provisions of:

1. Title II of the 2010 ADA Standards for Accessible Design as amended from time to time;
2. the Clean Air Act(42 U.S.C. 7401 *et seq.* and the Clean Water Act (33 U.S.C. 1251 *et seq.*
3. the Missouri Clean Water Law (Chapter 644 RSMo) together with any accompanying regulation(s) contained in the Missouri Code of State Regulations (CSR Title 10), as well as any implementing permits; and
4. Kansas City Code Sec. 3-71. LEED gold standard.

Design Professional shall notify and explain to City any applicable exceptions under these acts.

B. Design Professional shall use all design standards recognized and used in the industry in the performance of services

under this agreement. Design Professional shall endorse all plans and specifications, or estimates, and engineering data furnished under this Agreement if prepared by Design Professional. All subcontractors as appropriate shall endorse their respective plans and specifications, or estimates, and engineering data furnished for the Plan or Project.

C. Design Professional shall monitor quality assurance for their design services and shall revise the design and plans at their own expense in case of error or oversight in design by Design Professional or any subcontractor to Design Professional.

#### **Sec. 5. Copyright and Ownership of Documents.**

A. Design Professional shall on its behalf and on behalf of its employees and agents, promptly communicate and disclose to City all computer programs, documentation, software and other copyrightable works and all discoveries, improvements and inventions conceived, reduced to practice or made by Design Professionals or its agents, whether solely or jointly with others, during the term of this Agreement resulting from or related to any work Design Professional or its agents may do on behalf of City or at its request. All inventions and copyrightable works that Design Professional is obligated to disclose shall be and remain entirely the property of City. It is agreed that all inventions and copyrightable works are works made for hire and shall be the exclusive property of City. Design Professional hereby assigns to City any rights it may have in such copyrightable works. Design Professional shall cooperate with City in obtaining any copyrights or patents.

B. Original documents, including plans, specifications, reports, maps, models and renderings, including electronic media, prepared or obtained under the terms of this Agreement shall be delivered to and become the property of City and basic survey notes, diaries, sketches, charts, computations and

other data shall be made available upon request by City without restriction or limitation of their use. There shall be no legal limitations upon City in the subsequent use of the documents or ideas developed in the documents. In the event that any of the documents are reused by City, the nameplates or other identification to the Design Professional will be removed and the Design Professional will be released of subsequent liabilities. In the event that any of the design drawings are reused or modified by City, the name plates or other identification to the Design Professional will be removed.

#### **Sec. 6. Governing Law.**

This Contract shall be construed and governed in accordance with the laws of the State of Missouri without giving effect to Missouri's choice of law provisions. The City and Design Professional: (1) submit to the jurisdiction of the state and federal courts located in Jackson County, Missouri; (2) waive any and all objections to jurisdiction and venue; and (3) will not raise forum non conveniens as an objection to the location of any litigation.

#### **Sec. 7. Compliance with Laws.**

Design Professional shall comply with all federal, state and local laws, ordinances and regulations applicable to the work and this Agreement.

#### **Sec. 8. Termination for Convenience.**

A. City may, at any time upon ten (10) days notice to Design Professional specifying the effective date of termination, terminate this Agreement, in whole or in part. If this Agreement is terminated by City, City shall be liable only for payment for services rendered before the effective date of termination. Design Professional shall prepare an accounting of the services performed and money spent by Design Professional up to the effective date of termination and shall return to City any

remaining sums within thirty (30) days of such date.

B. If this Agreement is terminated prior to Design Professional's completion of services, all work or materials prepared or obtained by Design Professional pursuant to this Agreement shall become City's property.

C. If this Agreement is terminated prior to Design Professional's completion of the services to be performed hereunder, Design Professional shall return to City and sums paid in advance by City for services that would otherwise have had to be rendered between the effective date of termination and the original ending date of the Agreement. Design Professional shall prepare an accounting of the services performed and money spent by Design Professional up to the effective date of termination and shall return to City any remaining sums within thirty (30) days of such date.

#### **Sec. 9. Default and Remedies.**

If Design Professional shall be in default or breach of any provision of this Agreement, City may terminate this Agreement, suspend City's performance, withhold payment or invoke any other legal or equitable remedy after giving Design Professional notice and opportunity to correct such default or breach.

#### **Sec. 10. Waiver.**

Waiver by City of any term, covenant, or condition hereof shall not operate as a waiver of any subsequent breach of the same or of any term, covenant or condition. No term, covenant, or condition of this Agreement can be waived except by written consent of City, and forbearance or indulgence by City in any regard whatsoever shall not constitute a waiver of same to be performed by Design Professional to which the same may apply and, until complete performance by Design Professional of the term, covenant or condition, City shall be entitled to invoke any remedy available to it under this Agreement

or by law despite any such forbearance or indulgence.

#### **Sec. 11. Acceptance.**

No payment made under this Agreement shall be proof of satisfactory performance of the Agreement, either wholly or in part, and no payment shall be construed as acceptance of deficient or unsatisfactory work.

#### **Sec. 12. Modification.**

Unless stated otherwise in this Agreement, no provision of this Agreement may be waived, modified or amended except in writing signed by City.

#### **Sec. 13. Headings; Construction of Agreement.**

The headings of each section of this Agreement are for reference only. Unless the context of this Agreement clearly requires otherwise, all terms and words used herein, regardless of the number and gender in which used, shall be construed to include any other number, singular or plural, or any other gender, masculine, feminine or neuter, the same as if such words had been fully and properly written in that number or gender.

#### **Sec. 14. Severability of Provisions.**

Except as specifically provided in this Agreement, all of the provisions of this Agreement shall be severable. In the event that any provision of this Agreement is found by a court of competent jurisdiction to be unconstitutional or unlawful, the remaining provisions of this Agreement shall be valid unless the court finds that the valid provisions of this Agreement are so essentially and inseparably connected with and so dependent upon the invalid provision(s) that it cannot be presumed that the parties to this Agreement could have included the valid provisions without the invalid provision(s); or unless the court finds that the valid provisions, standing alone, are incapable of

being performed in accordance with the intentions of the parties.

#### **Sec. 15. Records.**

A. For purposes of this section:

1. "City" shall mean the City Auditor, the City's Internal Auditor, the City's Director of Human Relations, the City Manager, the City department administering this Contract and their delegates and agents.

2. "Record" shall mean any document, book, paper, photograph, map, sound recordings or other material, regardless of physical form or characteristics, made or received in connection with this Contract and all Contract amendments and renewals.

B. Design Professional shall maintain and retain all Record for a term of five (5) years that shall begin after the expiration or termination of this Contract and all Contract amendments. City shall have a right to examine or audit all Records and Design Professional shall provide access to City of all Records upon ten (10) days written notice from the City.

C. The books, documents and records of Design Professional in connection with this Agreement shall be made available to the City Auditor, the City's Internal Auditor, the City's Director of Human Relations and the City department administering this Agreement within ten (10) days after the written request is made.

#### **Sec. 16. Affirmative Action.**

If this Contract exceeds \$300,000.00 and Design Professional employs fifty (50) or more people, Design Professional shall comply with City's Affirmative Action requirements in accordance with the provisions of Chapter 3 of City's Code, the rules and regulations relating to those sections, and any additions or amendments thereto; in executing any Contract subject to

said provisions, Design Professional warrants that it has an affirmative action program in place and will maintain the affirmative action program in place for the duration of the Contract. Design Professional shall not discriminate against any employee or applicant for employment because of race, color, sex, religion, national origin or ancestry, disability, sexual orientation, gender identity or age in a manner prohibited by Chapter 3 of City's Code. Design Professional shall:

1. Submit, in print or electronic format, a copy of Design Professional's current certificate of compliance to the City's Human Relations Department (HRD) prior to receiving the first payment under the Contract, unless a copy has already been submitted to HRD at any point within the previous two calendar years. If, and only if, Design Professional does not possess a current certification of compliance, Design Professional shall submit, in print or electronic format, a copy of its affirmative action program to HRD prior to receiving the first payment under the Contract, unless a copy has already been submitted to HRD at any point within the previous two calendar years.

2. Require any Subcontractor awarded a subcontract exceeding \$300,000.00 to affirm that Subcontractor has an affirmative action program in place and will maintain the affirmative action program in place for the duration of the subcontract.

3. Obtain from any Subcontractor awarded a subcontract exceeding \$300,000.00 a copy of the Subcontractor's current certificate of compliance and tender a copy of the same, in print or electronic format, to HRD within thirty (30) days from the date the subcontract is executed. If, and only if, Subcontractor does not possess a current certificate of compliance, Design Professional shall obtain a copy of the Subcontractor's affirmative action program and tender

a copy of the same, in print or electronic format, to HRD within thirty (30) days from the date the subcontract is executed.

City has the right to take action as directed by City's Human Relations Department to enforce this provision. If Design Professional falls, refuses or neglects to comply with the provisions of Chapter 3 of City's Code, then such failure shall be deemed a total breach of this Contract and this Contract may be terminated, canceled or suspended, in whole or in part, and Design Professional may be declared ineligible for any further contracts funded by City for a period of one (1) year. This is a material term of this Contract.

#### **Sec. 17. Tax Compliance.**

Design Professional shall provide proof of compliance with the City's tax ordinances administered by the City's commissioner of revenue as a precondition to the City making the first payment under this Agreement or any Agreement renewal when the total Agreement amount exceeds \$150,000.00. If Design Professional performs work on an Agreement that is for a term longer than one year, the Design Professional also shall submit to the city proof of compliance with the City's tax ordinances administered by the City's commissioner of revenue as a condition precedent to the city making final payment under the Agreement.

#### **Sec. 18. Assignability and Subcontracting.**

(a) Assignability. Design Professional shall not assign or transfer any part or all of Design Professional's obligation or interest in this Contract without prior written approval of City. If Design Professional shall assign or transfer any of its obligations or interests under this Contract without the City's prior written approval, it shall constitute a material breach of this Contract. This provision shall not prohibit Design Professional from

subcontracting as otherwise provided for herein.

(b) Subcontracting. Design Professional shall not subcontract any part or all of Design Professional's obligations or interests in this Contract unless the subcontractor has been identified in a format required by City. If Design Professional shall subcontract any part of Design Professional's obligations or interests under this Contract without having identified the subcontractor, it shall constitute a material breach of this Contract. The utilization of subcontractors shall not relieve Design Professional of any of its responsibilities under the Contract, and Design Professional shall remain responsible to City for the negligent acts, errors, omissions or neglect of any subcontractor and of such subcontractor's officers, agents and employees. City shall have the right to reject, at any point during the term of this Contract, any subcontractor identified by Design Professional, and to require that any subcontractor cease working under this Contract. City's right shall be exercisable in its sole and subjective discretion. City shall not be obligated to pay or be liable for payment of any monies which may be due to any subcontractor. Design Professional shall include in any subcontract a requirement that the subcontractor comply with all requirements of this Contract in performing Design Professional's services hereunder.

#### **Sec. 19. Conflicts of Interest.**

Design Professional certifies that no officer or employee of City has, or will have, a direct or indirect financial or personal interest in this Agreement, and that no officer or employee of City, or member of such officer's or employee's immediate family, either has negotiated, or has or will have an arrangement, concerning employment to perform services on behalf of Design Professional in this Agreement.

#### **Sec. 20. Conflict of Interest - Certification.**

Design Professional certifies that Design Professional is not an expert witness for any party in litigation against the City at the time of the issuance of this Contract.

#### **Sec. 21. Buy American Preference.**

It is the policy of the city that any manufactured goods or commodities used or supplied in the performance of any city Agreement or any subcontract hereto shall be manufactured or produced in the United States whenever possible.

#### **Sec. 22. Independent Contractor.**

Design Professional is an independent contractor and is not City's agent. Design Professional has no authority to take any action or execute any documents on behalf of City.

#### **Section 23. Employee Eligibility Verification.**

If this Contract exceeds five thousand dollars(\$5,000.00), Design Professional shall execute and submit an affidavit, in a form prescribed by City, affirming that Design Professional does not knowingly employ any person in connection with the contracted services who does not have the legal right or authorization under federal law to work in the United States as defined in 8 U.S. C. § 1324a(h)(3). Design Professional shall attach to the affidavit documentation sufficient to establish Design Professional's enrollment and participation in an electronic verification of work program operated by the United States Department of Homeland Security (E-Verify) or an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, under the Immigration Reform and Control Act of 1986. Design Professional may obtain additional information about E-Verify and enroll at <http://www.uscis.gov/e-verify> . For those Design Professionals enrolled in E-Verify, the first and last pages of the E-Verify Memorandum of Understanding that Design

Professional will obtain upon successfully enrolling in the program shall constitute sufficient documentation for purposes of complying with this Section. Design Professional shall submit affidavit and attachments to City prior to execution of the contract, or at any point during the term of the Contract if requested by City.



## ATTACHMENT A SCOPE OF SERVICES

Owner: City of Kansas City, Missouri, Water Services Department  
Design Professional: Black & Veatch  
WSD Contract No: 1443  
WSD Project No: 81000819

- A. **SCOPE OF SERVICES.** The services to be performed by the ENGINEER under this AGREEMENT consist of the Five (5) phases, as stated below. Further, it is understood and agreed that the date of commencement, rate of progress and the time of completion of the work to be done hereunder are essential provisions of this AGREEMENT; and it is further understood and agreed that the work which is the subject of this AGREEMENT shall commence upon execution of this AGREEMENT and receipt of a Notice to Proceed.

Basic services to be provided by ENGINEER under this AGREEMENT for the Project are as follows:

- Phase 0 – Conceptual Design and Planning Services
- Phase 1 – Preliminary Design
- Phase 2 – Final Design, Equipment Procurement, and Bid Phase

A.1 **Conduct Project Administration Services.** Design Professional will provide the management functions required to successfully complete all phases of the work, including all project correspondence with the City; Status Reports, consultation with the City's staff; supervision and coordination of services; implementation of a project specific work plan, procedures, and a quality control/quality assurance plan; scheduling and assignment of personnel resources, administration and coordination of subconsultants, continuous monitoring of work progress; and invoicing for the work performed. The Scope of Services and the subtasks discussed below explicitly set forth what ENGINEER will perform and does not implicitly put additional responsibilities or duties upon ENGINEER.

A.2 **Project Schedule.**

Phase 0 - Conceptual Design – 180 calendar days  
Phases 1 and 2 - Preliminary Design, Final Design, and Bidding – 360 calendar days

A.3 **Cost Estimating.** All opinions of probable equipment, implementation, and lifecycle cost developed for the conceptual study, equipment procurement costs, preliminary design construction costs, final design construction costs, and engineer's bid estimates will follow the recommendations of the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinion level of accuracy presented by ENGINEER will be a Class 4 study or feasibility cost opinion in accordance with accepted industry guidelines and as defined by AACE. Since ENGINEER has no control over the cost of labor, material or equipment furnished by others not under contract to ENGINEER, ENGINEER's opinion of probable cost for construction of the work will be made on the basis of experience and qualifications as an ENGINEER. ENGINEER

does not guarantee or warranty that proposals, bids or actual PROJECT costs will not vary from ENGINEER's opinions of probable cost.

**A.4 Progress Reporting.** ENGINEER will prepare monthly invoices, monthly status reports and general correspondence during all phases of the project. Status reports will include an updated schedule, a summary of status of each major task and a summary of the PROJECT financial status. With each invoice, include a table or excel file divided by task for each task member hours and their position.

**A.5 Follow-On Phases.** At the discretion of the CITY and after completion of the Project, the DESIGN PROFESSIONAL may be requested to provide additional services related to the Wastewater SCADA.

**B.0 PHASE 0 - CONCEPTUAL DESIGN AND STANDARDS.** The conceptual design and master planning services of Phase 0 will form the basis for a standardized approach to instrumentation and control and supervisory control and data acquisition (SCADA) system improvements for Kansas City Water Services Department (WSD) Wastewater Facilities including treatment plants, wastewater pump stations, flood pump stations, in-line storage facilities, local monitoring devices, central platform, and communications backbone. This Conceptual Design task will be completed by ENGINEER within one hundred eighty (180) calendar days of a written Notice to Proceed. Concepts will be developed and design decisions will be made for:

- Centralized SCADA System Platform, Components, and Support
- Central SCADA System Equipment and Related Component Physical Locations
- Backbone Connectivity, Implementation, and Long-term Support
- End Users Definitions and system use requirements
- Transition of Currently Active Platforms

**B.0.1 Review System Documentation.** ENGINEER will perform a general assessment of available SCADA system documentation, including the existing Wastewater SCADA Master Plans, OCP/Smart Sewer implementation plans, system block diagrams, network block diagrams, communication system block diagrams, SCADA technology overview at up to 60 remote sites (refer to Table 1). ENGINEER will assist WSD in identification of the specific documents to be reviewed. Where existing documents are incomplete or missing, they shall be identified. WSD shall be responsible for assembling all available required data for review by ENGINEER. If the WSD chooses to expand or update the existing SCADA system documentation this work will be completed as supplemental or optional services.

**B.0.2 Project Initiation Meeting.** Conduct a Project Initiation Meeting with WSD to confirm PROJECT goals and objectives; to review PROJECT schedule and budget commitments; to review facilities; obtain existing system documentation; review advantages and disadvantages of system platform options (Wonderware and Rockwell) and identify criteria for the existing system condition assessment. Criteria will include visual inspection, consideration of component age and remaining useful life, expected duration of vendor support and availability of spare parts, ease of maintenance, expansion capacity and conformance to industry standards/best practices.

As part of the Project Initiation Meeting, discuss Mission Communications remote terminal units (RTUs) as an option for installation at remote sites. Provide discussion regarding advantages and disadvantages of using Mission RTUs versus using Allen Bradley PLCs as the field interface devices.

**B.0.3 Conduct On-Site Interviews and Field Investigations for Wastewater Facilities.**

ENGINEER will conduct a condition assessment of each facility listed in Table 1 at the end of this scope document and a series of structured interviews with individuals or groups identified at the Project Initiation Meeting and utilize an on-line survey to selected staff. ENGINEER will provide the target audience with a structured questionnaire outlining system functions and features to be considered. Two separate 2-hour interviews will be conducted. Anticipated functional groups include operations, technical support staff, information technology staff, and engineering. ENGINEER will conduct informal interviews with WSD staff to document current security practices, features of the existing system that work well and should be retained or shortcomings that should be addressed while performing the condition assessments. ENGINEER will observe how operators currently interact with existing SCADA system components to identify potential improvements to enhance functionality and ease of use. Findings from the site visits will be documented in technical memorandum (TM) 1.

**B.0.4 SCADA System Assessment.** A TM will be developed for each of the major elements presented below; a total of four (4) TM will be prepared – one for each of the elements described.

**B.0.4.1 TM1 – SCADA System Readiness and Vision.** This TM will assess the condition of the existing SCADA system and identify functional needs and requirements for the future. Development of the report will be based on on-site field investigations and meetings with staff. Complete the following tasks:

- A. Using the criteria developed at the Project Initiation Meeting, document the condition and locations of existing SCADA system components including HMI operator workstations, HMI networks, SCADA runtime servers, SCADA historical data collection systems, control networks, PLCs, and RTUs.
- B. Develop an understanding of the existing radio backbone methodology including the physical locations and issues.
- C. Study existing process control strategies and adequacy of the existing monitoring and control functions. Consider ways to improve or optimize the level of monitoring and control. Consider existing features that should be retained and shortcomings that should be addressed. Review options for tie between O&M support systems and SCADA.
- D. Consider current security practices, with respect to National Institute of Standards and Technology (NIST) and Department of Homeland Security (DHS) guidelines. Define data access requirements for other users and systems. Discuss remote and mobile operation requirements.

- E. Discuss existing and possible future physical locations for SCADA equipment, servers, workstations, routers, and switches. Discuss equipment placement as it relates to reliability, operational efficiency, operational functionality, physical security, H2S environmental effects, expandability, network connection options, back-up electrical power sources, server failover and recovery options.
- F. Review functional requirements identified during formal and informal interviews with WSD staff and observations of their interaction with the existing systems. Discuss potential operational, maintenance, IT, business, and strategic needs.
- G. Conduct SCADA Trends Workshop to inform WSD attendees of the latest trends in the industry. Using the information obtained in the workshop and information obtained through staff interviews and meetings, develop SCADA Vision statements for application to all future SCADA planning, design, and construction activities.
- H. After the SCADA Trends Workshop, a Wastewater SCADA Chartering Workshop will be held to further detail SCADA system vision, functionality, and capabilities.
- I. ENGINEER will document the findings of the site visits, inventories, interviews, workshops, and documentation review of this task in TM1. A draft copy will be transmitted to the WSD in pdf format for review and comment. ENGINEER will revise the draft memorandum incorporating ENGINEER's responses to WSD's comments. The final memorandum will be provided to the WSD electronically in pdf format and will be incorporated into the Conceptual Design Report at the end of this phase.

**B.0.4.2 TM2 – Wastewater SCADA System Investigation Results and Recommendations.**  
Complete the following:

- A. Rockwell Automation PlantPax SCADA software platform is being utilized on current in-plant systems already installed at the Blue River Treatment Complex and Fishing River Treatment Plant by other projects. ENGINEER will present comparison between PlantPax and Schneider Electric Wonderware System Platform during the Project Initiation meeting. WSD will make a choice for one package moving forward on the project. ENGINEER will coordinate with WSD/City procurement staff to document and justify SCADA software for sole-source procurement or inclusion in a construction contract. Evaluate project delivery alternatives to reduce cost and increase value and quality of delivered systems. Consider negotiating long-term pricing for SCADA software, SCADA hardware, and communications backbone equipment. Advise methods to develop and use qualification-based selection for programming and system integration services
- B. Evaluate and make recommendations for regarding staffing and/or required support agreements. Discuss staff development needs and provide recommendations. Develop guideline for the preparation of Standard Operating Procedures (SOP's) and require that SOP's be provided as part of the construction phase including server failure, communication failures, history retrieval, and other standard tasks to support WSD staff's use and maintenance.

- C. Identify and document operational, maintenance, IT, business, and strategic goals. The following bullet list has already been emphasized by Operations. Expand on Operations and the other five areas.
- Information should be readily available and be easily understood. Data decimal point rounding conventions should be developed.
  - It should be reasonably easy to make changes to enhance day-to-day operations.
  - Alarms should be meaningful to avoid alarm fatigue. Should be able to sort and print alarm reports.
  - The system should not have limitations on handshaking ability with other devices which may have meaningful information needed by Operations.
  - The system should securely support remote access.
  - Only meaningful information should be conveyed back from the field, not all information.
  - The HMI control screens should be functional and intuitive to Operators. It should not be necessary to go through several nested screens to get to the needed information or control.
  - Process control formulas should be visible and understandable.
  - Evaluate which functions will be local and remote control and develop security hierarchy.
- D. Develop server implementation including failover, recovery, historian, backup methodologies, remote access, network management, security, information management, and interfaces with asset management and other enterprise systems. Analysis will consider ease of generating automatic and ad hoc reports and access to historical operational data to support optimized plant operations.
- E. Consider existing locations or make recommendations for new locations for equipment and staff. Justify recommendations based on operational reliability, efficiency, operational functionality, physical security, H2S environmental effects, expandability, network connection options, and back-up electrical power sources. A new central control room and new server location(s) are anticipated and may be further developed by optional services for construction if suitable existing locations are not identified by the Engineer and City.
- F. Evaluate alternatives to support remote and mobile operations. Analysis will consider and address cyber security issues related to means and methods to isolate the SCADA system from the internet or other business networks.
- G. Consider, evaluate, and discuss communication system alternatives for connectivity between the in-line storage and real time control systems as a uniquely different requirement verses the monitoring only of an automated process such as a small lift station.
- H. Coordinate SCADA planning considerations with Smart Sewer to ensure Smart Sewer recommendations can be implemented in SCADA system and that data can be shared between SCADA and the Smart Sewer program.

- I. Assess backbone communications needs and recommend improvements including migration from serial radios and phone line telemetry to Ethernet, utilization of cell phone technology, fiber technology, and/or radios. The use of a combination of technologies should be considered and justified if necessary. Develop a decision tree that may be used in the future for determining how to connect new locations.
- J. Develop systematic approach to separate existing Dynac/Kapsch and Microtel Autodialer sites while minimizing impact on operations and coordinating with on-going capital improvement projects. The plan will define site groupings based on 1) existing systems utilized 2) types of control needs and priorities 3) physical location challenges and types. Identify, quantify, and report on the gap between existing control systems at sites and connecting to the new platform. Provide an itemized CIP cost estimate. Phase 1-3 of this project will connect and configure five locations: Fishing River WWTP; Blue River WWTP; Santa Fe Pump Station; 87th Street Pump Station; and Turkey Creek Pump Station. It is anticipated these initial sites will have some PLC configuration modifications to implement either PlantPax or Wonderware interface requirements. These five sites are included for initial development of the backbone. Additional sites may be added by optional services, follow-on phases, and separate projects. Additionally, investigation of provisions required for auxiliary control rooms at Fishing River WWTP and Birmingham WWTP are included.
- K. Provide and define equipment and life cycle cost in recommendations.
- L. ENGINEER will document the evaluations along with the findings and recommendations of this task in TM2. A draft copy will be transmitted to WSD in pdf format for review and comment. ENGINEER will revise the draft memorandum incorporating ENGINEER's responses to WSD's comments. The final memorandum will be provided to the WSD electronically in pdf format and will be incorporated into the Conceptual Design Report at the end of the phase.

**B.0.4.3 TM3 – Wastewater Communications Network Backbone and Platform Support.**  
Utilizing information technology (IT) professionals coordinating with operational technology (OT) professionals to complete the following tasks:

- A. Coordinate all recommendations with B.0.4.1; TM1–SCADA System Readiness Assessment and B.0.4.2; TM2–Wastewater SCADA System Investigation Results and Recommendations.
- B. Specify the general architecture requirements of the communications backbone in written and diagrammatic form. The architecture shall be in compliance with Control System Industry Standards, IEC 6243, NIST 800-82, and US Department of Homeland Security/Idaho National Laboratory Report INL/EXT-06-11478 providing the highest level of availability, integrity, and confidentiality. The initial project shall have the goal of developing a “network security overlay” that will be the basis of quickly and safely interfacing future sites to the SCADA system platform. The design shall include defense-in-depth strategies.



- C. Recommend IT staffing or support agreement needs. Provide industry standard salary ranges and estimated support agreement scope and costs.
- D. Provide and define equipment and life cycle cost. Tabulate in tables or other format to convey information.
- E. Develop a network ip addressing scheme which will be the basis to connect all future systems. Consider existing addressing modifications on the five sites which will be connected initially.
- F. Provide recommendations for storage and retrieve process data history. Provide long term costs considerations. Include the concepts in the architecture discussion (TM3-B).
- G. The five initial physical site locations will be chosen to implement the failover and recovery platform architecture, central control, and other agreed upon sites. Beyond the five initial locations, develop typical migration recommendations by groupings for all other existing SCADA locations.
- H. Develop a bid specification for equipment, software and installation required to develop the initial building blocks of the platform and backbone.
- I. Define and evaluate the use of City IT, third party fiber carrier, satellite, third party cell phone, reuse or modification of existing radio networks, or other Engineer chosen option of conveying data that would meet the needs of the project. Radio investigations will include up to three different frequency bands. (Note: Availability of licensed frequencies is not guaranteed, therefore, the possibility of unlicensed bands is included in the optional services.) In a workshop, Engineer will work with WSD to develop a decision tree that may be used in the future for how to connect new locations.
- J. ENGINEER will document the discussions along with the findings and recommendations of this task in a TM. A draft copy will be transmitted to WSD in pdf format for review and comment. ENGINEER will revise the draft memorandum incorporating ENGINEER's responses to WSD's comments. The final memorandum will be provided to the WSD electronically in pdf format and will be incorporated into the Conceptual Design Report at the end of the phase.

**B.0.4.4 TM4 – Wastewater SCADA System Standards.** This TM will reproduce, enhance, and expand on the existing Wastewater Master Plan Instrumentation and Control and SCADA System Standards Document that will be maintained and updated by WSD staff after the Project is completed. The purpose of the document is to provide guidelines to engineers, consultants and system integrators that are designing or implementing additions to the Instrumentation and Control and SCADA System.

- A. Instrumentation, control and SCADA system standards will include the following, at a minimum:
  - Directory Development – User, Groups, Assets, Access Hierarchy

- SCADA hardware and software standards
- HMI graphic displays
- Historical data, reporting and trending
- Alarming (per ISA 18.02 Management of Alarm Systems for the Process Industries)
- Communication network equipment including decision tree develop in the conceptual design for connecting new sites.
- Security policies and procedures
- PLC hardware requirements
- PLC programming requirements
- Instrumentation standards and preferences
- Consultant and vendor documentation requirements
- Submittals and testing requirements
- Standard Operator Procedures format and general requirement for when they are necessary.

B. ENGINEER will revise and expand upon the existing standards contained in the Wastewater Master Plan. Draft copies will be transmitted to WSD in pdf format for review and comment. ENGINEER will revise the draft memorandum incorporating ENGINEER's responses to WSD comments. The final standards will be provided to the WSD electronically in pdf and Microsoft Word format and will be incorporated into the Conceptual Design Report at the end of the phase and become the new WSD standards document.

**B.0.5 Quality Assurance/Quality Control.** The Draft Conceptual Design Report will be reviewed by ENGINEER's technical advisors or senior technical staff for quality assurance/quality control (QA/QC) purposes prior to delivery to the WSD. Results of said reviews will be maintained by ENGINEER in its record files until completion of the Project. The results of the QA/QC review will be incorporated into the Final Conceptual Design Report.

**B.0.6 Draft Report.** ENGINEER will document the conclusions of the conceptual study in a report. The technical memoranda developed under Task B.0.4 will form the chapters or sections of the report along with the conceptual cost opinions. An executive summary will be developed and included in the Conceptual Design Report summarizing the findings, recommendations and cost opinions for the respective SCADA system improvements. One (1) electronic pdf copy and up to ten (10) hard copies of the draft report will be provided to the WSD for review and comment.

**B.0.7 Draft Report Review Meeting.** Meet with the WSD to review the Draft Conceptual Design Report and obtain WSD's consolidated written comments. WSD and ENGINEER will discuss what elements to include in the subsequent preliminary and detailed design phases as

limited by available funding and prioritized by WSD's engineering, operations and maintenance staff.

**B.0.8 Final Report.** Resolve questions and incorporate responses to WSD's review comments into the final report. Submit to WSD up to ten (10) copies and one (1) electronic pdf copy of the Final Conceptual Design Report.

**B.0.9 WSD's Responsibilities.** WSD will furnish, as required by the herein described Scope of Services and not at the expense of the ENGINEER, the following items:

- A. Provide access to all WSD sites for field investigations by ENGINEER.
- B. Provide assistance by placing at ENGINEER's disposal available information pertinent to the assignment, including previous reports, drawings, specifications, operation and maintenance records and any other data relative thereto. Provide said information within fourteen (14) calendar days of receipt of a written request by ENGINEER. When required non-disclosure agreements will be provided.
- C. WSD hereby commits to review periods for interim deliverables of no more than fourteen (14) calendar days from receipt of deliverables from ENGINEER. WSD shall provide consolidated written review comments to ENGINEER within that period. The schedule shall be extended one day for each additional day beyond the fourteen (14) calendar day review period.
- D. WSD's project manager will provide the services of at least one (1) WSD employee who has the right of entry to and knowledge of the existing facilities. Site visits will be required on multiple occasions over the course of the Project.
- E. WSD's project manager will coordinate the scheduling of meetings between the WSD's management, engineering, information technology, and operations and maintenance groups and the ENGINEER.

**B.1 PHASE 1 - PRELIMINARY DESIGN.** The Scope of Services for Preliminary Design and the subtasks discussed below explicitly set forth what ENGINEER will perform and does not implicitly put additional responsibilities or duties upon ENGINEER. This Preliminary Design task will be completed by ENGINEER within one hundred twenty (120) calendar days from acceptance of the Conceptual Design Report.

All opinions of probable construction cost developed for Preliminary Design will follow the recommendations of the AACE International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinion level of accuracy presented by ENGINEER will be a Class 3 budget authorization or control cost opinion in accordance with accepted industry guidelines and as defined by AACE. Since ENGINEER has no control over the cost of labor, material or equipment furnished by others not under contract to ENGINEER, ENGINEER's opinion of probable cost for construction of the work will be made on the basis of experience and qualifications as an ENGINEER. ENGINEER does not guarantee or warranty that proposals, bids or actual PROJECT costs will not vary from ENGINEER's opinions of probable cost.

The level of effort for preliminary design has been based on the following assumptions:

- The five sites included in the SCADA upgrades include: Fishing River WWTP; Blue River WWTP; Santa Fe Pump Station; 87th Street Pump Station; and Turkey Creek Pump Station. These sites have recently been upgraded and have new instruments and electrical equipment.
- A central control room will be installed at the Blue River WWTP in the location of current office space in the Administration Building. An ancillary control room at Fishing River WWTP is also included. This will be located in the existing room currently housing SCADA workstations. For each location, new walls will be needed to create a server room and ventilation improvements will be needed.
- New fiber will be run to each site to provide the communication network. An allowance of 12,500 feet has been included for survey and design of the new fiber. Survey and utility locates will be provided for the new fiber within this 12,500 feet. An allowance of \$80,000 for survey and \$12,500 for utility locates is included in the base contract. Additional survey or utility locates will be provided through Optional Services.
- Design does not include new radio towers at any of the five sites. One of the five sites will be equipped with radio communication to establish the standards.
- Electronic versions of P&ID drawings are available for the five sites that are included in the initial SCADA project such that they don't need to be created from scratch.
- Control narratives will build on existing available control narratives. Control narratives will be provided to ENGINEER in electronic format (Word or pdf). City will obtain all temporary and permanent easements for the new fiber installation.
- City will be responsible for obtaining permits associated with the new fiber installation including but not limited to railroad companies, USACE, and other entities.
- Engineer will not be responsible for design of utility relocations for installation of new fiber.

- Engineer will not be responsible for design of new pavement associated with the installation of new fiber.
- Base scope assumes that programming/configuration of the SCADA system will be done by the construction contractor. ENGINEER can offer programming/configuration services as an optional service.

Preliminary Design shall include:

**B.1.1 Project Initiation Meeting/Inspections.** Conduct a Project Initiation Meeting with WSD to confirm PROJECT goals and objectives; to review PROJECT schedule and budget commitments; to review facilities; and to obtain records, drawings and data. Evaluate existing building space at the plant to determine adequacy of reuse. One (1) day is budgeted for the Project Initiation Meeting and plant inspection.

**B.1.2 Design Memorandum.** Prepare a design memorandum and preliminary drawings as required to establish agreement on the scope, design parameters, performance requirements and PROJECT approach for improvements. Submit electronic .pdf file and five paper (5) copies to WSD for review. The design memorandum will include the following:

Design Criteria (Level 1) Review Document

- Preliminary Communications architecture diagram
- Plant/pump station process and instrumentation diagrams. Since work was recently done on the five sites, it is assumed that existing P&IDs can be used as a starting point to show any required modifications.
- The plant/pump station process and instrumentation diagrams will be coordinated with WSD Operations to include reporting for support of the O&M dashboard.
- Preliminary input/output lists
- Engineer provided computer generated radio path studies if proposed and third party agreements if proposed.
- Primary equipment layouts and furnishings
  - Electrical one-line with consideration of availability and reliability of control power
  - Preliminary physical environment control and conditioning measures
  - Preliminary lighting and security related to control room modifications and construction
  - Number and size of equipment
  - Regulatory and code requirements
  - Preliminary cost opinions for recommended work
  - Preliminary Construction methodology, sequence, and schedule

**B.1.4 Design Memorandum Review.** Meet with the WSD and obtain WSD's comments on the design memorandum and preliminary drawings. Resolve questions and revise documents, if

necessary and submit ten (10) final copies and one electronic pdf copy of final Design Memorandum to WSD.

**B.1.5 Quality Assurance/Quality Control.** Designate a QA/QC review team to provide QA/QC reviews at the Preliminary Design phase. Team shall consist of a technical advisor or senior technical staff not associated with the day-to-day design work.

**B.1.7 WSD's Responsibilities.** will furnish, as required by the herein described Scope of Services and not at the expense of the ENGINEER, the following items:

**B.1.7.1** Provide access to sites for field investigations by ENGINEER.

**B.1.7.2** Provide assistance by placing at ENGINEER's disposal available information pertinent to the assignment, including previous reports, drawings, specifications, operation and maintenance records and any other data relative thereto. Provide said information within fourteen (14) calendar days of receipt of a written request by ENGINEER.

**B.1.7.3** WSD hereby commits to review periods for interim deliverables of no more than fourteen (14) calendar days from receipt of deliverables from ENGINEER. WSD shall provide consolidated written review comments to ENGINEER within that period. The schedule shall be extended one day for each additional day beyond the fourteen (14) calendar day review period.

**B.1.7.4** WSD's project manager will provide the services of at least one (1) WSD employee who has the right of entry to and knowledge of the existing facilities.

**B.1.7.5** WSD's project manager will coordinate the scheduling of meetings between the WSD's management, engineering and operations and maintenance groups and the ENGINEER.



**B.2**     **PHASE 2 - FINAL DESIGN.** The Scope of Services for Final Design and the subtasks discussed below explicitly set forth what ENGINEER will perform and does not implicitly put additional responsibilities or duties upon ENGINEER. The same assumptions made for Preliminary Design are included in the Final Design Phase. This Final Design task will be completed by ENGINEER within two hundred ten (210) calendar days of WSD's written acceptance of the Final Design Memorandum. The time required for bidding, award and construction contracting is expected to take one hundred fifty (150) calendar days; this is in addition to the time required for Final Design.

All opinions of probable construction cost developed for Final Design will follow the recommendations of the AACE International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinion level of accuracy presented by ENGINEER for the 60-percent deliverable will be a Class 2 control or bid cost opinion in accordance with accepted industry guidelines and as defined by AACE. The cost opinion level of accuracy presented by ENGINEER for the 95-percent and final deliverable will be a Class 1 check estimate or bid cost opinion in accordance with accepted industry guidelines and as defined by AACE. Since ENGINEER has no control over the cost of labor, material or equipment furnished by others not under contract to ENGINEER, ENGINEER's opinion of probable cost for construction of the work will be made on the basis of experience and qualifications as an ENGINEER. ENGINEER does not guarantee or warranty that proposals, bids or actual PROJECT costs will not vary from ENGINEER's opinions of probable cost.

Final Design shall include:

**B.2.2**   **Construction Contract Documents.** Prepare detailed drawings, specifications and other Construction Contract Documents for the proposed construction work and for materials and equipment required. The documents shall be prepared for selection of a private construction Contractor on a competitive bid basis. Construction Contract Documents shall be in accordance with WSD standards, detailed specifications and approved preliminary plans developed in Preliminary Design. Construction Contract Documents will be prepared in stages to facilitate review by WSD and provide an orderly progression of the design. Interim deliverables will be as follows:

**60-percent (Level 2) Review Documents**

- Equipment Physical Locations and Layouts
- P&ID drawings as described in Level 1
- Engineer provided physical radio path study if required
- Complete but not final construction methodology, sequence, and schedule
- Electrical systems one-line including generator if required
- Communications Network architecture diagram including major components
- Site plans required for fiber duct banks, if required
- Draft technical specifications for major equipment

- Control narratives required to support SCADA upgrades at each of the five sites.

95-percent (Level 3) Review Documents

- Complete specifications
- Remaining drawings, details and specifications
- Signed and sealed drawings and specifications

**B.2.3 Construction Cost Opinions.** At each design level, prepare an opinion of probable construction cost for the proposed work covered by the Construction Contract Documents.

**B.2.4 Quality Assurance/Quality Control.** Designate a QA/QC review team to provide QA/QC reviews at the Final Design phase. Team shall consist of a technical advisor or senior technical staff not associated with the day-to-day design work.

**B.2.5 Design Reviews.** ENGINEER shall provide to WSD for review five (5) sets of Construction Contract Documents for the 60- and 95-percent complete sets of Construction Contract Documents. Drawings will be half size. Meet with WSD at the 60- and 95-percent complete stages to present the design and obtain WSD review comments. Resolve questions and address WSD comments at each level.

**B.2.6 Permitting and Regulatory Reviews.** ENGINEER will provide documentation required for local building permits and three (3) sets (half-size drawings) of Construction Contract Documents. Respond to questions from agencies via telephone or through written correspondence.

**B.2.7 Final Cost Opinion.** Upon completion of the Construction Contract Documents reviews, update the opinion of probable construction cost and revise as required.

**B.2.8 Mylar Submittal/CAD Files.** ENGINEER will incorporate review comments concerning the 95-Percent Complete Construction Contract Documents and will furnish one (1) full-size check set printed on bond paper. Upon WSD approval of check set, ENGINEER shall submit signed and sealed full-size mylars for final WSD signatures. The electronic CAD Drawings and reference files will be provided on a single thumb drive to be archived by the City. The construction as-built drawings will supplement or replace these files at the digression of the City.

**B.2.9 Bidding Services.** The Project will be advertised for construction by a general contractor as one bid package for all five sites, control room, and ancillary control room. ENGINEER will provide the following services prior to, during and immediately following Project advertisement.

**B.2.9.1 Prepare Advertisement and Bidding Documents.** Assist WSD in establishing bid opening dates and prepare Construction Contract Documents for distribution by the WSD for the construction project.

Provide the following numbers of copies to the WSD for copying and reproduction by WSD for distribution to prospective bidders:

- Specifications 1 loose copy
- Final Mylar drawings 1 set
- Electronic Drawing and Specification Files 1 CD containing pdf files
- Electronic Proposal 1

**B.2.9.2 Pre-Bid Assistance.** Address inquiries prior to the bid opening from contractors, subcontractors, suppliers and public officials. Interpret bidding documents. Prepare up to two (2) addenda to the Construction Contract Documents, as required. Create conformed drawings and specifications prior to award.

**B.2.9.3 Pre-Bid Conference.** Attend and assist WSD, at a date and time selected and a place provided by WSD, with a pre-bid conference to:

- Confirm the types of information required by the Construction Contract Documents and the format in which bids are to be presented.
- Review special PROJECT requirements and Construction Contract Documents in general.
- Receive requests for interpretations that will be issued to plan holders by addendum, if necessary.

**B.2.9.4 Bid Opening/Final Cost Opinion.** Submit a sealed, final opinion of probable construction cost prior to bid opening. Assist WSD in reviewing the bids for completeness and accuracy.

**B.2.9.5 Pre-Award Services.** Consult, advise, and submit information on the responsiveness of the apparent low Bidder, the acceptability of its major subcontractors and the substitution of material and equipment proposed by the apparent low Bidder. Pre-award services will include:

- Qualifications of Apparent Successful Bidder. Review and evaluate the qualifications of the apparent successful bidder and the proposed major or specialty subcontractors. The review and evaluation will include financial resources and reference checks on previous experience.
- Bid Tabulations. Prepare and distribute a signed and sealed bid tabulation sheet, evaluate bids and make a recommendation to Owner concerning contract award.

**B.2.11 WSD's Responsibilities.** WSD will furnish, as required by the herein described Scope of Services and not at the expense of the ENGINEER, the following items:

**B.2.11.1** WSD will handle all copying and reproduction and all aspects of bidding document distribution during PROJECT advertisement.

**B.2.11.2** WSD will issue all addenda during bidding services.

**B.2.11.3** WSD hereby commits to review periods for interim deliverables of no more than fourteen (14) calendar days from receipt of deliverables from ENGINEER. WSD shall provide consolidated written review comments to ENGINEER within that period. The schedule shall be extended one day for each additional day beyond the fourteen (14) calendar day review period.

**B.2.11.4** WSD's project manager will coordinate the scheduling of meetings between WSD's management, engineering and operations and maintenance groups and the ENGINEER.

**B.3** **PHASE 3 - GENERAL SERVICES DURING CONSTRUCTION.** Construction phase services will be added as an amendment to the contract after the design of the project is complete.

**B.4** **PHASE 5 Annual Security Audits and Performance Measurement.** Three annual performance audits will be included in the Construction Phase Services Amendment.

**B.5** **Optional or Supplemental Services.** The following elements are not included in the Project's Scope of Services for Preliminary Design, but can be added as Supplemental or Optional Services by separate written authorization.

**B.5.1** **Development of unavailable Record Documents.** ENGINEER will research, document, develop drawings, tables, data bases, or other agreed upon format in the interest of project development.

**B.5.2** **Engineering Services associated with adding SCADA sites.** ENGINEER will specify and provide construction phase services related to SCADA sites beyond the initial five sites included in the base agreement. This work may be also be related to design assistance with new WSD construction projects to aid in the transition between SCADA systems.

**B.5.3** **Control Room or other ancillary site.** ENGINEER will design and provide construction phase services related to construction of spaces required to house system components and allow use of the system by operators whether that is a control room, office, or other spaces.

**B.5.4** **Remote Site Visits** - Up to two remote site visits within a six hour drive for up to four City participants or for an overnight trip including airfare may be included to discuss details and strategies of other operating utilities. All travel expenses will paid by the Engineer's Agreement Fees and include airfare (if needed), 2 rental cars, fuel, meals for two days, and hotel rooms for one overnight stay per trip.

**B5.5 Radio Tower.** Provide design memo and preliminary drawings for construction of a radio tower. Tower location is assumed to be on City-owned property.

**B5.6 Easement and Permitting Assistance.** Providing assistance with developing easement documents and permitting coordination for installation of the new fiber network.

**B5.7 Additional Survey and Utility Locates.** Provide additional survey or utility locations as needed beyond the base contract budgeted allowance.

#	Name	Function	Address
600	Southwest Blvd	Pumping/Flood	2800 SW Blvd
601	25 <sup>th</sup> Street	Flood	2501 Fairmont
602/617	Santa Fe	Pumping/Flood/ILS	1200 Woodsweather Rd
603	Broadway	Flood	101 Broadway
604	North Airport	Flood	1150 Richards Rd
606	Gillis	Flood	1000 E. Riverfront Dr
607	Lydia	Flood	1400 E. Riverfront Dr
608	Prospect	Flood	2600 E. Owen St
609	Milwaukee	Flood	1827 N. Chouteau Trfwy
610	Truman	Flood	7700 E. Levee Rd
611	Hawthorn	Flood	9100 E. Levee Rd
612	Blue Banks	Flood	7601 Rochester
614	S. Airport	Flood	95 N. Richards Rd
616	Westside	Eff. Pumping	1501 Woodweather Rd.
618	Swope Ind.	Pumping	4300 E. 75th Terrace
619	N. Church Estates	Pumping	8908 NE 72nd St
620	Blue River	Eff. Pumping	7800 Front St
623	Pied Creek	Pumping	6615 Eastside Dr
631	First Creek	Pumping	2450 NW 134 <sup>th</sup> St
632	Interim Second Creek	Pumping	5757 NW Cookingham Dr.
637	S Airport Relief Well	Flood	95 N. Richards
642	Wildwood West	Pumping	8727 N. Winfield Ave.
643	KCI Industrial	Pumping	9900 N Amity
646	Briarcliff West	Pumping	3498 N. Wyoming
647	15th and Crystal	Pumping	7601 E. Truman Rd
648	Line Creek	Pumping	2599 NW Tullison
649	Riverside	Pumping	Hwy 9 and Northwood
651	Blue River	Pumping	7300 Hawthorne Rd
652	Buckeye Creek	Pumping	5001 Birmingham Rd
658	NEID	Pumping	7300 Hawthorne
661	Turkey Creek	Pumping/ILS	2300 State Line
662	Riverside Horizons	Pumping	Mo Hwy 9 & Interstate 635
663	Birchwood	Pumping	10320 Indiana
667	12th Street	Pumping	7801 E 12th Street
669	Round Grove	Pumping	5901 Coal Mine Rd
676	S. Air Pumping	Pumping	101 Lou Holland Dr.
677	118th & Lawndale	Pumping	5799 E 118th
678	87 <sup>th</sup> St	Pumping	7800 Prospect
682	Lake Waukomis	Pumping	5801 NW 78 <sup>th</sup> Terrace
684	White Aloe	Pumping	6510 N.W. Platte Hills Rd.

686	Brush Creek	Pumping	4640 Prospect
687	Upper Rush	Pumping	8100 Eastside Drive
688	Harlem	Pumping	250 East Harlem Street
691	Burlington Creek	Pumping	4700 Green Hills Road
692	83rd Street	Pumping	8100 Blue River Rd
693	Birmingham	Pumping	11011 Birmingham Rd
694	Mace Road	Pumping	7500 N. Mace Rd
696	Weatherby Lake	Pumping	8100 Westside Drive
697	Platte Woods	Pumping	74th and Chatam Ave
699	Kemper	Flood	1701 W. American Royal Ct
---	Chouteau	Pumping/ILS	5300 Municipal
---	Gooseneck Creek	Pumping/ILS	TBD – in design
702	Blue River Secondary	Treatment	7600 Front St
703	Chemical Storage Fac	Treatment	7601 Front St
711	Birmingham	Treatment	10801 NE 28 <sup>th</sup> St
712	Westside	Treatment	1649 Woodsweather Rd
713	Westside Disinfection	Treatment	1649 Woodsweather Rd
715	Todd Creek	Treatment	7600 NW 144 <sup>th</sup> St
718	Rocky Branch	Treatment	500 NE 132 <sup>nd</sup> Street
720	Fishing River	Treatment	10600 NE 118 <sup>th</sup> St
745	KCI De-icing	Flood	West of Paris/Brasilia
746	Northland Mobile	Pumping	3500 NE 118 <sup>th</sup> Terrace
---	City Farm	Land Application	Adjacent to Birmingham WWTP



**ATTACHMENT B**  
**ELECTRONIC DATA REQUIREMENTS**

**A. Kansas City Plan Room - Electronic Format Requirements and Naming Conventions**

1. In addition to other deliverables included in this Contract, items listed below are requirements to accommodate posting bids documents, plans and specifications on the Kansas City Plan Room.
2. Prime Design Professional/Consultant and Sub-Consultants shall adhere to the following electronic format requirements and use the naming conventions as set out below:

**a. Drawings/plans**

- (1) Drawings/plans should be rendered as 200-300 dpi **PDF Format** images. No files may be larger than 5 megabytes in size. Plans/Drawings numbering should follow Form 00015 List of Drawings.
- (2) File names may not include any symbols such as < > : . " / \ | ? ' & # % ^ \* ( ) [ ] { } +
- (3) FILE NAMES: Plans/Drawings numbering should follow Form 00015 List of Drawings. All plans should be named in the following manner: three digit sequential number-brief descriptor. For example: 001-Cover.**pdf** or 002-arc1.**pdf**

**b. CSI specification sections (project manuals)**

- (1) CSI specification sections should be named by division, using DIV as a prefix.  
For example:
  - (a) DIV01.PDF (Technical, Project Specific)
  - (b) DIV02.PDF
  - (c) DIV03.PDF

**c. Summary:**

- (1) Division 00 and 01 in Microsoft Word or Excel
- (2) Division 2-16 in PDF Format
- (3) Completed document originals of Plans and Diagrams of project must be submitted as 200-300 dpi **PDF Format** images.

**ATTACHMENT C**

**ENGINEER FEE SUMMARY AND  
SCHEDULE OF POSITION CLASSIFICATIONS**

Owner: City of Kansas City, MO

Project: Wastewater SCADA

	Project Director	Project Manager	Project Admin	Finance	Senior Structural Engineer	Structural Technician	Structural Engineer	SCADA Technician Advisor / QC	Lead I&C / Engineering Manager	I&C Engineer	Technician	I&C Engineer	I&C Technician	Cyber Security Specialist	HMI Specialist	SCADA Radio Specialist	SCADA Fiber Specialist	SCADA Technician	Cost Estimating	O&M Specialist	Project Controls	SUBTOTAL hours	SUBTOTAL Billings \$	Major Reproduction	Com-Search Fee	Auto / Travel	SUBTOTAL EXPENSES	Subcontract Custom Engineering	Subcontract Telefirm & Browse	Subcontract E&E	SUBTOTAL SUB-CONTRACTS	TOTAL COST	
PHASE/Task																																	
Task A. PROJECT ADMINISTRATION (10 months)																																	
A.1 Project Administration (10 months)	10	144																			16	178	\$ 41,678			\$ -	\$ 8,461		\$ 8,000	\$ 13,451	\$ 55,329		
A.4 Progress Reporting / Invoicing																					36	164	\$ 25,872			\$ -			\$ 2,300	\$ 2,300	\$ 28,172		
Subtotal, Hours	10	180	20	36	-	-	-	-	-	36	-	-	-	-	-	-	-	-	-	-	46	342											
Subtotal, Billings	\$ 4,990	\$ 43,030	\$ 1,600	\$ 4,098	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,516	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,908		\$ 67,780	\$ -	\$ -	\$ -	\$ 8,461		\$ 7,300	\$ 15,751	\$ 83,591		
Task B.0 Groundwater Design and Standards																																	
B.0.1 Review System Documentation										16						60	60	12					168	\$ 31,808			\$ -				\$ -	\$ 31,808	
B.0.2 Project Initiation Meeting										8						8							40	\$ 9,000			\$ -	\$ 1,632		\$ 680	\$ 2,192	\$ 11,192	
B.0.3 Conduct On-Site Interviews and Field Investigations for WW Facilities										20						16	16						176	\$ 35,888			\$ 300	\$ 300		\$ 84,347	\$ 54,347	\$ 90,345	
B.0.4.1 TM1 - SCADA System Readiness and Vision										12						32	8			24			232	\$ 46,112	\$ 100		\$ 1,000	\$ 8,800		\$ 3,500	\$ 50,712		
B.0.4.2 TM2 - WW SCADA System Investigation Results and Recommendations										22						16	80	8					294	\$ 58,430	\$ 100		\$ 100	\$ 1,000		\$ 1,000	\$ 59,530		
B.0.4.3 TM3 - WW Communications Network Backbone and Platform Support										11						120	12						286	\$ 58,630	\$ 200	\$ 20,000	\$ 1,000	\$ 21,200	\$ 14,770		\$ 14,770	\$ 94,600	
B.0.4.4 TM4 - WW SCADA System Standards										24						24							212	\$ 39,684			\$ -				\$ -	\$ 39,684	
B.0.5 Quality Assurance / Quality Control																							56	\$ 12,294			\$ -	\$ 1,691			\$ 1,691	\$ 15,175	
B.0.6 Draft Report										16						16	8						160	\$ 30,552	\$ 300		\$ 300	\$ 1,097			\$ 1,097	\$ 31,939	
B.0.7 Draft Report Review Meeting										4													28	\$ 5,636		\$ 200	\$ 200					\$ 5,836	
B.0.8 Final Report										8						2	4						80	\$ 14,888			\$ -	\$ 1,400			\$ 1,400	\$ 16,288	
Subtotal, Hours	8	60	28	-	12	-	-	54	184	448	-	200	88	108	88	344	122	18	8	34	-	1,734											
Subtotal, Billings	\$ 1,880	\$ 14,348	\$ 2,362	\$ -	\$ 2,424	\$ -	\$ -	\$ 14,834	\$ 80,688	\$ 79,648	\$ -	\$ 35,000	\$ 8,160	\$ 21,600	\$ 11,230	\$ 73,272	\$ 20,882	\$ 2,089	\$ 1,344	\$ 4,244	\$ -		\$ 343,732	\$ 708	\$ 20,000	\$ 2,800	\$ 23,200	\$ 25,270	\$ -	\$ 54,997	\$ 80,177	\$ 467,100	
Task B.1 Permitting Design																																	
B.1.1 Project Initiation Meeting / Inspections										8						8							56	\$ 11,776			\$ -	\$ 8,910			\$ 8,910	\$ 17,686	
B.1.2 Design Memorandum										12						16	16	-	40	40			356	\$ 64,604	\$ 800		\$ 500	\$ 4,900			\$ 4,500	\$ 68,804	
B.1.4 Design Memorandum Review										4													28	\$ 5,896			\$ -	\$ 1,047			\$ 1,047	\$ 6,943	
B.1.5 Survey																							4	\$ 956		\$ 800	\$ 200		\$ 80,000	\$ 12,000		\$ 92,500	\$ 93,656
B.1.6 Quality Assurance / Quality Control																							68	\$ 16,264			\$ -	\$ 3,178			\$ 3,178	\$ 19,442	
Subtotal, Hours	8	36	-	-	2	4	16	82	20	92	-	82	48	18	18	36	32	9	40	40	-		611										
Subtotal, Billings	\$ 1,880	\$ 9,862	\$ -	\$ -	\$ 404	\$ 828	\$ 2,736	\$ 14,082	\$ 5,500	\$ 14,852	\$ -	\$ 8,100	\$ 5,440	\$ 3,320	\$ 2,640	\$ 7,060	\$ 5,472	\$ 1,170	\$ 6,720	\$ 7,280	\$ -		\$ 88,488	\$ 800	\$ 300	\$ 700	\$ 14,636	\$ 88,008	\$ 12,800	\$ 107,136	\$ 267,331		
Task B.2 Final Design																																	
B.2.2 Construction Contract Documents - 80% (Level 2)										48						40	20						710	\$ 125,014	\$ 1,000	\$ 100	\$ 1,100	\$ 18,280		\$ 7,389	\$ 25,673	\$ 151,787	
B.2.3 Construction Cost Option - 80% (Level 2)										2													82	\$ 11,538			\$ -	\$ 800			\$ 800	\$ 12,638	
B.2.4 Quality Assurance / Quality Control - 80% (Level 2)																							108	\$ 27,034			\$ -	\$ 1,632			\$ 1,632	\$ 28,666	
B.2.5 Owner Design Review - 80% (Level 2)										8													70	\$ 14,070			\$ -	\$ 500			\$ 500	\$ 14,570	
B.2.6 Construction Contract Documents - 90% (Level 3)										32						16	20	20	12				438	\$ 73,790	\$ 1,000	\$ 100	\$ 1,100	\$ 14,080		\$ 5,882	\$ 20,072	\$ 94,822	
B.2.7 Construction Cost Option - 90% (Level 3)										4													42	\$ 8,178			\$ -				\$ -	\$ 8,178	
B.2.8 Quality Assurance / Quality Control - 90% (Level 3)																							87	\$ 21,686			\$ -				\$ -	\$ 21,686	
B.2.9 Owner Design Review - 90% (Level 3)										4													66	\$ 11,402	\$ 1,000	\$ 100	\$ 1,100	\$ 5,884		\$ 1,120	\$ 6,984	\$ 19,486	
B.2.6 Permitting and Regulatory Reviews																							24	\$ 4,948	\$ 1,000		\$ 1,000				\$ -	\$ 5,948	
B.2.7 Final Cost Option																							32	\$ 6,864		\$ 1,000	\$ -	\$ 1,000			\$ 1,000	\$ 8,864	
B.2.8 Inter Submittal / CAD Files																							64	\$ 9,528	\$ 1,000	\$ 204	\$ 1,284	\$ 1,634		\$ 442	\$ 2,076	\$ 12,606	
B.2.9 Bidding Services																							-	\$ -			\$ -				\$ -	\$ -	
B.2.9.1 Prepare Advertisement and Bidding Documents										4													28	\$ 4,258	\$ 800		\$ 500				\$ -	\$ 4,758	
B.2.9.2 Pre-Bid Assistance																							42	\$ 7,770			\$ -	\$ 880		\$ 1,200	\$ 1,780	\$ 9,530	
B.2.9.3 Pre-Bid Conference																							10	\$ 2,282		\$ 100	\$ 100				\$ -	\$ 2,382	
B.2.9.4 Bid Opening / Final Cost Option																							6	\$ 1,182			\$ -				\$ -	\$ 1,182	
B.2.9.5 Pre-Award Services																							18	\$ 3,998			\$ -				\$ -	\$ 3,998	
Subtotal, Hours	12	102	88	-	4	24	88	180	100	332	74	100	284	26	48	88	114	47	70	-	-		1,896										
Subtotal, Billings	\$ 3,728	\$ 24,378	\$ 4,872	\$ -	\$ 808	\$ 4,428	\$ 14,768	\$ 40,080	\$ 25,700	\$ 69,092	\$ 9,842	\$ 31,800	\$ 35,904	\$ 4,800	\$ 7,880	\$ 18,888	\$ 19,494	\$ 8,110	\$ 12,768	\$ -	\$ -		\$ 331,380	\$ 5,800	\$ 864	\$ 6,164	\$ 44,148	\$ -	\$ 16,147	\$ 60,287	\$ 397,731		
Task B.4 Optional or Supplemental Services																																	
B.4.1 Optional Services																																	
Subtotal, Hours	-	40	-	-	-	-	60	40	70	100	204	-	-	-	-	348	40	80	-	-	-		1,012	\$ 182,586	\$ 3,916	\$ 15,708	\$ 14,216	\$ 3,481	\$ 15,947	\$ 18,8			

**CONFIDENTIAL****ATTACHMENT C**

**BLACK & VEATCH CORPORATION  
SCHEDULE OF POSITION CLASSIFICATIONS AND SALARY RATES  
FOR  
CITY OF KANSAS CITY, MISSOURI**

Hourly Billing Rates Effective April 1, 2018 through March 31, 2019

JOB CLASSIFICATION	CLASSIFICATION	SALARY RATE	
		MINIMUM RATE	MAXIMUM RATE
Administrative Business (ADM)	ADM 009	90.11	117.68
	ADM 008	62.03	94.25
	ADM 007	51.02	72.35
	ADM 006	38.67	70.51
	ADM 005	33.31	65.44
	ADM 004	26.76	48.88
	ADM 003	22.35	40.35
	ADM 002	17.60	30.32
	ADM 001	17.00	26.52
Administrative Support (ADO)	ADO-005	16.56	46.83
	ADO-004	17.74	35.71
	ADO-003	14.32	28.75
	ADO-002	12.79	22.40
Architectural (ARC)	ARC-008	70.24	72.35
	ARC-007	56.18	65.28
	ARC-006	44.94	61.94
	ARC-005	38.48	48.73
	ARC-004	34.57	39.98
	ARC-003	28.89	35.35
	ARC-001	25.32	26.08
Corporate Management Group (CMG)	CMG-40	125.05	128.80
	CMG-30	135.29	150.01
	CMG-20	94.36	124.40
	CMG-10	77.87	97.69
Construction Services (CNS)	CNS-012	99.05	106.40
	CNS-011	86.43	103.18
	CNS-010	70.11	101.74
	CNS-009	63.95	94.11
	CNS-008	54.98	79.86
	CNS-007	48.14	78.54

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JOB CLASSIFICATION	CLASSIFICATION	SALARY RATE	
		MINIMUM RATE	MAXIMUM RATE
Construction Services (CNS) Cont.	CNS-006	42.30	66.70
	CNS-005	35.00	58.12
	CNS-004	31.20	52.23
	CNS-003	27.10	40.59
	CNS-002	24.77	35.17
	CNS-001	32.14	33.10
Consulting (CST)	CST-008	176.70	182.00
	CST-007	107.45	153.42
	CST-006	79.23	132.19
	CST-005	59.42	105.28
	CST-004	42.15	103.56
	CST-003	38.34	56.07
	CST-002	34.22	49.11
	CST-001	29.08	39.33
Engineering (ENG)	ENG-136	88.42	105.19
	ENG-135	74.57	109.84
	ENG-134	68.39	105.80
	ENG-133	54.73	105.88
	ENG-132	50.89	89.22
	ENG-131	42.89	75.14
	ENG-130	36.91	64.41
	ENG-129	33.73	51.50
	ENG-128	29.70	44.96
	ENG-127	27.89	43.38
Engineering & Technical Specialties (ENS)	ENS-134	78.65	84.43
	ENS-133	62.68	79.10
	ENS-132	46.22	76.91
	ENS-131	37.26	70.88
	ENS-130	35.89	61.02
	ENS-129	30.24	45.33
	ENS-128	22.48	43.98
	ENS-127	24.04	31.00
Engineering Technician (ENT)	ENT-134	71.80	83.09
	ENT-133	48.25	82.92
	ENT-132	50.51	71.79
	ENT-131	42.00	62.94
	ENT-130	34.13	54.19
	ENT-129	30.71	50.73



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JOB CLASSIFICATION	CLASSIFICATION	SALARY RATE	
		MINIMUM RATE	MAXIMUM RATE
Engineering Technician (ENT) Cont.	ENT-128	26.09	41.10
	ENT-127	21.86	38.32
	ENT-126	20.00	32.73
	ENT-125	19.08	29.72
Estimating (EST)	EST-008	85.16	92.32
	EST-007	57.21	87.76
	EST-006	52.00	76.07
	EST-005	44.52	61.20
	EST-004	39.81	54.95
	EST-003	32.69	40.60
	EST-002	29.47	35.61
Finance (FIN)	FIN-008	55.29	76.88
	FIN-007	49.52	65.72
	FIN-006	40.62	63.77
	FIN-005	33.68	48.49
	FIN-004	27.00	39.73
	FIN-003	22.57	35.33
	FIN-002	19.35	31.03
	FIN-001	20.00	20.90
General Management (GMT)	GMT-009	147.41	192.38
	GMT-008	108.68	155.32
	GMT-007	110.68	159.59
	GMT-006	92.84	137.72
	GMT-005	76.94	132.92
	GMT-004	72.75	100.91
	GMT-003	67.50	90.49
	GMT-002	72.60	84.61
	GMT-001	48.91	68.30
Information Technology Services (ITS)	ITS-10	122.79	126.47
	ITS-9	92.25	95.02
	ITS-8	74.48	90.15
	ITS-7	45.90	80.73
	ITS-6	49.52	63.76
	ITS-5	41.31	52.53
	ITS-4	27.40	48.17
	ITS-3	25.33	38.17
	ITS-2	23.01	23.70
Legal (LGL)	LGL-10	126.27	131.09
	LGL-9	107.17	126.28



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JOB CLASSIFICATION	CLASSIFICATION	SALARY RATE	
		MINIMUM RATE	MAXIMUM RATE
Legal (LGL) Cont.	LGL-8	92.48	103.81
	LGL-7	71.82	95.35
	LGL-6	55.17	69.67
	LGL-5	44.57	46.20
	LGL-4	39.49	40.67
	LGL-3	33.09	42.41
	LGL-2	34.46	35.49
Marketing & Communications (MAC)	MAC-010	116.83	120.33
	MAC-009	87.18	93.26
	MAC-008	61.96	83.96
	MAC-007	43.92	71.46
	MAC-006	37.25	60.64
	MAC-005	31.02	50.09
	MAC-004	28.05	42.97
	MAC-003	21.40	36.35
	MAC-002	19.23	29.23
	MAC-001	20.57	22.02
Procurement (PCR)	PCR-008	69.93	84.37
	PCR-007	57.41	85.87
	PCR-006	45.48	62.95
	PCR-005	39.83	61.80
	PCR-004	33.99	49.86
	PCR-003	28.44	40.88
	PCR-002	25.24	38.07
	PCR-001	19.45	30.62
Project Controls (PJC)	PJC-009	90.49	93.20
	PJC-008	89.94	97.06
	PJC-007	64.02	86.40
	PJC-006	52.58	79.53
	PJC-005	48.71	74.75
	PJC-004	32.91	59.20
	PJC-003	34.61	45.63
	PJC-002	31.93	40.61
	PJC-001	23.77	32.38
Project Management (PMT)	PMT-008	110.44	119.81
	PMT-007	95.09	120.33
	PMT-006	91.21	115.80
	PMT-005	82.25	118.45
	PMT-004	73.39	116.81

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JOB CLASSIFICATION	CLASSIFICATION	SALARY RATE	
		MINIMUM RATE	MAXIMUM RATE
Project Management (PMT) Cont.	PMT-003	66.65	100.50
	PMT-002	52.34	95.66
	PMT-001	42.38	86.20
Sales (SAM)	SAM-011	153.55	158.31
	SAM-010	108.12	124.82
	SAM-009	90.95	137.73
	SAM-008	69.23	113.20
	SAM-007	52.73	90.19
	SAM-006	45.56	75.65
	SAM-005	48.04	72.88
	SAM-004	31.38	51.04
	SAM-003	34.34	35.37
	SAM-002	26.42	27.21
Security Services (SEC)	SEC-008	69.67	71.76
	SEC-007	55.87	57.55
	SEC-006	46.60	56.86
Specialized Staff (SPC)	SPC-009	99.40	102.38
	SPC-008	58.48	90.80
	SPC-007	56.95	72.76
	SPC-006	40.37	74.38
	SPC-005	32.53	49.35
	SPC-004	33.06	41.37

End of Attachment C

## **ATTACHMENT D**

### **CITY – LICENSED GEOGRAPHICAL INFORMATION SYSTEM DATA**

CITY will provide licensed materials for Geographical Information Systems to be used for the project as follows:

**Grant of License.** CITY grants to DESIGN PROFESSIONAL and DESIGN PROFESSIONAL hereby accepts, upon the express terms and conditions contained in this Agreement, a non-exclusive License to use the information described herein in the form produced and maintained by the Geographical Information System produced and maintained by City.

**License Materials.** The materials licensed for use by DESIGN PROFESSIONAL under this Agreement are the forms which can be read or manipulated by computer of the geographical and physical characteristic information collected and assimilated in the records of City ("Licensed Materials").

**Use of Licensed Materials.** Subject to the terms, conditions and prohibitions of this Agreement, DESIGN PROFESSIONAL shall be entitled to use the information contained in the Licensed Materials to accomplish the scope of services provided by DESIGN PROFESSIONAL. At the completion of the Agreement, DESIGN PROFESSIONAL shall return all materials to the CITY, and shall permanently remove the Licensed Materials from any media used by DESIGN PROFESSIONAL. At the end of the Agreement, DESIGN PROFESSIONAL shall provide a written certification that all materials are returned and that all Licensed Materials, including copies, have been removed from the equipment or media of DESIGN PROFESSIONAL.

**Transfer of Licensed Materials.** This license is expressly nontransferable and DESIGN PROFESSIONAL shall not transfer any interest, entitlement or obligation under this Agreement to any other person or entity.

**Data.** The data and information contained in the Licensed Materials shall be those files and systems as recorded and existing as of the time DESIGN PROFESSIONAL requests the information.

**Title.** The custody and title and all other rights and interests in the Licensed Materials are and shall at all times remain with the CITY and with the Offices or officials of the CITY having official custody of the Licensed Materials.

**Not Public Records.** The database in the form of the Licensed Materials is proprietary, intellectual property of the CITY and shall not be considered or deemed as open, public records, except as provided in §256.670, RSMo. DESIGN PROFESSIONAL shall and hereby expressly agrees that it will, recognize the property interests of CITY and CITY agrees that it is not,

pursuant to this License, a custodian of any open, public records, except as may exist pursuant to §256.670 RSMo.

**Access to Materials.** Pursuant to the terms and conditions of this agreement, DESIGN PROFESSIONAL shall be provided access to obtain the Licensed Materials in a periodic basis for the term of this Agreement. As provided in this Agreement, DESIGN PROFESSIONAL, shall be entitled to any Modifications, updates, renewals or additional data or information under the License granted by this Agreement.

**Updated Material and Modifications.** CITY shall in accordance with this Agreement and upon request of the DESIGN PROFESSIONAL provide to DESIGN PROFESSIONAL updates to or modifications of all or any specific parts of the data or information in the Licensed Materials. Any such updates or modifications provided by CITY shall be covered by and subject to each and all of the terms and conditions of this Agreement. Furthermore, upon completion or termination of this Agreement, DESIGN PROFESSIONAL, will provide to CITY in a compatible form, updated information developed during the execution of the Scope of Services provided by DESIGN PROFESSIONAL.

**Data Contents.** The data contained in the materials licensed by CITY to DESIGN PROFESSIONAL under this Agreement shall include that information necessary to allow DESIGN PROFESSIONAL to perform scope of services outlined in the Agreement.

**Waiver.** The waiver of any breach of any provision of this license shall not constitute a waiver of any subsequent breach of the same or other provisions of the Agreement.

**Modifications.** Any modification to the rights provided herein for licensed materials shall be in writing executed by each party.

## **ATTACHMENT E**

### **HRD DOCUMENTS**

1. 00450 HRD Form 08: Contractor Utilization Plan & Request for Waiver
2. 00450.01: HRD Letter of Intent to Subcontract
3. 00460 HRD Form 10: Timetable for MBE/WBE Utilization
4. 00470 HRD Form 11: Request for Modification or Substitution
5. 01290.14: Contractor Affidavit for Final Payment
6. 01290.15: Subcontractor Affidavit for Final Payment

## ATTACHMENT E

### CONTRACTOR UTILIZATION PLAN/REQUEST FOR WAIVER

Project Number 81000819, Contract No. 1443

Project Title Wastewater SCADA

Wastewater SCADA  
(Department Project)

Water Services Department  
Department

Black & Veatch Corporation  
(Bidder/Proposer)

STATE OF MISSOURI )  
 ) ss  
COUNTY OF JACKSON )

I, Patrick O'Neill, of lawful age and upon my oath state as follows:

1. This Affidavit is made for the purpose of complying with the provisions of the MBE/WBE submittal requirements on the above project and the MBE/WBE Program and is given on behalf of the Bidder/Proposer listed below. It sets out the Bidder/Proposer's plan to utilize MBE and/or WBE contractors on the project.
2. The project goals are 14 % MBE and 8 % WBE. Bidder/Proposer assures that it will utilize a minimum of the following percentages of MBE/WBE participation in the above project:

**BIDDER/PROPOSER PARTICIPATION: 14 % MBE 8 % WBE**

3. The following are the M/WBE subcontractors whose utilization Bidder/Proposer warrants will meet or exceed the above-listed Bidder/Proposer Participation. Bidder/Proposer warrants that it will utilize the M/WBE subcontractors to provide the goods/services described in the applicable Letter(s) of Intent to Subcontract, copies of which shall collectively be deemed incorporated herein). *(All firms must currently be certified by Kansas City, Missouri)*

- a. Name of M/WBE Firm Custom Engineering, Inc. (MBE)  
Address 12760 E. US Highway 40, Independence, Missouri 64055  
Telephone No. (816) 350-1473  
I.R.S. No. 43-1031915



- b. Name of M/WBE Firm Taliaferro & Browne, Inc. (MBE)  
 Address 1020 East 8<sup>th</sup> Street, Kansas City, Missouri 64106  
 Telephone No. (816) 283-3456  
 I.R.S. No. 48-0758891
- c. Name of M/WBE Firm Environmental Advisors & Engineers (EAE) (WBE)  
 Address 19211 West 64<sup>th</sup> Terrace, Shawnee, Kansas 66218  
 Telephone No. (913) 599-4326  
 I.R.S. No. 43-1806626
- d. Name of M/WBE Firm \_\_\_\_\_  
 Address \_\_\_\_\_  
 Telephone No. \_\_\_\_\_  
 I.R.S. No. \_\_\_\_\_
- e. Name of M/WBE Firm \_\_\_\_\_  
 Address \_\_\_\_\_  
 Telephone No. \_\_\_\_\_  
 I.R.S. No. \_\_\_\_\_

*(List additional M/WBEs, if any, on additional page and attach to this form)*

4. The following is a breakdown of the percentage of the total contract amount that Bidder/Proposer agrees to pay to each listed M/WBE:

**MBE/WBE BREAKDOWN SHEET**

**MBE FIRMS:**

Name of MBE Firm	Supplier/Broker/Contractor	Subcontract Amount*	Weighted Value**	% of Total Contract
<u>Custom Engineering</u>	_____	<u>\$95,947</u>	_____	<u>7 %</u>
<u>Taliaferro &amp; Browne</u>	_____	<u>\$95,947</u>	_____	<u>7 %</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
<b>TOTAL MBE \$ / TOTAL MBE %:</b>		<u>\$191,894</u>		<u>14 %</u>

**WBE FIRMS:**

Name of WBE Firm	Supplier/Broker/Contractor	Subcontract Amount*	Weighted Value**	% of Total Contract
<u>Environmental Advisors</u>		<u>\$109,654</u>		<u>8 %</u>
<u>and Engineers</u>				
<b>TOTAL WBE \$ / TOTAL WBE %:</b>		<u>\$109,654</u>		<u>8 %</u>


\*"Subcontract Amount" refers to the dollar amount that Bidder/Proposer has agreed to pay each M/WBE subcontractor as of the date of contracting and is indicated here solely for the purpose of calculating the percentage that this sum represents in proportion to the total contract amount. Any contract amendments and/or change orders changing the total contract amount may alter the amount due an M/WBE under their subcontract for purposes of meeting or exceeding the Bidder/Proposer participation.

\*\*\*"Weighted Value" means the portion of the subcontract amount that will be credited towards meeting the Bidder/Proposer participation. See HRD Forms and Instructions for allowable credit and special instructions for suppliers.

5. Bidder/Proposer acknowledges that the monetary amount to be paid each listed M/WBE for their work, and which is approved herein, is an amount corresponding to the percentage of the total contract amount allocable to each listed M/WBE as calculated in the MBE/WBE Breakdown Sheet. Bidder/Proposer further acknowledges that this amount may be higher than the subcontract amount listed therein as change orders and/or amendments changing the total contract amount may correspondingly increase the amount of compensation due an M/WBE for purposes of meeting or exceeding the Bidder/Proposer participation
6. Bidder/Proposer acknowledges that it is responsible for considering the effect that any change orders and/or amendments changing the total contract amount may have on its ability to meet or exceed the Bidder/Proposer participation. Bidder/Proposer further acknowledges that it is responsible for submitting a Request for Modification or Substitution if it will be unable to meet or exceed the Bidder/Proposer participation set forth herein.
7. If Bidder/Proposer has not achieved both the M/WBE goal(s) set for this Project, Bidder/Proposer hereby requests a waiver of the MBE and/or WBE goal(s) that Bidder/Proposer has failed to achieve

8. Bidder/Proposer will present documentation of its good faith efforts, a narrative summary detailing its efforts and the reasons its efforts were unsuccessful when requested by the City.
9. I hereby certify that I am authorized to make this Affidavit on behalf of the Bidder/Proposer named below and who shall abide by the terms set forth herein:

Bidder/Proposer primary contact: Black & Veatch Corporation  
Address: 8400 Ward Parkway  
Kansas City, Missouri 64114  
Phone Number: 913-458-4308  
Facsimile number: 913-458-4308  
E-mail Address: oneillpa@bv.com

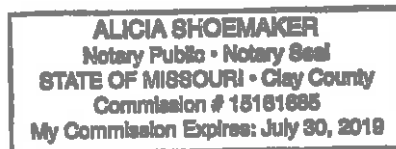
By:   
Title: Associate Vice President  
Date: 5/18/2018  
(Attach corporate seal if applicable)

Subscribed and sworn to before me this 18<sup>th</sup> day of May, 2018

My Commission Expires:

July 30 2019

  
Notary Public





## LETTER OF INTENT TO SUBCONTRACT

Project Number 81000819, Contract No. 1443

Project Title Wastewater SCADA

Black & Veatch Corporation ("Prime Contractor") agrees to enter into a contractual agreement with Custom Engineering, Inc. ("MAA/DBE Subcontractor"), who will provide the following goods/services in connection with the above-referenced contract:

(Insert a brief narrative describing the goods/services to be provided. Broad categorizations (e.g., "electrical," "plumbing," etc.) or the listing of the NAICS Codes in which MAA/DBE Subcontractor is certified are insufficient and may result in this Letter of Intent to Subcontract not being accepted.)

Custom Engineering will assist with electrical, I&C, and HVAC study and design task.

for an estimated amount of \$95,947 or 7 % of the total estimated contract value.

MAA/DBE Subcontractor is, to the best of Prime Contractor's knowledge, currently certified with the City of Kansas City's Human Relations Department to perform in the capacities indicated herein. Prime Contractor agrees to utilize MAA/DBE Subcontractor in the capacities indicated herein, and MAA/DBE Subcontractor agrees to work on the above-referenced contract in the capacities indicated herein, contingent upon award of the contract to Prime Contractor.

Patrick O'Neill  
Signature: Prime Contractor

Patrick O'Neill  
Print Name

Associate Vice President  
Title

5/10/2018  
Date

Joe Davis  
Signature: MAA/DBE Subcontractor

Joe Davis  
Print Name

CEO  
Title

5/18/18  
Date



## LETTER OF INTENT TO SUBCONTRACT

Project Number 81000819, Contract No. 1443

Project Title Wastewater SCADA

Black & Veatch Corporation ("Prime Contractor") agrees to enter into a contractual agreement with Environmental Advisors & Engineers, Inc. ("MAW/DBE Subcontractor"), who will provide the following goods/services in connection with the above-referenced contract:

(Insert a brief narrative describing the goods/services to be provided. Broad categorizations (e.g., "electrical," "plumbing," etc.) or the listing of the NAICS Codes in which MAW/DBE Subcontractor is certified are insufficient and may result in this Letter of Intent to Subcontract not being accepted.)

Environmental Advisors & Engineers will conduct site assessment, staff interviews, and architectural design.

for an estimated amount of \$ 109,654 or 8 % of the total estimated contract value.

MAW/DBE Subcontractor is, to the best of Prime Contractor's knowledge, currently certified with the City of Kansas City's Human Relations Department to perform in the capacities indicated herein. Prime Contractor agrees to utilize MAW/DBE Subcontractor in the capacities indicated herein, and MAW/DBE Subcontractor agrees to work on the above-referenced contract in the capacities indicated herein, contingent upon award of the contract to Prime Contractor.

Patrick O'Neill  
Signature: Prime Contractor

Patrick O'Neill  
Print Name

Associate Vice President 5/18/2018  
Title Date

Robert Bens  
Signature: MAW/DBE Subcontractor

Jill R. Biesma Robert Bens  
Print Name

Vice President 5/18/18  
Title Date



## LETTER OF INTENT TO SUBCONTRACT

Project Number 81000819, Contract No. 1443

Project Title Wastewater SCADA

Black & Veatch Corporation ("Prime Contractor") agrees to enter into a contractual agreement with Taliaferro & Browne, Inc. ("MAA/DBE Subcontractor"), who will provide the following goods/services in connection with the above-referenced contract:

(Insert a brief narrative describing the goods/services to be provided. Broad categorizations (e.g., "electrical," "plumbing," etc.) or the listing of the NAICS Codes in which MAA/DBE Subcontractor is certified are insufficient and may result in this Letter of Intent to Subcontract not being accepted.)

Taliaferro & Browne will provide surveying services associated with the fiber optic design.


for an estimated amount of \$ 85,947 or 7 % of the total estimated contract value.

MAA/DBE Subcontractor is, to the best of Prime Contractor's knowledge, currently certified with the City of Kansas City's Human Relations Department to perform in the capacities indicated herein. Prime Contractor agrees to utilize MAA/DBE Subcontractor in the capacities indicated herein, and MAA/DBE Subcontractor agrees to work on the above-referenced contract in the capacities indicated herein, contingent upon award of the contract to Prime Contractor.

  
Signature: Prime Contractor

Patrick O'Neill  
Print Name

Associate Vice President 5/18/2018  
Title Date

  
Signature: MAA/DBE Subcontractor

Hagen Andersen  
Print Name

CEO 5/18/2018  
Title Date



## TIMETABLE FOR MBE/WBE UTILIZATION

*(This form should be submitted to the City after contract award.)*

I, Patrick O'Neill, acting in my capacity as Associate Vice President  
*(Name)* *(Position with Firm)*  
of Black & Veatch Corporation, with the submittal of this Timetable, certify that  
*(Name of Firm)*  
the following timetable for MBE/WBE utilization in the fulfillment of this contract is correct and true to the best of my knowledge.

### **ALLOTTED TIME FOR THE COMPLETION OF THIS CONTRACT**

*(Check one only)*

15 days	<input type="checkbox"/>	75 days	<input type="checkbox"/>	135 days	<input type="checkbox"/>
30 days	<input type="checkbox"/>	90 days	<input type="checkbox"/>	150 days	<input type="checkbox"/>
45 days	<input type="checkbox"/>	105 days	<input type="checkbox"/>	165 days	<input type="checkbox"/>
60 days	<input type="checkbox"/>	120 days	<input type="checkbox"/>	180 days	<input type="checkbox"/>
Other	<u>540 Days</u>	<i>(Specify)</i>			

Throughout 7/2/18 thru 12/23/19 Beginning 1/3 180 days  
Middle 1/3 180 days Final 1/3 180 days  
Beginning 1/3 7 % Middle 1/3 7 % Final 1/3 8 %

**PLEASE NOTE:** Any changes in this timetable require approval of the Human Relations Department in advance

If you have any questions regarding the completion of this form, please contact the Department of Human Relations at: (816) 513-1818.

  
*(Signature)*

*Associate Vice President*  
*(Position with Firm)*

*6/7/2018*  
*(Date)*



## REQUEST FOR MODIFICATION OR SUBSTITUTION

*(This Form must be submitted to HRD to request substitutions for an MBE/WBE listed in the Contractor Utilization Plan or for modification of the amount of MBE/WBE participation listed in the Contractor Utilization Plan. This Form shall be an amendment to the Contractor Utilization Plan.)*

**BIDDER/PROPOSER/CONTRACTOR:** Black & Veatch Corporation

**ADDRESS:** 8400 Ward Parkway, Kansas City, MO 64114

**PROJECT NUMBER OR TITLE:** 81000819, Contract No. 1443

**AMENDMENT/CHANGE ORDER NO: (if applicable)** \_\_\_\_\_

<b>Project Goals:</b>	_____ % MBE	_____ % WBE
<b>Contractor Utilization Plan:</b>	_____ % MBE	_____ % WBE

1. I am the duly authorized representative of the above Bidder/Contractor/Proposer and am authorized to request this substitution or modification on behalf of the Bidder/Contractor/Proposer.

2. I hereby request that the Director of HRD recommend or approve: (check appropriate space(s))

a. \_\_\_\_\_ A substitution of the certified MBE/WBE firm \_\_\_\_\_,  
(Name of new firm)  
to perform \_\_\_\_\_,  
(Scope of work to be performed by new firm)

for the MBE/WBE firm \_\_\_\_\_ which is currently  
(Name of old firm)  
listed on the Bidder's/Contractor's/Proposer's Contractor Utilization Plan to  
perform the following scope of work: \_\_\_\_\_.  
(Scope of work of old firm)

b. \_\_\_\_\_ A modification of the amount of MBE/WBE participation currently listed on the Bidder's/Contractor's/Proposer's Contractor Utilization Plan from

\_\_\_\_\_ % MBE \_\_\_\_\_ % WBE (Fill in % of MBE/WBE Participation currently listed on Contractor Utilization Plan)

**TO**

\_\_\_\_\_ % MBE \_\_\_\_\_ % WBE (Fill in New % of MBE/WBE Participation requested for Contractor Utilization Plan)

- c. Attach 00450.01 Letter of Intent to Subcontract letter for each new MBE/WBE to be added.
- d. Attach a copy of the most recent 00485.01 or on-line M/WBE Monthly Utilization Report

3. Bidder/Contractor/Proposer states that a substitution or modification is necessary because: (check applicable reason(s))

**The MBE/WBE listed on the Contractor Utilization Plan is non-responsive or cannot perform.**

**The MBE/WBE listed on the Contractor Utilization Plan has increased its previously quoted price without a corresponding change in the scope of work.**

\_\_\_\_\_ The MBE/WBE listed on the Contractor Utilization Plan has committed a material default or breach of its contract.

Requirements of the scope of work of the contract have changed and make subcontracting not feasible or not feasible at the levels required by the goals established for the contract.

\_\_\_\_\_ The MBE/WBE listed on the Contractor Utilization Plan is unacceptable to the City contracting department.

\_\_\_\_ Bidder/Contractor/Proposer has not attempted intentionally to evade the requirements of the Act and it is in the best interests of the City to allow a modification or substitution.

4. The following is a narrative summary of the Bidder's/Contractor's/Proposer's good faith efforts exhausted in attempts to substitute the MBE/WBE firm named above which is currently listed on the Contractor Utilization Plan with other qualified, certified MBE/WBE firms for the listed scope of work or any other scope of work in the project:

[illegible]

5. Bidder/Proposer/Contractor will present documentation when requested by the City to evidence its good faith efforts.

**Dated:** \_\_\_\_\_

(Bidder/Proposer/Contractor)

By: (Authorized Representative)



KANSAS CITY  
MISSOURI

## CONTRACTOR AFFIDAVIT FOR FINAL PAYMENT

Project Number 81000819, Contract No. 1443

Project Title Wastewater SCADA

STATE OF MISSOURI )  
COUNTY OF JACKSON )SS

The Undersigned, \_\_\_\_\_ of lawful  
(Name)

age, being first duly sworn, states under oath as follows:

1. I am the \_\_\_\_\_ of \_\_\_\_\_ who is the general  
(Title) (CONTRACTOR)  
CONTRACTOR for the CITY on Project No. \_\_\_\_\_ and Project Title \_\_\_\_\_.

2. All payrolls, material bills, use of equipment and other indebtedness connected with the Work for this Project have been paid and all Claims of whatever nature have been satisfied, as required by the Contract.

3 (✓) \_\_\_\_\_ Prevailing wage does not apply; or

(✓) \_\_\_\_\_ All provisions and requirements set forth in Chapter 290, Section 290.210 through and including 290.340, Missouri Revised Statutes, pertaining to the payment of wages to workmen employed on public works projects have been fully satisfied and there has been no exception to the full and complete compliance with these provisions and requirements and the Annual Wage Order contained in the Contract in carrying out the Contract and Work. CONTRACTOR has fully complied with the requirements of the prevailing wage law as required in the Contract and has attached affidavits from all Subcontractors on this Project, regardless of tier, affirming compliance with the prevailing wage law as stipulated in the Contract.

4. I hereby certify that (a) at project completion and pursuant to contractor's final request for payment, contractor achieved (\_\_\_\_%) Minority Business Enterprise (MBE) participation and (\_\_\_\_%) Women Business Enterprise (WBE) participation on this contract, and (b) listed herein are the names of all certified M/WBE subcontractors, regardless of tier, with whom I, or my subcontractors contracted.

1. Name of MBE/WBE Firm \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone Number (\_\_\_\_) \_\_\_\_\_  
IRS Number \_\_\_\_\_  
Area/Scope\*of Work \_\_\_\_\_  
Subcontract Final Amount \_\_\_\_\_

2. Name of MBE/WBE Firm \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone Number (\_\_\_\_) \_\_\_\_\_  
IRS Number \_\_\_\_\_  
Area/Scope\*of Work \_\_\_\_\_  
Subcontract Final Amount \_\_\_\_\_

List additional subcontractors, if any, on a similar form and attach to the bid.

Supplier\*\* Final Amount: \_\_\_\_\_

\*Reference to specification sections or bid item number.

- (✓) \_\_\_\_\_ Met or exceeded the Contract utilization goals; or  
(✓) \_\_\_\_\_ Failed to meet the Contract utilization goals (attach waiver, substitution or modification); or  
(✓) \_\_\_\_\_ No goals applied to this Project.

5. CONTRACTOR certifies that each Subcontractor has received full payment for its respective work in connection with the Contract.
6. If applicable, I hereby certify that (a) at project completion and pursuant to contractor's final request for payment, contractor achieved, company-wide, at least ten percent (10%) minority workforce participation and two percent (2%) women workforce participation and (2) a true and accurate copy of my final project workforce monthly report (HRD Form 00485.02 and final company-wide workforce monthly report (HRD Form 00485.03) are attached. **NOTE: This paragraph is only applicable if you completed a construction contract that was estimated by the City, prior to solicitation, as requiring more than 800 construction labor hours and costing in excess of \$324,000.01. If applicable you MUST attach copies of your final monthly workforce reports.**
7. This affidavit is made in behalf of the CONTRACTOR for the purpose of securing from Kansas City, Missouri, the certification of completion of the Project and receiving payment therefore.
8. If the Contract amount exceeded \$150,000, CONTRACTOR has submitted proof of compliance with the City tax ordinances administered by the City's Commissioner of Revenue and has on file proof of tax compliance from all Subcontractors. If the Contract term exceeded one (1) year, CONTRACTOR has provided proof of compliance with the City tax ordinances administered by the City's Commissioner of Revenue prior to receiving final payment and has on file proof of tax compliance from all Subcontractors prior to the Subcontractor receiving final payment from CONTRACTOR.

CONTRACTOR \_\_\_\_\_

By \_\_\_\_\_  
(Authorized Signature)

Title \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me

appeared \_\_\_\_\_, to me personally known to be the

\_\_\_\_\_ of the \_\_\_\_\_

and who executed the foregoing instrument and acknowledged that (s)he executed the same on behalf of

\_\_\_\_\_ as its free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the day and year first above written.

My commission expires:

\_\_\_\_\_  
Notary Public



## SUBCONTRACTOR AFFIDAVIT FOR FINAL PAYMENT

Project Number 81000819. Contract No. 1443

Project Title Wastewater SCADA

STATE OF MISSOURI )

) ss:

COUNTY OF JACKSON )

After being duly sworn the person whose name and signature appears below hereby states under penalty of perjury that:

1. I am the duly authorized officer of the business indicated below (hereinafter Subcontractor) and I make this affidavit on behalf of Subcontractor in accordance with the requirements set forth in Section 290.290, RSMo. Subcontractor has completed all of the Work required under the terms and conditions of a subcontract as follows:

Subcontract with: \_\_\_\_\_ Contractor

Work Performed: \_\_\_\_\_

Total Dollar Amount of Subcontract and all Change Orders: \$ \_\_\_\_\_

City Certified ☐ MBE ☐ WBE ☐ DBE ☐ NA

List certifications: \_\_\_\_\_

2. Subcontractor fully complied with the provisions and requirements of the Missouri Prevailing Wage Law set forth in Sections 290.210, RSMo through 290.340, RSMo.

**Business Entity Type:**

- ☐ Missouri Corporation  
☐ Foreign Corporation  
☐ Fictitious Name Corporation  
☐ Sole Proprietor  
☐ Limited Liability Company  
☐ Partnership  
☐ Joint Venture  
☐ Other (Specify) \_\_\_\_\_

**Subcontractor's Legal Name and Address**

\_\_\_\_\_

Phone No. \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Federal ID No. \_\_\_\_\_

I hereby certify that I have the authority to execute this affidavit on behalf of Subcontractor.

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Date)

**NOTARY**

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My Commission Expires: \_\_\_\_\_ By \_\_\_\_\_

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title



## ATTACHMENT F

### EMPLOYEE ELIGIBILITY VERIFICATION AFFIDAVIT

(Required for any contract with the City of Kansas City, Missouri in excess of \$5,000.00)

STATE OF MISSOURI                     )  
  ) ss  
COUNTY OF JACKSON                 )

On this 8<sup>th</sup> day of June, 2018, before me appeared  
Patrick O'Neill, personally known by me or otherwise  
proven to be the person whose name is subscribed on this affidavit and who, being duly sworn,  
stated as follows:

I am of sound mind, capable of making this affidavit, and personally swear or affirm that  
the statements made herein are truthful to the best of my knowledge. I am the  
Associate Vice President (title) of Black & Veatch Corporation  
(business entity) and I am duly authorized, directed or empowered to act with full authority on  
behalf of the business entity in making this affidavit.

I hereby swear or affirm that the business entity does not knowingly employ any person  
in connection with the contracted services who does not have the legal right or authorization  
under federal law to work in the United States as defined in 8 U.S.C. § 1324a(h)(3).

I hereby additionally swear or affirm that the business entity is enrolled in an electronic  
verification of work program operated by the United States Department of Homeland Security (E-  
Verify) or an equivalent federal work authorization program operated by the United States  
Department of Homeland Security to verify information of newly hired employees, under the  
Immigration Reform and Control Act of 1986, and that the business entity will participate in said  
program with respect to any person hired by the business entity to perform any work in  
connection with the contracted services. I have attached hereto documentation sufficient to  
establish the business entity's enrollment and participation in the required electronic verification  
of work program.

I am aware and recognize that unless certain contractual requirements are satisfied and  
affidavits obtained as provided in Section 285.530, RSMo, the business entity may face liability  
for violations committed by its subcontractors, notwithstanding the fact that the business entity  
may itself be compliant.

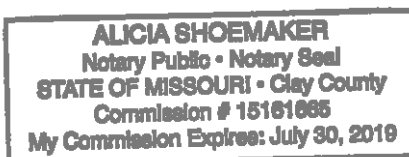
I acknowledge that I am signing this affidavit as the free act and deed of the business entity and that I am not doing so under duress.

  
Affiant's signature

Subscribed and sworn to before me this 9<sup>th</sup> day of June, 2018.

  
Notary Public

My Commission expires:





Company ID Number: 11557

Client Company ID Number: 771013



**THE E-VERIFY  
MEMORANDUM OF UNDERSTANDING  
FOR EMPLOYERS USING AN E-VERIFY EMPLOYER AGENT**

**ARTICLE I  
PURPOSE AND AUTHORITY**

The parties to this agreement are the Department of Homeland Security (DHS), the Black & Veatch Corporation (Employer), and the E-Verify Employer Agent. The purpose of this agreement is to set forth terms and conditions which the Employer and the E-Verify Employer Agent will follow while participating in E-Verify.

E-Verify is a program that electronically confirms an employee's eligibility to work in the United States after completion of Form I-9, Employment Eligibility Verification (Form I-9). This Memorandum of Understanding (MOU) explains certain features of the E-Verify program and describes specific responsibilities of the Employer, the E-Verify Employer Agent, the Social Security Administration (SSA), and DHS.

Authority for the E-Verify program is found in Title IV, Subtitle A, of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA), Pub. L. 104-208, 110 Stat. 3009, as amended (8 U.S.C. § 1324a note). The Federal Acquisition Regulation (FAR) Subpart 22.18, "Employment Eligibility Verification" and Executive Order 12989, as amended, provide authority for Federal contractors and subcontractors (Federal contractor) to use E-Verify to verify the employment eligibility of certain employees working on Federal contracts.

**ARTICLE II  
RESPONSIBILITIES**

**A. RESPONSIBILITIES OF THE EMPLOYER**

1. The Employer agrees to display the following notices supplied by DHS in a prominent place that is clearly visible to prospective employees and all employees who are to be verified through the system:
  - a. Notice of E-Verify Participation
  - b. Notice of Right to Work
2. The Employer agrees to provide to the SSA and DHS the names, titles, addresses, and telephone numbers of the Employer representatives to be contacted about E-Verify. The Employer also agrees to keep such information current by providing updated information to SSA and DHS whenever the




Company ID Number: 11557

Client Company ID Number: 771013

If you have any questions, contact E-Verify at 1-888-464-4218.

**Approved by:**

<b>Employer</b> Black & Veatch Corporation	
<b>Name (Please Type or Print)</b> Christopher Gould	<b>Title</b>
<b>Signature</b> 	<b>Date</b> 04/04/2014
<b>E-Verify Employer Agent</b> HireRight, Inc. (v25)	
<b>Name (Please Type or Print)</b> Orvella Cartwright	<b>Title</b>
<b>Signature</b> Electronically Signed	<b>Date</b> 04/04/2014
<b>Department of Homeland Security – Verification Division</b>	
<b>Name (Please Type or Print)</b> USCIS Verification Division	<b>Title</b>
<b>Signature</b> Electronically Signed	<b>Date</b> 04/07/2014

## ATTACHMENT G

### Non-Construction Subcontractors Listing

Contractor shall submit Subcontractor information on this form prior to Subcontractor beginning Work. Contractor shall update this listing and keep it current for the life of the Contract.

	Company Name Contact Name and Email	Address Phone No. and Fax No.
1.	Name: Custom Engineering, Inc., Joe Davis Email: <a href="mailto:JTDAVIS@customengr.com">JTDAVIS@customengr.com</a>	Address: 12760 East 40 Highway, Independence, MO 64055 Phone: 913-350-1473 Fax: 816-350-1579
2.	Name: Taliaferro & Browne, Hagos Andebrhan Email: <a href="mailto:hagos@tb-cngr.com">hagos@tb-cngr.com</a>	Address: 1020 East 8 <sup>th</sup> Street, Kansas City, MO 64106 Phone: 816-283-3456 Fax: 816-283-0810
3.	Name: Environmental Advisors & Engineers, Inc., Jill R. Bicsma Email: <a href="mailto:JBicsma@EAEI.com">JBicsma@EAEI.com</a>	Address: 19211 W. 64 <sup>th</sup> Terrace, Shawnee, Kansas 66218 Phone: 913-599-4326 Fax: 913-631-6011
4.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
5.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
6.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
7.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
8.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
9.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
10.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____

Contractor – Company Name:	<u>Black &amp; Veatch Corporation</u>
Submitted By:	<u>Patrick O'Neill</u>
Title:	<u>Associate Vice President</u>
Telephone No.:	<u>913-458-4308</u>
Fax No.:	<u>913-458-4308</u>
E-mail:	<u><a href="mailto:oneillpa@bv.com">oneillpa@bv.com</a></u>
Date:	<u>May 18, 2018</u>

**DESIGN PROFESSIONAL SERVICES**  
**AMENDMENT NO. 1**  
**CONTRACT NO. 1443      PROJECT NO. 81000819**  
**WASTEWATER SCADA**  
**WATER SERVICES DEPARTMENT**

This amendment is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation (City), and Black & Veatch Corporation (Design Professional). The parties amend the Agreement entered into on July 2, 2018, as follows:

WHEREAS, City has previously entered into a contract dated July 2, 2018 in the amount of \$1,370,672.00; and

WHEREAS, the City desires execute Amendment No. 1, in the amount of \$999,189.00, to amend the total contract amount to \$2,369,861.00; and

NOW, THEREFORE, in consideration of the payments and mutual agreements contained in this 1<sup>st</sup> Amendment, City and Design Professional agree as follows:

**Sec. 1. Sections Amended.** The Contract is amended as follows:

- A. Add the following attachments:
  - a. Attachment A-1, Scope of Services for Amendment 1; and
  - b. Attachment C-1, Engineering Fee Summary and Schedule of Position Classifications for Amendment 1.
- B. Delete and replace the following section(s):
  - a. Delete Sec. 4, Compensation and Reimbursables, and replace with the following Sec. 4, Compensation and Reimbursables:
    - A. The maximum amount that City shall pay Design Professional under this Agreement is \$2,369,861.00, as follows:
      - 1. \$1,465,658 for the services performed by Design Professional under this Agreement.
      - 2. For Design Professional services described in the Scope of Services, City shall pay Design Professional compensation amounting to actual salary of personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and schedule of position classifications and the salary range for each position is included as a part of **Attachments C and C-1**. The Attachment C hourly rates for an employee may be increased by the Design Professional during the term of this Agreement a maximum of 5% annually. Design Professional will provide the City for approval on April 1st of each City's fiscal year proposed salary rate ranges for the job classification listed. New job classification will be added to the above list as applicable.

3. Actual reasonable expenses incurred by Design Professional directly related to Design Professional's performance under this Agreement, to include only the following, in an amount not to exceed \$669,203.00. The following are the reimbursable expenses that City has approved: Subcontractor direct costs paid by Design Professional, outside reproduction of final deliverables, local transportation in the project area, and non-local travel expenses for the cyber security specialist. Subcontractors office personnel labor costs shall be included in the unit prices for field investigation work.
4. Design Professionals' maximum amount shown in Sec. 4, Compensation and Reimbursables, includes a total allowance amount of \$235,000.00 for Optional Services not yet authorized by the City that may be required throughout the course of work. This allowance amount will not be utilized by Design Professional unless specifically authorized in writing by the City to perform Optional Services. Optional Services will not be performed, nor is the Design Professional approved to utilize any allowance monies unless the City provides written authorization to Design Professional that includes the scope of work for each optional task to be performed and a maximum billing limit for compensation that has been mutually agreed upon.
5. Compensation for all Optional Services will be based on the actual salary of office personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and schedule of position classifications and the salary range for each position is included as a part of **Attachments C and C-1**. The amount billed for each Optional Service shall not exceed the amount established for it without further written authorization. Additional amounts for Optional Services may be authorized, if deemed by CITY to be necessary, as the work progresses.
6. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Agreement.

**B. Method of Payment.**

Design Professional shall invoice City monthly setting forth the total effort expended on an hourly basis and all actual reasonable expenses incurred and allowed under this Agreement. Each invoice shall provide the subtotal of the hours and costs invoiced by the Design Professional for each Task Series identified in **Attachments A and A-1** and a sum total of hours and costs for each invoice period. Design Professional shall submit a copy of invoices received from its subcontractors with labor hours per person, salary rate per person, effective salary multiplier, and direct expenses for each Task Series. Design Professional shall also submit monthly project status report with each monthly invoice containing the information defined in **Attachments A and A-1**. City, upon approving the invoice, shall remit payment.



**C. Condition Precedent to Payment.**

1. It shall be a condition precedent to payment of any invoice from Design Professional that Design Professional is in compliance with, and not in breach or default of, all terms, covenants and conditions of this Agreement. If damages are sustained by City as a result of breach or default by Design Professional, City may withhold payment(s) to Design Professional for the purpose of offset until such time as the exact amount of damages due City from Design Professional may be determined.
2. No request for payment will be processed unless the request is in proper form, correctly computed, accompanied by a monthly status report, and is approved as payable under Agreement. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Agreement.
3. No request for payment will be processed unless it is accompanied by a copy of the most recent 00485.01 M/WBE Monthly Utilization Report submitted to the City's Human Relations Department.

**Sec. 2. Sections not Amended.** All other sections of the Agreement shall remain in full force and effect.

**Sec. 3. Authorization.** If the amount of the original Agreement plus the amount of any amendments to the original Agreement total over \$400,000.00, then this amendment requires City Council authorization. Notwithstanding the foregoing, City Council authorization is not required if (1) the total amount of the original Agreement plus the amount of any amendments to the original Agreement are within ten percent (10%) of the maximum amount authorized by the City Council or (2) a previous ordinance or Resolution authorized amendments without further City Council approval.

**Sec. 4. Effectiveness; Date.** This amendment will become effective when the City's Director of Finance has signed it. The date this amendment is signed by the City's Director of Finance will be deemed the date of this amendment.

Each party is signing this amendment on the date stated opposite that party's signature.

## DESIGN PROFESSIONAL

I hereby certify that I have authority to execute  
this document on behalf of Design Professional

Date: August 31, 2020

By: O'Neill, Patrick A.

Digitally signed by O'Neill, Patrick A.  
DN: CN="O'Neill, Patrick A.",  
E=ONeillPA@bv.com, O=Black  
Veatch, C=US  
Date: 2020.08.31 09:59:40-05'00'

Title: Associate Vice President

## KANSAS CITY, MISSOURI

By:

9/17/2020

Date:

—DocuSigned by:

D Matt Bond

44458FCE836C4D6.

Title: Deputy Director

Approved as to form:

**- DocuSigned by:**

Mark Jones

Assistant City Attorney

torney

I hereby certify that there is a balance, otherwise unencumbered, to the credit of the appropriation to which the foregoing expenditure is to be charged, and a cash balance, otherwise unencumbered, in the Treasury, to the credit of the fund from which payment is to be made, each sufficient to meet the obligation hereby incurred.

**- DocuSigned by:**

Theresa Danielson

9/29/2020

**Director of Finance**

(Date)

## ATTACHMENT A-1

### Construction Management and RPR Phase Services

DESIGN PROFESSIONAL: Black & Veatch Corporation

Owner: City of Kansas City, Missouri

Project: Wastewater SCADA System Improvements Phase 1

WSD CPS Contract No.: 1443

WSD Project No.: 81000819

#### I. GENERAL

The following paragraphs provide a general description of the Work to be performed by DESIGN PROFESSIONAL under this Scope of Services. Subsequent paragraphs describe in detail the design professional services to be provided for the construction project. Project schedule durations shown below are based on DESIGN PROFESSIONAL's understanding of the anticipated construction period.

##### A. Background Information

1. The City has begun implementation of instrumentation and control and supervisory control and data acquisition (SCADA) system improvements for Kansas City Water Services Department (WSD) Wastewater Facilities including treatment plants, wastewater pump stations, flood pump stations, in-line storage facilities, local monitoring devices, central platform, and communications backbone. The first phase of work includes upgrades at 13 facilities and a central Operations Center at Blue River Primary Wastewater Treatment Plant.
2. This phase of the Work adds the following to the Basic Services:
  - i. Provide engineering office construction phase services for the project. Field representative construction phase services will be provided for a portion of the Work included in the construction contract documents. The construction phase services described herein are based on a period of 730 calendar days from the Notice to Proceed through Project Closeout Services as further detailed in Section II – Project Milestones.

B. General Description of Activities. The Basic Scope of Services to be performed by DESIGN PROFESSIONAL consists of construction phase services for the Project. The Work consists of the following professional services:

1. Project Management and Administration

2. Construction office and field support services
3. Part time Resident Project Representative services
4. Project closeout services

C. Task Series Listing. This Basic Scope of Services is organized under the following Task Series:

Task Series 100 – Project Management and Administration

Task Series 200 – Construction Office and Field Support Services

Task Series 300 – Resident Project Representative (RPR) Services

Task Series 400 – Project Closeout

Task Series 500 - Annual Security Audits and Performance Measurement

D. Follow-On Phases. At the discretion of the CITY, the DESIGN PROFESSIONAL may be requested to provide additional construction phase services related to the Project.

E. Explicit Responsibilities. The Basic Scope of Services explicitly sets forth what DESIGN PROFESSIONAL will perform and does not implicitly put any additional responsibilities or duties upon DESIGN PROFESSIONAL. The DESIGN PROFESSIONAL agrees to provide the specific Basic Services as identified herein. Work not specifically discussed herein will not be performed without an amendment or will be provided as Optional Services upon written authorization from the CITY.

F. Responsibilities of CITY

1. The CITY's assigned project manager will coordinate communication and all activities with all CITY staff including other City Departments. The CITY staff will coordinate with the United States Army Corps of Engineers and any other levee authority throughout the Project. The City will provide and manage the City's Document Control Platform (E-Builder) and provide training.
2. The CITY's assigned project manager will serve as the primary point of contact with the DESIGN PROFESSIONAL.

G. Limits of Authority:

1. DESIGN PROFESSIONAL's efforts will be to provide CITY a greater degree of confidence that the completed Work generally conforms to the Contract Documents. On the basis of visits to the Site and on-Site observations, DESIGN PROFESSIONAL will keep CITY informed of the progress of the Work.

2. DESIGN PROFESSIONAL's visits to the Site and on-Site observations are subject to all the limitations on DESIGN PROFESSIONAL's authority and responsibility set forth below.
3. DESIGN PROFESSIONAL will furnish RPR staff to assist DESIGN PROFESSIONAL in providing more extensive observation of the Work. The responsibilities, authority and limitations thereon of any such RPR and assistants will be as provided herein.
4. Neither DESIGN PROFESSIONAL nor the RPR will supervise, direct, control or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws or Regulations applicable to the furnishing or performance of the Work. DESIGN PROFESSIONAL will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.
5. Upon authorization by CITY, DESIGN PROFESSIONAL will have authority to disapprove or reject Work which DESIGN PROFESSIONAL believes to be defective, that DESIGN PROFESSIONAL believes will not produce a completed Project that conforms to the Contract Documents, or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. DESIGN PROFESSIONAL will also have authority to require special inspection or testing of the Work as provided in the Contract Documents, whether or not the Work is fabricated, installed or completed.
6. DESIGN PROFESSIONAL will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.
7. DESIGN PROFESSIONAL's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, Bonds and certificates of inspection, tests and approvals and other documentation required to be delivered will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests and approvals, that the results certified indicate compliance with, the Contract Documents.
8. The DESIGN PROFESSIONAL will not have responsibility for the superintendence of construction site conditions, safety, safe practices or unsafe practices or conditions, operation, equipment, or personnel other than employees of the DESIGN PROFESSIONAL and its Subconsultants. The CONTRACTOR will have sole responsibility for safety and for maintaining safe practices and avoiding unsafe practices or conditions.
9. The DESIGN PROFESSIONAL will be responsible for generating and preparing written or electronic responses pertaining to request for information, change orders, request for

substitution and/or “or-equal”, and adaptive design for the construction documents prepared by the DESIGN PROFESSIONAL.

10. The DESIGN PROFESSIONAL will be responsible for site safety of DESIGN PROFESSIONAL’s staff and Subconsultant’s employees. The DESIGN PROFESSIONAL will supply the required safety equipment and will ensure that all DESIGN PROFESSIONAL employees and Subconsultant’s employees are properly equipped and trained in all safety procedures and precautions.
11. The limitations upon authority and responsibility set forth in this agreement will also apply to DESIGN PROFESSIONAL’s Consultants, Subconsultants, RPRs and assistants.

## **II. PROJECT MILESTONES**

- A. DESIGN PROFESSIONAL will generally complete the Task Series within the following calendar days. It is understood that the project milestones for this project will be determined by the CITY and the CONTRACTOR:
  1. Task Series 100 through 300, Services will be completed on or before 730 calendar days, or twenty-four (24) months, as anticipated to complete construction activities.
  2. Task Series 400 – Project Closeout will be completed within 90 calendar days, or three (3) months of either the CONTRACTOR’s Submittal of Construction Record Markups, or DESIGN PROFESSIONAL’s review of CONTRACTOR’s Final Application for Payment, whichever occurs later.

## **III. BASIC SCOPE OF SERVICES**

The following paragraphs describe the Scope of Services to be provided by the DESIGN PROFESSIONAL under the Construction Project.

### **TASK SERIES 100 – PROJECT MANAGEMENT AND ADMINISTRATION**

The purpose of Project Management and Administration will be to manage, direct and oversee each element of Basic Services identified herein and Subconsultants employed by the DESIGN PROFESSIONAL in completion of the Work. The following management activities described below will be provided by DESIGN PROFESSIONAL.

The Project Management and Administration services are developed based on the total anticipated schedule of approximately twenty-four (24) months, or seven hundred thirty (730) calendar days through project closeout as detailed in Section II – Project Milestones. Any changes to this anticipated schedule may result in changes to the planned scope tasks requiring an adjustment to the Scope of Services and fee for this task as approved by the CITY.

#### **Task 101 Project Management Services**

DESIGN PROFESSIONAL will provide project management services necessary throughout the project to successfully manage and complete the work, including project correspondence and

consultation with CITY Staff related to DESIGN PROFESSIONAL's scope of services; supervision and coordination of services; scheduling and assignment of personnel resources; submission of a cost-loaded schedule for the work planned; continuous monitoring of DESIGN PROFESSIONAL's work progress; and quality control of services provided.

### **Task 102 Monthly Invoicing**

DESIGN PROFESSIONAL will prepare and submit one monthly invoice on a form acceptable to the CITY. PDF copies of monthly invoices will be uploaded to the CITY's project document management system. Each invoice by DESIGN PROFESSIONAL and Subconsultants will be itemized as follows:

Task Series 100 – Project Management and Administration

Task Series 200 – Construction Phase Office and Field Support Services

Task Series 300 – Resident Project Representative Services

Task Series 400 – Project Closeout

Task Series 500 - Annual Security Audits and Performance Measurement

A copy of the Subconsultant utilization report will be attached to the monthly invoice.

### **Task 103 Provide Monthly Status Report**

DESIGN PROFESSIONAL will prepare and submit monthly project status reports which will provide progress for the Project on a form acceptable to the CITY. PDF copies of project status reports will be uploaded to the CITY's web-based document management system. Project status report will accompany the monthly invoice submittal. The monthly progress status reports will document the DESIGN PROFESSIONAL's work progress, the percentage of completed work, the earned value of the completed work, schedule status, and budget status for each Task Series. The monthly project status report will identify work performed by DESIGN PROFESSIONAL, the work activities anticipated to be performed the next month, action items required by CITY, potential project scope variances with corrective action, a general assessment of DESIGN PROFESSIONAL's ability to meet project schedule milestones, including identification of any delays beyond its control, M/WBE utilization goals, and an estimate of work percent completion and earned value for each Task Series in the Scope of Services based on the work completed. A short narrative will be provided to describe the work activity performed for each task within each Task Series.

### **Task 104 Subconsultant Agreements and Administration**



Prepare a scope, budget, schedule, and agreement for the DESIGN PROFESSIONAL's Subconsultants involved in the Project. Conduct coordination meetings as required to prepare Subconsultant agreements, to review deliverables, and to execute the defined scope of work. Provide administration of Subconsultant agreements and Subconsultant work including deliverables, Subconsultant invoicing, and schedule maintenance. Prepare monthly M/WBE Subconsultant utilization reports and submit in the required format to the CITY's Human Relations Department.

### **Task 105 Document Management**

The DESIGN PROFESSIONAL will utilize the CITY's web-based document management system (E-Builder) for managing, tracking and storing documents associated with the Project. Documents will include, but are not limited to, shop drawings, submittal responses between the CONTRACTOR, DESIGN PROFESSIONAL and CITY produced during construction. DESIGN PROFESSIONAL will comply with file protocols and procedures for the web-based document management system provided by the CITY.

## **TASK SERIES 200 – CONSTRUCTION OFFICE AND FIELD SUPPORT SERVICES**

To establish the basis for the DESIGN PROFESSIONAL's compensation, Construction Office and Field Support services are based on an anticipated construction schedule of twenty-three (23) months to Substantial Completion and one (1) additional months for Final Completion for the Project. Any changes to this anticipated construction schedule may result in changes to the scope of Tasks 101, 102, 103, 104, 201, 205, 208 and 300, and may require an adjustment to the Scope of Services and/or DESIGN PROFESSIONAL's compensation as approved by the CITY.

Specific construction phase tasks and services to be performed by DESIGN PROFESSIONAL are described below.

### **Task 201 CONTRACTOR Communication**

The DESIGN PROFESSIONAL's project manager and Resident Project Representative (RPR) will act as the primary point of contact with the CONTRACTOR. All contractual written communication regarding scope, schedule and costs with the CONTRACTOR will be authorized by the CITY's Project Manager. Other project and field related written communications, such as RFI's, Shop Drawings, etc. can be submitted between the CONTRACTOR and DESIGN PROFESSIONAL and all written communication of any kind will be copied to the CITY's Project Manager. All major project decisions related to potential design modification, construction schedule extensions, and contract price adjustments must be approved in writing by the CITY.

### **Task 202 Review CONTRACTOR's Schedules and Monthly Payment Applications**

DESIGN PROFESSIONAL will receive, review, and comment on the CONTRACTOR's schedules and advise CITY as to the acceptability. This task is based on review of the initial proposed schedule for the project, and monthly updates of the construction schedule, schedule of submittals, and monthly payment applications.

1. Construction Schedule. Review of CONTRACTOR's construction schedule will be for general conformity of the construction schedule to the requirements for scheduling as defined in the Construction Contract Documents and to determine if the CONTRACTOR's construction schedule and activity sequence include construction sequencing and any special conditions that are applicable in order for CITY to keep existing facilities in operation as specified in the Construction Contract Documents. Items to be considered in review of the CONTRACTOR's schedule will include work site restrictions, access restrictions, traffic control restrictions, and restrictions identified by the CITY in the Construction Contract Documents.
2. Schedule of Submittals. Review of CONTRACTOR's schedule of submittals will be for general conformity of the schedule of items of materials and equipment for which submittals are required by the Construction Contract Documents.
3. Schedule of Values. Review of CONTRACTOR's schedule of values will be for its acceptability and will indicate only consent to the schedule of values as a basis for preparing applications for progress payments and will not constitute an agreement as to the value of each indicated item.
4. Schedule of Monthly Payments: DESIGN PROFESSIONAL will receive and review the CONTRACTOR's initial schedule of estimated monthly payments and advise CITY as to its acceptability.
5. Monthly Payment Applications: DESIGN PROFESSIONAL will review the CONTRACTOR's payment request for accuracy and confirm with the RPR that all items were performed as noted. DESIGN PROFESSIONAL will forward recommendations for payment of items on the monthly payment request to the CITY's Project Manager including monthly photographs, progress narrative, updated schedule, and updated schedule of monthly payments, and materials/equipment delivered (and evidence of insurance if stored offsite if allowed by the CITY).

CITY will have final approval authority for all schedules and monthly payment applications.

### **Task 203 Interpretations of Contract Documents**

DESIGN PROFESSIONAL will issue, with reasonable promptness, written clarifications or interpretations (which may be in the form of Drawings) of the requirements of the Drawings and Specifications as DESIGN PROFESSIONAL may determine necessary, which will be consistent with the intent of and reasonably inferable from the Contract Documents. Such written clarifications and interpretations will be binding on CITY and CONTRACTOR. DESIGN PROFESSIONAL's interpretations, draft responses to RFIs, and clarifications will be provided to the CITY for review and approval, and distributed to the CONTRACTOR, CITY and RPR.

To establish the basis for the DESIGN PROFESSIONAL's compensation, a maximum of twenty (20) Requests for Interpretations will be completed by DESIGN PROFESSIONAL for the project and 88 hours budgeted.

## **Task 204 Preconstruction Conference**

DESIGN PROFESSIONAL will facilitate a preconstruction conference, with the CONTRACTOR, CITY and RPRs. The date, time, and location for the preconstruction conference will be determined and provided by the DESIGN PROFESSIONAL in coordination with the CONTRACTOR, and CITY. The preconstruction conference will include a discussion of the CONTRACTOR's preliminary schedules, work plan, procedures for transmittal, review, and acceptance of the CONTRACTOR's submittals, processing of payment applications, critical work sequencing, change orders, work change directives, record documents, the CONTRACTOR's responsibilities for safety and first aid, and other administrative items; and will address questions. DESIGN PROFESSIONAL will preside over the meeting, will prepare meeting notes to the CITY for review and approval, and distribute meeting notes to all parties in attendance of the Preconstruction Conference.

## **Task 205 Perform Site Visits**

DESIGN PROFESSIONAL and its Subconsultants will make site visits as required to review special construction issues, inspections, installation checks, functional acceptance testing, and leak testing with CONTRACTOR and CITY. DESIGN PROFESSIONAL and its Subconsultants will visit the site(s) to observe the construction activities for general conformance with the intent of the technical specifications and drawings prior to certification of applications of payment and to assist with resolution of field issues during the Project. These visits are in addition to the site visits conducted after the progress meetings noted in Task 208. To establish the basis for the DESIGN PROFESSIONAL's compensation, forty (40) site visits attended by DESIGN PROFESSIONAL and its Subconsultants are anticipated. Two hours are budgeted per site visit.

## **Task 206 Shop Drawings and Data Submittals**

DESIGN PROFESSIONAL will receive, review, and accept shop drawings, samples, and data submitted by the CONTRACTOR as required by the Construction Contract Documents. DESIGN PROFESSIONAL's review and acceptance will only be to determine if the items covered by the submittals will, after installation or incorporation into the Work, conform to the requirements in the Contract Documents and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. The shop drawing review by the DESIGN PROFESSIONAL is not intended to relieve the CONTRACTOR from its responsibility for performance in accordance with the Contract for construction, nor is such review a guarantee that the work covered by the shop drawings is free of errors, inconsistencies or omissions. The review and acceptance of a separate item as such will not indicate acceptance of the assembly in which the item functions.

DESIGN PROFESSIONAL will complete the review and respond to submittal items within twenty-eight (28) calendar days of receipt thereof for final approval.

To establish the basis for the DESIGN PROFESSIONAL's compensation, a maximum of one hundred (100) submittals for the project, including resubmittals, are budgeted to be reviewed. Additional submittals may be reviewed by DESIGN PROFESSIONAL as an Optional Service.

CITY will seek reimbursement from CONTRACTOR for additional submittal reviews performed by DESIGN PROFESSIONAL as specified in the Construction Contract Documents. Reviews of submittals will be limited to the review of the first initial submittal and one re-submittal, if required, for each specification section. Some sections will have several submittals, such as the concrete rebar and electrical sections.

### **Task 207 Review Operation and Maintenance Manuals.**

DESIGN PROFESSIONAL will receive and review preliminary and final operation and maintenance manuals developed by equipment manufacturers and submitted by CONTRACTOR. DESIGN PROFESSIONAL's review will be for general conformance to the O&M manual development requirements and applicability to the equipment items actually installed. DESIGN PROFESSIONAL will submit its review comments along with preliminary O&M manuals to CONTRACTOR and CITY, and final O&M Manuals received from the CONTRACTOR to CITY.

To establish basis for DESIGN PROFESSIONAL's compensation a combined total of up to sixteen (16) preliminary, final, and electronic O&M manuals are budgeted to be reviewed as part of the Basic Services. O&M manuals are anticipated from the following specification sections:

<b>Section</b>	<b>Description</b>
11185	Submersible Sump Pumps
13500	Instrumentation and Control System
13510	Computer System Hardware
13520	Computer System Software
13530	Programmable Logic Controllers
13540	Radio Equipment
13561	Panel Mounted Instruments
13566	Miscellaneous Instruments
13570	Panel Mounted Instruments
13590	Network Systems
13591	Metallic and Fiber Optic Communication Cable and Connectors
15500	Heating, Ventilating, and Air Conditioning
15650	Refrigeration Systems
16050	Electrical
16480	600 Volt Class Motor Control Centers
16611	Solid State Uninterruptible Power Supply

### **Task 208 Attend Progress Meetings**

DESIGN PROFESSIONAL along with the RPR(s) will attend monthly progress meetings and coordination meetings conducted by the CONTRACTOR with CITY and other applicable representatives. The purpose of the meetings will be to review and discuss progress of the Work and schedule, submittals, coordination, construction issues, and other matters concerning the

project. The CONTRACTOR will be responsible for preparing the agenda and preparing and distributing the meeting notes.

To establish the basis for DESIGN PROFESSIONAL's compensation, DESIGN PROFESSIONAL will attend a maximum of twenty-two (22) progress meetings, representing one (1) per month assuming a duration of 1 hour per meeting followed by up to a one-hour site visit. DESIGN PROFESSIONAL attendance will be limited to 1 person on-site and three additional people attending via video conference (not including RPRs) and 4 hours per on-site person including travel and review of CONTRACTOR's meeting notes and two hours each per remote person. Up to 176 hours are budgeted for attendance at progress meetings.

### **Task 209 Assist in Evaluating Claims and Change Order Requests**

DESIGN PROFESSIONAL will assist CITY in evaluating change order requests (includes all work change directives and time extensions) submitted by the CONTRACTOR or initiated by DESIGN PROFESSIONAL issuance for request for proposal. DESIGN PROFESSIONAL will evaluate the construction cost and schedule impact of each change order request. DESIGN PROFESSIONAL will assist with determining a fair price for the Work and evaluating the potential impact of each change order request on the CONTRACTOR's construction schedule. DESIGN PROFESSIONAL will review change order requests and cost proposals prepared by the CONTRACTOR for the contemplated work. The DESIGN PROFESSIONAL will prepare a written recommendation stating the reason for each change order request and recommended action by CITY. The DESIGN PROFESSIONAL will negotiate change order requests with the CONTRACTOR on CITY's behalf for approval by the CITY prior to CONTRACTOR's start of work defined in each change order request. If the CITY determines that the CONTRACTOR must competitively bid certain Subcontractor work covered under a change order request, DESIGN PROFESSIONAL will review bids of the CONTRACTOR and provide a written recommendation of those bids to the CITY if authorized under Optional Services. The DESIGN PROFESSIONAL will draft all change orders for the CITY. CITY will review, approve and execute all change orders covering changes in the Work, changes in the contract price or contract times for work defined in change order requests and agreed upon by CITY and CONTRACTOR.

To establish the basis for DESIGN PROFESSIONAL's compensation, a maximum of four (4) change orders and a maximum of sixteen (16) work change directives and a total of 92 hours have been budgeted. Additional change orders will be provided as Optional Services.

### **Task 210 Field Material Testing.**

An allowance has been provided for the services of an independent testing laboratory to perform all materials testing required by the Construction Contract Documents. Through a Subconsultant agreement, DESIGN PROFESSIONAL will conduct concrete compression tests, field air content, and slump tests to verify compliance with the requirements of the Construction Contract Documents. DESIGN PROFESSIONAL will evaluate the test results and submit them to the City.

### **Task 211 Substantial Completion Inspections**

The DESIGN PROFESSIONAL, RPR and Subconsultants will perform an inspection at substantial completion and prepare a punch list of deficiencies requiring completion or correction. It is assumed that 1 person from Black & Veatch will attend, and each site will have a separate walk-through (13 sites and 6 fiber lines). The mechanical engineer, electrical engineer, and architect will attend the walk-through for the Operations Center. The DESIGN PROFESSIONAL will submit to the CITY a statement of substantial completion.

### **Task 212 Final Completion Inspection**

The DESIGN PROFESSIONAL and the RPR will perform a final inspection of the work to determine if the punch list of deficiencies from the Substantial Completion Inspection have been corrected, and each site will have a separate walk-through. The DESIGN will submit to the CITY a statement of final completion.

### **Task 213 Review of Contractor Prepared OCCPs**

The DESIGN PROFESSIONAL will review OCCP's prepared by the Contractor and provide comments to incorporation into updated OCCPs. Up to 40 OCCP's at two hours each have been budgeted.

## **TASK SERIES 300 – RESIDENT PROJECT REPRESENTATIVE SERVICES**

DESIGN PROFESSIONAL will provide Resident Project Representative (RPR) services to observe the construction work associated with the Project as defined in the Construction Contract Documents. Through a Subconsultant agreement, DESIGN PROFESSIONAL will provide RPR assistants.

The RPR and its assistants will observe the CONTRACTOR's work and perform the services listed below.

1. RPR Level of Effort: To establish basis for DESIGN PROFESSIONAL's compensation for resident project representative services, the effort for Task Series 300 is based on providing one half-time RPR working up to 16 hours per week for the first 24 weeks of the project and 20 hours per week for 80 weeks, totaling 1984 hours. DESIGN PROFESSIONAL will stagger working hours for RPR if CONTRACTOR elects to work outside standard working hours if allowed by the Contract Documents. Additional inspection will be provided as Optional Services upon written authorization from the CITY.
2. General Responsibilities. RPR will be on site from the CONTRACTOR's mobilization until final completion of the Work or up to the budgeted number of hours indicated herein. RPR will be responsible to perform site observation and liaison tasks with the CONTRACTOR, CITY, DESIGN PROFESSIONAL, public and other agencies; tasks involving monthly progress meetings, daily and weekly reporting, document review and maintenance and conducting substantial completion inspections and final completion inspections of the Work.

3. Neither DESIGN PROFESSIONAL nor the RPR will supervise, direct, control or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws or Regulations applicable to the furnishing or performance of the Work. DESIGN PROFESSIONAL will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

#### RPR Offices:

A Field office trailer will not be provided by the CONTRACTOR for this work. The RPR will travel from the office to the necessary site daily for periodic checks of the work.

#### **Task 301 Schedules**

RPR will assist DESIGN PROFESSIONAL with the review of CONTRACTOR's monthly construction schedule updates and monthly payment applications as described in Task 202. RPR will provide comments concerning their acceptability to DESIGN PROFESSIONAL.

#### **Task 302 Meeting and Conferences:**

1. RPR will attend the preconstruction conference.
2. RPR will attend weekly field coordination meetings, monthly progress meetings, and other meetings with CITY, CONTRACTOR, and DESIGN PROFESSIONAL, when necessary, to review and discuss construction procedures and progress scheduling, construction administration procedures, and other matters concerning the project. CONTRACTOR will be required to distribute updated schedules and agendas in advance of the meeting, take meeting notes, and distribute notes for comment prior to issuing final meeting notes to all parties in attendance.

#### **Task 303 Liaison**

RPR will serve as DESIGN PROFESSIONAL's liaison with CONTRACTOR, working principally through CONTRACTOR's superintendent to assist CONTRACTOR in understanding the intent of the Contract Documents. The RPR will provide the following liaison services, as limited by the budgeted hours:

1. Discuss work activities on site with the CONTRACTOR on a daily basis. When the CONTRACTOR does not perform work in the field, provide a report to the CITY indicating that there was no work performed. Track weather conditions on days when the CONTRACTOR does not perform work on the site, include weather conditions in the report.
2. Be aware of construction site activities and be prepared to report to the CITY by telephone and/or email depending on the urgency of the matter. Awareness of job site



activities, at times when the RPR is not on site, is limited to that which is reported to the RPR by the CONTRACTOR.

3. Track the CONTRACTOR's progress on a daily basis. Keep a running record of work performed. Record will be in sufficient detail that it will be useful in evaluating the CONTRACTOR's status reports and applications for payment. Track which assets have been replaced or constructed. Record will include quantities for payment (by asset, monthly totals), and dates of construction or replacement of each asset. It is not anticipated that RPR will observe all construction work. Recording of daily construction activity will rely upon daily conversations with the CONTRACTOR to obtain work performed and quantities constructed. Maintain the record in Microsoft Excel and/or on a progress set of construction drawings with the work complete tracked; provide copies of the Excel file and/or progress set of drawings.
4. Provide a monthly summary of work completed by the CONTRACTOR in the monthly CPS status report.
5. Witness and document testing performed by the CONTRACTOR.
6. Immediately notify DESIGN PROFESSIONAL and CITY of the occurrence of any site accidents, emergencies, and acts of God endangering the Work, damage to property by fire or other causes, or the discovery of any buried contaminants of concern.

#### **Task 304 Review of Work, Rejection of Defective Work, Inspections and Testing**

1. RPR will conduct onsite observations of the general progress of the Work to assist DESIGN PROFESSIONAL in determining if the Work is performed in accordance with the Construction Contract Documents.
2. RPR will report to DESIGN PROFESSIONAL whenever RPR believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or does not meet the requirements of any inspections, tests or approval required to be made or has been damaged prior to final payment; and advise DESIGN PROFESSIONAL when RPR believes Work should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval. DESIGN PROFESSIONAL will report unsatisfactory work to the CITY.
3. Monitor changes of apparent integrity of the site (such as differing subsurface and physical conditions, existing structures, and site-related utilities when such utilities are exposed) resulting from construction-related activities.
4. Visually inspect materials, equipment, and supplies delivered to the site. Reject materials, equipment, and supplies that do not conform to the Contract Documents.
5. Coordinate the attendance and observation of performance tests in the field as specified in the Contract Documents.

6. Observe field materials testing services performed by CONTRACTOR's quality control and testing laboratory Subcontractor. RPRs will be given the opportunity to review the reports and reject reports that do not conform to the Construction Contract Documents. Copies of testing results will be forwarded to DESIGN PROFESSIONAL and CITY for review and information.
7. For reuse of existing conduit, RPR and DESIGN PROFESSIONAL will review results of wire brush and mandrel pull in accordance with the Contract Documents.
8. RPR will verify that tests and operations and maintenance training is conducted as required by the Contract Document and in presence of the required personnel, and that CONTRACTOR maintains adequate records thereof; observe, record and report to DESIGN PROFESSIONAL appropriate details relative to the test procedures. This task is limited to that which the RPR can perform when the RPR is on site.

### **Task 305 Records**

1. RPR will maintain in orderly files correspondence, reports of job conferences, shop drawings and samples submissions, reproductions of original Contract Documents, including all addenda, change orders, field orders, additional Drawings issued subsequent to the execution of the Contract, DESIGN PROFESSIONAL's clarifications, and interpretations of the Contract Documents, progress reports, and other project-related documents.
2. RPR will keep a recording of general CONTRACTOR hours on the job site, weather conditions, data relative to questions of extras or deductions, list of visiting officials and representatives of manufacturers, fabricators, suppliers and distributors, daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures. This task is limited to that which the RPR can perform when the RPR is onsite, or as indicated by the CONTRACTOR when the RPR is not on site.
3. RPR will record names, addresses, and telephone numbers of all CONTRACTOR, Subcontractors, and major suppliers of materials and equipment. This task is limited to that which the RPR can perform when the RPR is on site, or as indicated by the CONTRACTOR when the RPR is not on site.
4. Maintain a marked set of Drawings and Specifications at the site. This information will be combined with information from the record documents maintained by the CONTRACTOR, and a marked record set of conforming to construction documents will be provided to the CITY. The CONTRACTOR will be responsible for maintaining record drawings to be used for Construction Record Drawings as part of Task 401.

### **Task 306 Reports and Document Review**

1. Submit to DESIGN PROFESSIONAL, with a notification to the CITY's Project Manager or designate on a weekly basis, the daily reports of RPR observed events at the job site, including the following information:
  - a. Hours the CONTRACTOR worked on the site.
  - b. Review CONTRACTOR and Subcontractor personnel on site (Daily Labor Force Report received from CONTRACTOR).
  - c. Construction equipment on the site.
  - d. Observed delays and potential causes.
  - e. Weather conditions.
  - f. Data relative to claims for extras or deductions.
  - g. Daily construction activities and condition of the work.
  - h. Observations pertaining to the progress of the Work. Materials received on site.
  - i. Construction issues, and resolutions or proposed resolutions to issues.
2. All reports will be prepared using CITY-provided forms or DESIGN PROFESSIONAL's forms approved by the CITY.

### **Task 307 Payment Requisitions**

RPR will review applications for payment with CONTRACTOR for compliance with the established procedure for their submission and forward them with recommendations to DESIGN PROFESSIONAL, noting particularly their relation to the schedule of values, Work completed and materials and equipment delivered at the site but not incorporated in the Work. As a part of the review, RPR will review CONTRACTOR's annotated drawings showing changes made during construction for completeness.

### **Task 308 Substantial Completion Inspection**

1. Before DESIGN PROFESSIONAL conducts Substantial Completion Inspection, and after CONTRACTOR certifies the project is ready for Substantial Completion, RPR will provide the DESIGN PROFESSIONAL with an opinion as to the project's readiness.
2. RPR and DESIGN PROFESSIONAL will conduct substantial completion inspection in the company of the CITY and CONTRACTOR. RPR and DESIGN PROFESSIONAL will prepare a punch list of items to be completed or corrected by the CONTRACTOR. The punch list will be submitted to the CITY for review and approval before distribution by the CITY.

3. The DESIGN PROFESSIONAL will provide technical assistance in the identification of project punch-list items, evaluation of the proposed remedial actions and confirmation of the acceptability of the completed work.

### **Task 309 Final Completion Inspection**

1. RPR and DESIGN PROFESSIONAL will conduct final completion inspections for each site in the company of the CITY and CONTRACTOR. RPR and DESIGN PROFESSIONAL will prepare a punch list of items to be completed or corrected by the CONTRACTOR. The punch list will be submitted to the CITY for review and approval before it is distributed by the DESIGN PROFESSIONAL.
2. RPR and DESIGN PROFESSIONAL will verify that all items on punch list for each site have been completed or corrected and make recommendations to the CITY concerning final acceptance.

## **TASK SERIES 400 – PROJECT CLOSEOUT**

### **Task 401 Construction Record Drawings**

1. Upon substantial completion and the CONTRACTOR's submittal of record drawing markups, DESIGN PROFESSIONAL will prepare a set of construction record drawings showing record information based on the drawings and other record documents furnished by the CONTRACTOR and the RPR for the project that show changes to original drawings made during construction.
2. DESIGN PROFESSIONAL is not responsible for any errors or omission in the information from others that is incorporated into the record drawings.
3. DESIGN PROFESSIONAL will provide three (3) full size and two (2) half size drawings, one (1) electronic version of CAD files, and one set of drawings in PDF format.
4. The RPR will close out the construction contract including punch list items, warranties, liens, functional and performance testing results, outstanding claims and final payment. DESIGN PROFESSIONAL will review these items with RPR before issuing a statement of final completion to the CITY.

### **Task 402 Furnish CONTRACTOR Completion Documents**

DESIGN PROFESSIONAL will receive, review, and transmit to CITY certificates of inspection, tests and approvals, shop drawings, samples and other data accepted as provided under the "Review Shop Drawings and Data Submittals" task above, and transmit the annotated Conforming to Construction documents which are to be assembled by DESIGN PROFESSIONAL in accordance with the Construction Contract Documents to obtain final payment. The extent of such review by DESIGN PROFESSIONAL will be limited as provided under the "Review Shop Drawings and Data Submittals" in the Construction Phase Services task.

### **Task 403 Project Closeout Documentation**

The DESIGN PROFESSIONAL will review and file applicable documents required by the CITY pertaining to the project and turn over required documents from the RPR to the CITY. DESIGN PROFESSIONAL will gather and consolidate its project files for long-term record storage. CITY's HRD project completion forms will be submitted with DESIGN PROFESSIONAL's final invoice.

### **Task 500 Annual Security Audits and Performance Measurement**

Five annual performance audits will be included in the Construction Phase Services Agreement. Each audit will evaluate:

- Cybersecurity
- System Performance
- Support level, Staffing, Recommendations, and Costs

A one week site visit and technical memorandum is included with each performance audit.

### **OPTIONAL SERVICES**

Any work requested by the CITY that is not specifically stated in the Basic Services listed above will be classified as Optional Services. DESIGN PROFESSIONAL's contract upper limit includes an Optional Services Allowance amount of \$30,476.00. This allowance is for additional professional services that may be required during the course of the Project. Optional Services will not be performed nor is the DESIGN PROFESSIONAL approved to utilize any allowance monies unless specifically authorized in writing by the CITY. Compensation for Optional Services will be as mutually agreed upon and included in CITY's written authorization that will include the specific scope of work for each Optional Services task to be performed. Optional Services may include the following:

1. Additional performance of field testing services. Field testing services is planned to be the responsibility of the DESIGN PROFESSIONAL under the Construction Contract Documents.
2. Additional RPR Services or Office Phase Services beyond the quantities defined in the Basic Scope of Services.
3. Survey Services beyond the quantity defined in the Basic Scope of Services.
4. Review of Substitutions: The DESIGN PROFESSIONAL will record time required by DESIGN PROFESSIONAL in evaluating substitutes proposed or submitted by CONTRACTOR pursuant to the Contract Documents and in making changes in the Contract Documents (or in the provisions of any other direct contract with CITY for work on the Project) occasioned thereby. CITY will reimburse DESIGN PROFESSIONAL for evaluating each such proposed substitute.

5. Regulatory Coordination: Liaison with Regulatory Agencies beyond coordination already completed or associated with Amendment No. 1 of the Work.
6. Review and analysis of the CONTRACTOR's claims for differing subsurface and physical conditions.
7. Services resulting from significant delays, changes, or price increases caused directly or indirectly by shortages of materials, equipment, or energy.
8. Additional or extended services during construction made necessary by (1) work damaged by fire or other cause during construction, (2) a significant amount of defective or neglected work by any Contractor, (3) acceleration of the progress schedule involving service beyond normal working hours, (4) default by any Contractor, and (5) failure of the Contractor to complete the work within the construction contract time.
9. Evaluation of unusually complex or unreasonably numerous claims submitted by the Contractor or others in connection with the work.
10. Providing Construction Phase Services beyond the original date for completion and readiness for final payment of Contractor.

## **END OF SCOPE OF SERVICES**

**CONFIDENTIAL****ATTACHMENT C-1**

BLACK & VEATCH CORPORATION  
 SCHEDULE OF POSITION CLASSIFICATIONS FOR CONSTRUCTION PHASE SERVICES  
 FOR  
 CITY OF KANSAS CITY, MISSOURI

Hourly Billing Rates Effective April 1, 2020 through March 31, 2021

JOB CLASSIFICATION	CLASSIFICATION	SALARY RATE	
		MINIMUM RATE	MAXIMUM RATE
Administrative Business (ADM)	ADM 009	87.32	129.65
	ADM 008	51.00	98.56
	ADM 007	51.14	75.93
	ADM 006	39.83	83.64
	ADM 005	33.65	65.44
	ADM 004	25.06	48.88
	ADM 003	22.00	40.35
	ADM 002	18.13	30.32
	ADM 001	17.51	26.52
Administrative Support (ADO)	ADO-007	26.47	46.70
	ADO-006	26.36	44.57
	ADO-005	17.06	46.83
	ADO-004	17.48	35.71
	ADO-003	14.22	28.75
	ADO-002	13.17	22.40
Architectural (ARC)	ARC-008	72.35	76.45
	ARC-007	57.87	69.46
	ARC-006	46.29	61.91
	ARC-005	39.63	48.73
	ARC-004	35.61	41.89
	ARC-003	29.76	35.35
	ARC-001	26.08	26.86
Corporate Management Group (CMG)	CMG-40	128.80	132.66
	CMG-30	115.21	150.09
	CMG-20	97.19	130.59
	CMG-10	80.21	107.86
Construction Services (CNS)	CNS-012	102.02	128.88
	CNS-011	89.02	108.19
	CNS-010	72.21	101.74
	CNS-009	65.87	98.45
	CNS-008	56.63	91.36



**CONFIDENTIAL**

<b>JOB CLASSIFICATION</b>	<b>CLASSIFICATION</b>	<b>SALARY RATE</b>	
	CNS-007	49.58	79.00
	CNS-006	42.63	66.70
	CNS-005	36.05	60.97
	CNS-004	32.14	52.23
	CNS-003	27.91	44.18
	CNS-002	25.51	36.37
	CNS-001	30.12	33.10
Consulting (CST)	CST-008	182.00	187.46
	CST-007	110.67	159.35
	CST-006	81.61	137.71
	CST-005	61.20	109.82
	CST-004	43.41	64.09
	CST-003	39.49	58.27
	CST-002	35.25	51.01
	CST-001	29.95	40.80
Engineering (ENG)	ENG-136	93.80	108.35
	ENG-135	68.19	115.38
	ENG-134	70.44	110.06
	ENG-133	56.37	108.98
	ENG-132	52.42	91.04
	ENG-131	44.18	77.14
	ENG-130	38.02	64.90
	ENG-129	34.74	58.77
	ENG-128	30.59	45.70
	ENG-127	28.08	44.57
Engineering & Technical Specialties (ENS)	ENS-136	90.36	92.69
	ENS-134	81.01	125.00
	ENS-133	60.00	89.25
	ENS-132	47.61	83.43
	ENS-131	43.27	70.88
	ENS-130	36.97	62.24
	ENS-129	31.15	45.33
	ENS-128	23.15	43.98
	ENS-127	24.76	31.00
Engineering Technician (ENT)	ENT-134	55.50	85.01
	ENT-133	49.70	92.40
	ENT-132	48.41	75.96
	ENT-131	43.26	72.79
	ENT-130	35.15	54.19
	ENT-129	31.63	51.54

**CONFIDENTIAL**

<b>JOB CLASSIFICATION</b>	<b>CLASSIFICATION</b>	<b>SALARY RATE</b>	
	ENT-128	26.87	41.73
	ENT-127	22.52	40.03
	ENT-126	20.60	35.05
	ENT-125	19.65	27.68
Estimating (EST)	EST-009	104.38	104.38
	EST-008	80.27	110.58
	EST-007	58.93	91.35
	EST-006	53.56	79.03
	EST-005	45.67	79.33
	EST-004	35.24	54.95
	EST-003	32.99	46.71
	EST-002	30.35	37.38
Finance (FIN)	FIN-008	56.95	76.88
	FIN-007	49.52	65.72
	FIN-006	41.84	63.77
	FIN-005	33.95	49.49
	FIN-004	27.81	41.85
	FIN-003	23.25	35.33
	FIN-002	19.93	31.13
	FIN-001	20.60	21.53
General Management (GMT)	GMT-009	151.83	192.62
	GMT-008	111.94	180.75
	GMT-007	114.00	165.39
	GMT-006	95.63	171.90
	GMT-005	79.25	132.92
	GMT-004	74.93	118.17
	GMT-003	64.53	94.14
	GMT-002	51.53	88.12
	GMT-001	50.38	68.30
Information Technology Services (ITS)	ITS-10	126.47	129.81
	ITS-9	95.02	116.64
	ITS-8	76.71	101.32
	ITS-7	47.28	82.43
	ITS-6	48.69	69.46
	ITS-5	39.88	54.37
	ITS-4	28.22	48.36
	ITS-3	23.23	38.17
	ITS-2	23.70	24.41
Legal (LGL)	LGL-10	130.06	137.98
	LGL-9	110.39	136.25

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<b>JOB CLASSIFICATION</b>	<b>CLASSIFICATION</b>	<b>SALARY RATE</b>	
	LGL-8	94.42	109.60
	LGL-7	73.97	99.44
	LGL-6	49.26	74.04
	LGL-5	45.91	52.87
	LGL-4	40.67	41.89
	LGL-3	34.08	45.36
	LGL-2	35.49	36.55
Marketing & Communications (MAC)	MAC-010	100.03	120.33
	MAC-009	89.80	93.57
	MAC-008	63.82	83.96
	MAC-007	45.24	75.76
	MAC-006	38.37	80.00
	MAC-005	31.95	52.85
	MAC-004	27.88	42.97
	MAC-003	22.04	37.37
	MAC-002	19.81	29.23
	MAC-001	21.19	22.68
Procurement (PCR)	PCR-008	72.03	94.21
	PCR-007	59.13	85.87
	PCR-006	46.84	80.72
	PCR-005	40.32	61.80
	PCR-004	35.01	49.86
	PCR-003	29.29	44.73
	PCR-002	22.95	38.07
	PCR-001	20.03	30.62
Project Controls (PJC)	PJC-009	89.30	93.20
	PJC-008	86.03	101.28
	PJC-007	65.94	95.08
	PJC-006	54.16	81.83
	PJC-005	50.17	74.75
	PJC-004	33.90	59.20
	PJC-003	35.65	49.62
	PJC-002	31.16	42.55
	PJC-001	24.48	40.76
Project Management (PMT)	PMT-008	113.75	131.55
	PMT-007	97.94	133.03
	PMT-006	93.95	128.88
	PMT-005	88.57	126.21
	PMT-004	75.59	116.81
	PMT-003	68.65	107.10
	PMT-002	53.91	96.91

**CONFIDENTIAL**

JOB CLASSIFICATION	CLASSIFICATION	SALARY RATE	
	PMT-001	43.65	87.48
Sales (SAM)	SAM-011	158.16	162.90
	SAM-010	111.36	148.59
	SAM-009	93.68	139.05
	SAM-008	71.31	115.00
	SAM-007	54.31	100.47
	SAM-006	46.93	76.51
	SAM-005	38.46	73.58
	SAM-004	32.32	51.60
	SAM-003	32.54	35.37
	SAM-002	27.21	28.03
	SAM-001	22.92	22.92
Security Services (SEC)	SEC-008	71.76	76.21
	SEC-007	57.55	59.27
	SEC-006	48.00	57.12
Specialized Staff (SPC)	SPC-009	85.43	102.38
	SPC-008	60.23	91.72
	SPC-007	48.44	78.64
	SPC-006	41.58	75.37
	SPC-005	33.51	49.82
	SPC-004	34.05	44.21
	SPC-003	23.75	41.57
	SPC-002	24.19	43.11

End of Attachment C

Owner: KCMO WSD

Wastewater SCADA System Improvements - Phase 1 CPS  
Project: Services ATTACHMENT C-1

PHASE/Task		Sr. Project Director	Sr. Project Manager	Admin	Engineering Manager	Civil Sr. Technician	Structural Sr. Engineer	Electrical Engineer	I&C Sr. Engineer	I&C Engineer	I&C Technician	Sr. Estimator	Finance	Project Controls	SUBTOTAL, hours	SUBTOTAL, Billings \$
		\$323.00	\$244.00	\$122.00	\$131.00	\$116.00	\$204.00	\$159.00	\$298.00	\$213.00	\$107.00	\$210.00	\$98.00	\$210.00		
(Billing Rate, \$\$,Hr.)																
WORK BREAKDOWN STRUCTURE	PHASE															
Task Series 100 - Project Management and Administration	0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
Task 101 Project Management Services	0101	8	48	-	24	-	-	-	-	-	-	-	-	-	80	\$ 17,440
Task 102 Monthly Invoicing	0102	-	48	96	-	-	-	-	-	-	-	-	48	52	244	\$ 39,048
Task 103 Provide Monthly Status Report	0103	-	24	-	24	-	-	-	-	-	-	-	-	-	48	\$ 9,000
Task 104 Subconsultant Agreements and Administration	0104	4	24	8	24	-	-	-	-	-	-	-	-	-	60	\$ 11,268
Task 105 Document Management	0105	-	12	24	12	-	-	-	-	-	-	-	-	-	48	\$ 7,428
Task Series 200 - Construction Phase Services	0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
Task 201 Contractor Communication	0201	2	24	-	48	-	-	-	-	104	-	-	-	-	178	\$ 34,942
Task 202 Review Contractor's Schedules and Pay Apps	0202	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
1. Construction Schedule	0202.1	-	4	-	40	-	-	-	-	-	-	-	-	-	44	\$ 6,216
2. Schedule of Submittals	0202.2	-	1	-	4	-	-	-	-	-	-	-	-	-	5	\$ 768
3. Schedule of Values	0202.3	-	1	-	8	-	-	-	-	-	-	-	-	-	9	\$ 1,292
4. Schedule of Monthly Payments	0202.4	-	4	-	4	-	-	-	-	-	-	-	-	-	8	\$ 1,500
5. Monthly Payment Applications	0202.5	-	12	-	24	-	-	-	-	-	-	-	-	-	36	\$ 6,072
Task 203 Interpretations of Contract Docs (20 RFI)	0203	-	20	-	20	-	4	8	8	20	8	-	-	-	88	\$ 17,088
Task 204 Preconstruction Conference	0204	-	2	-	10	-	-	-	8	8	-	-	-	-	28	\$ 5,886
Task 205 Perform Site Visits	0205	-	-	-	-	-	-	-	80	-	-	-	-	-	80	\$ 23,840
Task 206 Shop Drawings and Data Submittals (Up to 100)	0206	-	10	-	80	-	-	16	20	80	-	-	-	-	206	\$ 38,464
Task 207 Review Operation and Maintenance Manuals	0207	-	2	-	40	-	-	-	12	36	-	-	-	-	90	\$ 16,972
Task 208 Attend Progress Meetings	0208	-	22	-	22	-	-	-	22	88	-	-	-	-	154	\$ 33,550
Task 209 Assist in Evaluating Claims & Change Orders	0209	-	8	-	20	-	-	-	16	16	16	16	-	-	92	\$ 17,820
Task 210 Field Material Testing	0210	-	2	-	16	-	-	-	-	-	-	-	-	-	18	\$ 2,584
Task 211 Substantial Completion Inspections	0211	-	4	-	-	-	-	-	60	-	-	-	-	-	64	\$ 18,856
Task 212 Final Completion Inspections	0212	-	4	-	-	-	-	-	32	-	-	-	-	-	36	\$ 10,512
Task 213 OCCP Coordination (up to 40 OCCPs)	0213	-	4	-	-	-	-	-	-	80	-	-	-	-	84	\$ 18,016
Task Series 300 - Resident Project Representative Services	0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
Task 300 RPR Services	0300	-	-	-	-	-	-	-	-	200	-	-	-	-	200	\$ 42,600
Task Series 400 - Project Closeout	0400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
Task 401 Construction Record Drawings	0401	-	2	-	8	20	-	-	4	12	32	-	-	-	118	\$ 18,588
Task 402 Contractor Completion Documents	0402	-	2	-	16	-	-	-	-	-	-	-	-	-	18	\$ 2,584
Task 403 Project Closeout Documentation	0403	-	2	16	4	-	-	-	4	-	-	-	-	-	26	\$ 4,156
Allowance		-	4	-	16	-	-	-	8	118	-	-	-	-	146	\$ 30,590
Annual Security Audits and Performance Management		-	40	-	-	-	-	-	-	800	-	-	20	20	880	\$ 186,320
Total, Hours		14	330	144	464	20	4	24	274	1,562	56	16	68	72	3,088	
Total, Billings																\$ 623,400

Attachment C-1

Owner: KCMO WSD

Wastewater SCADA System Improvements - Phase 1 CPS  
Project: Services

PHASE/Task		Travel/Per Diem Expenses	SUBTOTAL, EXPENSES	SUBCONTRACTS				SUBTOTAL, SUBCONTRACTS w/o MULTIPLIER	SUBTOTAL, SUBCONTRACTS	TOTAL Billings
				EAE	T&B	Custom Engineering	Materials Testing and SI Allowance			
(Billing Rate, \$\$,Hr.)										
WORK BREAKDOWN STRUCTURE	PHASE									
Task Series 100 - Project Management and Administration	0100	\$ -	\$ -					\$ -	\$ -	\$ -
Task 101 Project Management Services	0101	\$ -	\$ 5,000	\$ 12,514	\$ 21,282	\$ 3,410	\$ 10,000	\$ 47,205	\$ 47,205	\$ 69,645
Task 102 Monthly Invoicing	0102	\$ -	\$ -	\$ 5,452				\$ 5,452	\$ 5,452	\$ 44,500
Task 103 Provide Monthly Status Report	0103	\$ -	\$ -					\$ -	\$ -	\$ 9,000
Task 104 Subconsultant Agreements and Administration	0104	\$ -	\$ -					\$ -	\$ -	\$ 11,268
Task 105 Document Management	0105	\$ -	\$ -					\$ -	\$ -	\$ 7,428
Task Series 200 - Construction Phase Services	0200	\$ -	\$ -					\$ -	\$ -	\$ -
Task 201 Contractor Communication	0201	\$ -	\$ -					\$ -	\$ -	\$ 34,942
Task 202 Review Contractor's Schedules and Pay Apps	0202	\$ -	\$ -					\$ -	\$ -	\$ -
1. Construction Schedule	0202.1	\$ -	\$ -					\$ -	\$ -	\$ 6,216
2. Schedule of Submittals	0202.2	\$ -	\$ -					\$ -	\$ -	\$ 768
3. Schedule of Values	0202.3	\$ -	\$ -					\$ -	\$ -	\$ 1,292
4. Schedule of Monthly Payments	0202.4	\$ -	\$ -					\$ -	\$ -	\$ 1,500
5. Monthly Payment Applications	0202.5	\$ -	\$ -					\$ -	\$ -	\$ 6,072
Task 203 Interpretations of Contract Docs (20 RFI)	0203	\$ -	\$ -		\$ 5,235			\$ 5,235	\$ 5,235	\$ 22,323
Task 204 Preconstruction Conference	0204	\$ -	\$ -	\$ 877	\$ 1,047	\$ 1,274		\$ 3,198	\$ 3,198	\$ 9,084
Task 205 Perform Site Visits	0205	\$ -	\$ -	\$ 2,173		\$ 2,808		\$ 4,981	\$ 4,981	\$ 28,821
Task 206 Shop Drawings and Data Submittals (Up to 100)	0206	\$ -	\$ -	\$ 45,854		\$ 7,052		\$ 52,906	\$ 52,906	\$ 91,370
Task 207 Review Operation and Maintenance Manuals	0207	\$ -	\$ -	\$ 3,161		\$ 6,120		\$ 9,281	\$ 9,281	\$ 26,253
Task 208 Attend Progress Meetings	0208	\$ -	\$ -	\$ 1,043		\$ 2,648		\$ 3,691	\$ 3,691	\$ 37,241
Task 209 Assist in Evaluating Claims & Change Orders	0209	\$ -	\$ -	\$ 2,624		\$ 1,996		\$ 4,620	\$ 4,620	\$ 22,440
Task 210 Field Material Testing	0210	\$ -	\$ -					\$ -	\$ -	\$ 2,584
Task 211 Substantial Completion Inspections	0211	\$ -	\$ -	\$ 3,683		\$ 2,708		\$ 6,391	\$ 6,391	\$ 25,247
Task 212 Final Completion Inspections	0212	\$ -	\$ -					\$ -	\$ -	\$ 10,512
Task 213 OCCP Coordination (up to 40 OCCPs)	0213	\$ -	\$ -					\$ -	\$ -	\$ 18,016
Task Series 300 - Resident Project Representative Services	0300	\$ -	\$ -					\$ -	\$ -	\$ -
Task 300 RPR Services	0300	\$ 5,000	\$ 5,000		\$ 190,843			\$ 190,843	\$ 190,843	\$ 238,443
Task Series 400 - Project Closeout	0400	\$ -	\$ -					\$ -	\$ -	\$ -
Task 401 Construction Record Drawings	0401	\$ -	\$ -	\$ 4,245	\$ 6,236	\$ 7,386		\$ 17,867	\$ 17,867	\$ 36,455
Task 402 Contractor Completion Documents	0402	\$ -	\$ -					\$ -	\$ -	\$ 2,584
Task 403 Project Closeout Documentation	0403	\$ -	\$ -	\$ 4,120				\$ 4,120	\$ 4,120	\$ 8,276
Allowance		\$ -	\$ -					\$ -	\$ -	\$ 30,590
Annual Security Audits and Performance Management		\$ 10,000	\$ 10,000					\$ -	\$ -	\$ 196,320
Total, Hours										
Total, Billings		\$ 15,000	\$ 20,000	\$ 85,744	\$ 224,643	\$ 35,402	\$ 10,000		\$ 355,789	\$ 999,189

**DESIGN PROFESSIONAL SERVICES**  
**AMENDMENT NO. 2**  
**CONTRACT NO. 1443      PROJECT NO. 81000819**  
**WASTEWATER SCADA**  
**WATER SERVICES DEPARTMENT**

This amendment is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation (City), and Black & Veatch Corporation (Design Professional). The parties amend the Agreement entered into on July 2, 2018, as follows:

WHEREAS, City has previously entered into a contract dated July 2, 2018 in the amount of \$1,370,672.00; and

WHEREAS, the City executed Amendment No. 1 on September 29, 2020, in the amount of \$999,189.00, to amend the total contract amount to \$2,369,861.00; and

WHEREAS, the City desires execute Amendment No. 2, in the amount of \$2,318,126.00, to amend the total contract amount to \$4,687,987.00; and

NOW, THEREFORE, in consideration of the payments and mutual agreements contained in this 2nd Amendment, City and Design Professional agree as follows:

**Sec. 1. Sections Amended.** The Contract is amended as follows:

- A. Add the following attachments:
  - a. Attachment A-2, Scope of Services for Amendment 1; and
  - b. Attachment C-2, Engineering Fee Summary and Schedule of Position Classifications for Amendment 2.
- B. Delete and replace the following section(s):
  - a. Delete Sec. 4, Compensation and Reimbursables, and replace with the following Sec. 4, Compensation and Reimbursables:
    - A. The maximum amount that City shall pay Design Professional under this Agreement is \$4,687,987.00, as follows:
      - 1. \$2,717,750.00 for the services performed by Design Professional under this Agreement.
      - 2. For Design Professional services described in the Scope of Services, City shall pay Design Professional compensation amounting to actual salary of personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and schedule of position classifications and the salary range for each position is included as a part of **Attachments C, C-1, and C-2**. The Attachment C hourly rates for an employee may be increased by the Design Professional during the term of this Agreement a maximum of 5% annually. Design Professional will provide the City for approval on April 1st of each City's fiscal year proposed salary rate ranges for the job classification listed. New job classification will be added to the above list as applicable.

3. Actual reasonable expenses incurred by Design Professional directly related to Design Professional's performance under this Agreement, to include only the following, in an amount not to exceed \$1,098,399.00. The following are the reimbursable expenses that City has approved: Subcontractor direct costs paid by Design Professional, outside reproduction of final deliverables, local transportation in the project area, and non-local travel expenses for the cyber security specialist. Subcontractors office personnel labor costs shall be included in the unit prices for field investigation work.

4. Design Professionals' maximum amount shown in Sec. 4, Compensation and Reimbursables, includes a total allowance amount of \$871,838.00 for Optional Services not yet authorized by the City that may be required throughout the course of work. This allowance amount will not be utilized by Design Professional unless specifically authorized in writing by the City to perform Optional Services. Optional Services will not be performed, nor is the Design Professional approved to utilize any allowance monies unless the City provides written authorization to Design Professional that includes the scope of work for each optional task to be performed and a maximum billing limit for compensation that has been mutually agreed upon.

5. Compensation for all Optional Services will be based on the actual salary of office personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and schedule of position classifications and the salary range for each position is included as a part of **Attachments C, C-1 and C-2**. The amount billed for each Optional Service shall not exceed the amount established without further written authorization.

Additional amounts for Optional Services may be authorized, if deemed by CITY to be necessary, as the work progresses.

6. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Agreement.

#### B. Method of Payment.

Design Professional shall invoice City monthly setting forth the total effort expended on an hourly basis and all actual reasonable expenses incurred and allowed under this Agreement. Each invoice shall provide the subtotal of the hours and costs invoiced by the Design Professional for each Task Series identified in **Attachments A, A-1 and A-2** and a sum total of hours and costs for each invoice period. Design Professional shall submit a copy of invoices received from its subcontractors with labor hours per person, salary rate per person, effective salary multiplier, and direct expenses for each Task Series. Design Professional shall also submit monthly project status report with each monthly invoice containing the information defined in **Attachments A, A-1, and A-2**. City, upon approving the invoice, shall remit payment.



C. Condition Precedent to Payment.

1. It shall be a condition precedent to payment of any invoice from Design Professional that Design Professional is in compliance with, and not in breach or default of, all terms, covenants and conditions of this Agreement. If damages are sustained by City as a result of breach or default by Design Professional, City may withhold payment(s) to Design Professional for the purpose of offset until such time as the exact amount of damages due City from Design Professional may be determined.
2. No request for payment will be processed unless the request is in proper form, correctly computed, accompanied by a monthly status report, and is approved as payable under Agreement. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Agreement.
3. No request for payment will be processed unless it is accompanied by a copy of the most recent 00485.01 M/WBE Monthly Utilization Report submitted to the City's Human Relations Department.

**Sec. 2. Sections not Amended.** All other sections of the Agreement shall remain in full force and effect.

**Sec. 3. Authorization.** If the amount of the original Agreement plus the amount of any amendments to the original Agreement total over \$400,000.00, then this amendment requires City Council authorization. Notwithstanding the foregoing, City Council authorization is not required if (1) the total amount of the original Agreement plus the amount of any amendments to the original Agreement are within ten percent (10%) of the maximum amount authorized by the City Council or (2) a previous ordinance or Resolution authorized amendments without further City Council approval.

**Sec. 4. Effectiveness; Date.** This amendment will become effective when the City's Director of Finance has signed it. The date this amendment is signed by the City's Director of Finance will be deemed the date of this amendment.

Each party is signing this amendment on the date stated opposite that party's signature.

**DESIGN PROFESSIONAL**

I hereby certify that I have authority to execute this document on behalf of Design Professional

By:

DocuSigned by:  
  
819AF6924656448...

Date: 1/31/2022

Title: Associate Vice President

**KANSAS CITY, MISSOURI**

By:

DocuSigned by:  
  
44458FCE836C4D6...

Date: 2/7/2022

Title: DeputyDirector

Approved as to form:

DocuSigned by:  
  
0909E44CF75D420...

Assistant City Attorney

I hereby certify that there is a balance, otherwise unencumbered, to the credit of the appropriation to which the foregoing expenditure is to be charged, and a cash balance, otherwise unencumbered, in the Treasury, to the credit of the fund from which payment is to be made, each sufficient to meet the obligation hereby incurred.

DocuSigned by:  
 2/16/2022

Director of Finance (Date)

ATTACHMENT A-2  
SCOPE OF SERVICES

Owner: City of Kansas City, Missouri, Water Services Department  
Design Professional: Black & Veatch  
Project: Wastewater SCADA System Improvements Phase 1 CPS and Phase 2 Design  
WSD Contract No: 1443  
WSD Project No: 81000819

- A. **SCOPE OF SERVICES.** The services to be performed by the ENGINEER under this AGREEMENT consist of the expansion of the Phase 1 Construction Phase Services and for the addition of Phase 2 Design Services of Wastewater SCADA implementation of remaining sites and further development of standards documents, as stated below. Further, it is understood and agreed that the date of commencement, rate of progress and the time of completion of the work to be done hereunder are essential provisions of this AGREEMENT; and it is further understood and agreed that the work which is the subject of this AGREEMENT shall commence upon execution of this AGREEMENT and receipt of a Notice to Proceed.

Basic services to be provided by ENGINEER under this AGREEMENT for the Project are as follows:

- Phase 1 – Additional Construction Phase Services
  - Phase 2 – Preliminary Design
  - Phase 2 – Final Design and Bid Phase
1. **Conduct Project Administration Services.** Design Professional will provide the management functions required to successfully complete all phases of the work, including all project correspondence with the City; Status Reports, consultation with the City's staff; supervision and coordination of services; implementation of a project specific work plan, procedures, and a quality control/quality assurance plan; scheduling and assignment of personnel resources, administration and coordination of subconsultants, continuous monitoring of work progress; and invoicing for the work performed. The Scope of Services and the subtasks discussed below explicitly set forth what ENGINEER will perform and does not implicitly put additional responsibilities or duties upon ENGINEER.
  2. **Project Schedule.**
    - Phase 1 – no changes to the current schedule
    - Phase 2 - Preliminary Design – 120 calendar days
    - Phase 2 - Final Design, and Bidding – 245 calendar days
  3. **Cost Estimating.**
    - a. Preliminary Design: All opinions of probable equipment, implementation, and lifecycle cost developed for the preliminary design construction costs, final design construction costs, and ENGINEER's bid estimates will follow the recommendations of the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice

No. 18R with regard to methodology and accuracy. Lifecycle costs will include estimated operations and maintenance costs. The cost opinion level of accuracy presented by ENGINEER will be a Class 3 budget authorization or control cost opinion in accordance with accepted industry guidelines and as defined by AACE. Since ENGINEER has no control over the cost of labor, material or equipment furnished by others not under contract to ENGINEER, ENGINEER's opinion of probable cost for construction of the work will be made on the basis of experience and qualifications as an ENGINEER. ENGINEER does not guarantee or warranty that proposals, bids or actual PROJECT costs will not vary from ENGINEER's opinions of probable cost.

- b. Final Design: All opinions of probable construction cost developed for Final Design will follow the recommendations of the AACE International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinion level of accuracy presented by ENGINEER for the 60-percent deliverable will be a Class 2 control or bid cost opinion in accordance with accepted industry guidelines and as defined by AACE. The cost opinion level of accuracy presented by ENGINEER for the 95-percent and final deliverable will be a Class 1 check estimate or bid cost opinion in accordance with accepted industry guidelines and as defined by AACE. Since ENGINEER has no control over the cost of labor, material or equipment furnished by others not under contract to ENGINEER, ENGINEER's opinion of probable cost for construction of the work will be made on the basis of experience and qualifications as an ENGINEER. ENGINEER does not guarantee or warranty that proposals, bids or actual PROJECT costs will not vary from ENGINEER's opinions of probable cost.
- 4. **Progress Reporting.** ENGINEER will prepare monthly invoices, monthly status reports and general correspondence during all phases of the PROJECT. Status reports will include an updated schedule, a summary of status of each major task and a summary of the PROJECT financial status. With each invoice, include a table or excel file divided by task for each task member hours and their position.
  - 5. **Follow-On Phases.** At the discretion of the CITY and after completion of the Project, the DESIGN PROFESSIONAL may be requested to provide additional services related to the Phase 2 Wastewater SCADA.

**B. Phase 1 – CONSTRUCTION MANAGEMENT AND RPR PHASE SERVICES.** The following paragraphs describe the Scope of Services to be amended under this amendment. Tasks not listed herein have no additional effort included in this Amendment.

- 1. Task 201 CONTRACTOR Communication.** An additional 16 hours per week is included for Contractor communication and coordination for the remaining 66 weeks of the project.
- 2. Task 203 Interpretations of Contract Documents.**

DESIGN PROFESSIONAL will issue, with reasonable promptness, written clarifications or interpretations (which may be in the form of Drawings) of the requirements of the Drawings and Specifications as DESIGN PROFESSIONAL may determine necessary, which will be consistent with the intent of and reasonably inferable from the Contract Documents. Such written clarifications and interpretations will be binding on CITY and CONTRACTOR. DESIGN PROFESSIONAL's interpretations, draft responses to RFIs, and clarifications will be provided to the CITY for review and approval, and distributed to the CONTRACTOR, CITY and RPR.

To establish the basis for the DESIGN PROFESSIONAL's compensation in the original budget, a maximum of twenty (20) Requests for Interpretations and 88 hours was budgeted. To-date, 39 RFI's have been reviewed. Additional effort has been included to respond to a total of 75 RFI for the duration of the project.

- 3. Task 206 Shop Drawings and Data Submittals**

DESIGN PROFESSIONAL will receive, review, and accept shop drawings, samples, and data submitted by the CONTRACTOR as required by the Construction Contract Documents.

DESIGN PROFESSIONAL's review and acceptance will only be to determine if the items covered by the submittals will, after installation or incorporation into the Work, conform to the requirements in the Contract Documents and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. The shop drawing review by the DESIGN PROFESSIONAL is not intended to relieve the CONTRACTOR from its responsibility for performance in accordance with the Contract for construction, nor is such review a guarantee that the work covered by the shop drawings is free of errors, inconsistencies or omissions. The review and acceptance of a separate item as such will not indicate acceptance of the assembly in which the item functions.

DESIGN PROFESSIONAL will complete the review and respond to submittal items within twenty-eight (28) calendar days of receipt thereof for final approval.

To establish the basis for the DESIGN PROFESSIONAL's compensation in the original budget, a maximum of one hundred (100) submittals for the project, including resubmittals were planned to be reviewed. To-date, 99 submittals were reviewed and 95 additional submittals are anticipated based on the Contractor's log. An additional 324 hours have been budgeted for submittal reviews.

Reviews of submittals will be limited to the review of the first initial submittal and one re-submittal, if required, for each specification section.

#### **4. Task 209 Assist in Evaluating Claims and Change Order Requests**

DESIGN PROFESSIONAL will assist CITY in evaluating change order requests (includes all work change directives and time extensions) submitted by the CONTRACTOR or initiated by DESIGN PROFESSIONAL issuance for request for proposal. DESIGN PROFESSIONAL will evaluate the construction cost and schedule impact of each change order request. DESIGN PROFESSIONAL will assist with determining a fair price for the Work and evaluating the potential impact of each change order request on the CONTRACTOR's construction schedule. DESIGN PROFESSIONAL will review change order requests and cost proposals prepared by the CONTRACTOR for the contemplated work. The DESIGN PROFESSIONAL will prepare a written recommendation stating the reason for each change order request and recommended action by CITY. The DESIGN PROFESSIONAL will negotiate change order requests with the CONTRACTOR on CITY's behalf for approval by the CITY prior to CONTRACTOR's start of work defined in each change order request. If the CITY determines that the CONTRACTOR must competitively bid certain Subcontractor work covered under a change order request, DESIGN PROFESSIONAL will review bids of the CONTRACTOR and provide a written recommendation of those bids to the CITY if authorized under Optional Services. The DESIGN PROFESSIONAL will draft all change orders for the CITY. CITY will review, approve and execute all change orders covering changes in the Work, changes in the contract price or contract times for work defined in change order requests and agreed upon by CITY and CONTRACTOR.

To establish the basis for DESIGN PROFESSIONAL's compensation in the original budget, a maximum of four (4) change orders and a maximum of sixteen (16) work change directives and a total of 92 hours have been budgeted. To-date, two change orders, five Requests for Proposals, and seven Approved Work Authorizations have been coordinated and 117 hours spent. An additional 80 hours are included for this task.

#### **5. Task 214 Westside Coordination**

DESIGN PROFESSIONAL will assist CITY in coordinating Westside SCADA upgrades.

## **6. Task 215 Administration Building BIM Model**

DESIGN PROFESSIONAL will provide laser scanning and development of a BIM model for the Administration Building. Assumptions include:

- Electrical and I&C modeling not included in this estimate.
- Drawing production not included in this estimate (The deliverable is a BIM model).
- Others will model water heater and associated piping.
- Estimate does not include scan or model time of existing furniture or items (HVAC, electrical, fire protection, etc.) above drop ceiling, if present, in the administration building.
- Estimate does not include time for geospatial location. Survey shall be completed by others.
- Estimate does not include time for exterior laser scanning of administration building.
- Estimate assumes existing structural information (materials, structural details, etc.) is available prior to modeling.
- Estimate assumes existing architectural information (materials, architectural details, etc.) is available prior to modeling.
- Total Hours (including travel, scanning, processing scans, and modeling)
- Scanning tools will be rented on a daily basis as noted in the fee proposal.

## **7. TASK SERIES 300 – RESIDENT PROJECT REPRESENTATIVE SERVICES**

DESIGN PROFESSIONAL will provide Resident Project Representative (RPR) services to observe the construction work associated with the Project as defined in the Construction Contract Documents. Through a Subconsultant agreement, DESIGN PROFESSIONAL will provide RPR assistants.

The RPR and its assistants will observe the CONTRACTOR's work and perform the services listed below.

- a. RPR Level of Effort: To establish basis for DESIGN PROFESSIONAL's compensation for resident project representative services in the original budget, the effort for Task Series 300 is based on providing one half-time RPR working up to 16 hours per week for the first 24 weeks of the project and 20 hours per week for 80 weeks, totaling 1984 hours. DESIGN PROFESSIONAL will stagger working hours for RPR if CONTRACTOR elects to work outside standard working hours if allowed by the Contract Documents.

**An additional 80 hours for B&V I&C support for RPR services is included in this Amendment.**

- b. General Responsibilities. RPR will be on site from the CONTRACTOR's mobilization until final completion of the Work or up to the budgeted number of hours indicated herein. RPR will be responsible to perform site observation and liaison tasks with the CONTRACTOR, CITY, DESIGN PROFESSIONAL, public and other agencies; tasks involving monthly progress meetings, daily and weekly reporting, document review and maintenance and conducting substantial completion inspections and final completion inspections of the Work.
- c. Neither DESIGN PROFESSIONAL nor the RPR will supervise, direct, control or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws or Regulations applicable to the furnishing or performance of the Work. DESIGN PROFESSIONAL will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.



**PHASE 2 - PRELIMINARY DESIGN.** The Scope of Services for Preliminary Design and the subtasks discussed below explicitly set forth what ENGINEER will perform and does not implicitly put additional responsibilities or duties upon ENGINEER. This Preliminary Design task will be completed by ENGINEER within one hundred twenty (120) calendar days from receipt of Amendment A-2.

All opinions of probable construction cost developed for Preliminary Design will follow the recommendations of the AACE International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinion level of accuracy presented by ENGINEER will be a Class 3 budget authorization or control cost opinion in accordance with accepted industry guidelines and as defined by AACE. Since ENGINEER has no control over the cost of labor, material or equipment furnished by others not under contract to ENGINEER, ENGINEER's opinion of probable cost for construction of the work will be made on the basis of experience and qualifications as an ENGINEER. ENGINEER does not guarantee or warranty that proposals, bids or actual PROJECT costs will not vary from ENGINEER's opinions of probable cost.

The level of effort for preliminary design has been based on the following assumptions:

- SCADA upgrades will be provided for Birmingham WWTP which is anticipated to be incorporated in the fiber optic backbone. ENGINEER will coordinate activities with ongoing design and construction work anticipated for this site.
- ENGINEER will coordinate with WSD-hired consultant undertaking design for Todd Creek WWTP. It is anticipated that six meetings of one hour each will be required. ENGINEER will review preliminary and design documents for conformance with SCADA standards.
- Field investigation of existing conditions will be required for each site in consideration during preliminary design. Field investigations will include investigating providing "Hand" position feedback for all motor and equipment "Hand-Off-Auto" selector switch positions for the sites included in Phase 2.
- SCADA upgrades will be provided for the following pumping stations. PLC model numbers listed below reflect the site conditions noted during Wastewater SCADA Phase 1 Conceptual Design and may not reflect subsequent improvements and current conditions. Present existing conditions and hardware models will be noted during field investigations. All Phase 2 sites are expected to require an upgrade to the facility PLC. Field investigations will account for how the new PLC will need to be installed. (The site listing below and work described to be done at the WWTP's and pump stations should completely remove the wastewater facilities from the Transdyn/Kapsch SCADA system. An early review of facilities will be conducted in Preliminary Design to ensure all facilities have been accounted.

	FACILITY NAME	FACILITY NUMBER	FACILITY TYPE	PLC MODEL	ANTICIPATED FIBER <sup>1</sup> OR RADIO
1	SOUTHWEST BLVD	600	SANITARY & FLOOD	5/05	FIBER (60')
2	25TH ST	601	FLOOD	5/04	FIBER (100')
3	BROADWAY	603	FLOOD	No PLC	RADIO
4	NORTH AIRPORT	604	FLOOD	No PLC	FIBER (200')
5	GILLIS	606	FLOOD	No PLC	FIBER (1600')
6	LYDIA	607	FLOOD	No PLC	FIBER (1800')
7	PROSPECT	608	FLOOD	No PLC	RADIO
8	MILWAUKEE	609	FLOOD	L33ER	FIBER (400')
9	TRUMAN	610	FLOOD	No PLC	RADIO
10	HAWTHORN	611	FLOOD	No PLC	RADIO
11	BLUE BANK	612	FLOOD	1200	FIBER (1200')
12	SOUTH AIRPORT	614	FLOOD	5/05	FIBER (200')
13	SWOPE INDUSTRIAL	618	SANITARY	ControlLogix	RADIO
14	NORTH CHURCH ESTATES	619	SANITARY	5/03	RADIO
15	PIED CREEK	623	SANITARY	5/03	RADIO
16	FIRST CREEK	631	SANITARY	5572	RADIO
17	SECOND CREEK	632	SANITARY	5572	RADIO
18	SOUTH AIRPORT RELIEF	637	FLOOD - GW	No PLC	FIBER (200')
19	WILDWOOD WEST	642	SANITARY	5/03	RADIO
20	KCI INDUSTRIAL	643	SANITARY	5/03	RADIO
21	BRIARCLIFF WEST	646	SANITARY	5/03	FIBER (50')
22	NORTHLAND MOBILE	657	SANITARY	5/05	RADIO
23	CHOUTEAU	659	SANITARY	5572	FIBER (50')
24	RIVERSIDE HORIZONS	662	SANITARY	5/05	RADIO

WSD Contract No. 1443

8/13/2021

	FACILITY NAME	FACILITY NUMBER	FACILITY TYPE	PLC MODEL	ANTICIPATED FIBER <sup>1</sup> OR RADIO
25	BIRCHWOOD	663	SANITARY	5/03	RADIO
26	12TH STREET	667	SANITARY	5/03	RADIO
27	SOUTH AIR PUMPING	676	SANITARY	5/03	FIBER (1600')
28	118TH AND LAWNSDALE	677	SANITARY	5/03	RADIO
29	LAKE WAUKOMIS	682	SANITARY	5572	FIBER (2100')
30	WHITE ALOE	684	SANITARY	5/03	FIBER (50')
31	BRUSH CREEK	686	SANITARY	5/03	FIBER (150')
32	UPPER RUSH	687	SANITARY	5/03	FIBER (2400')
33	HARLEM	688	SANITARY	5/03	FIBER (2500')
34	83RD ST	692	SANITARY	5/03	FIBER (3800')
35	BIRMINGHAM	693	SANITARY	5572	FIBER (100')
36	MACE ROAD	694	SANITARY	5/03	RADIO
37	WEATHERBY LAKE	696	SANITARY	5/03	FIBER (2400')
38	PLATTE WOODS	697	SANITARY	5/03	FIBER (1100')
39	KEMPER	699	FLOOD	5/04	FIBER (800')
40	KCI DE-ICING	745	FLOOD	No PLC	RADIO

**Notes:**

- 1. Fiber lengths noted are approximate and subject to revision based on evaluation in preliminary design.**
- 2. An additional ten (10) Green Infrastructure sites will also be connected to the SCADA system.**

Architectural Modifications: Modifications will be required to the existing control rooms in Birmingham WWTP, Rocky Branch WWTP, Fishing River WWTP, and Westside WWTP. The control rooms will be modified to include standardized workstations, wall mounted screens, and aesthetic updates. The need for ventilation improvements will be considered. Additional architectural modifications may be considered pending Operations Staff feedback.

- New fiber will be run to each site to provide the communication network. An allowance of 33,000 feet has been included for design of the new fiber. (Estimated fiber lengths shown in the table of facilities. Allowance also includes investigating connection to fiber for East Tank and Waldo Tank.) Fiber layout drawings will be based on GIS mapping, desktop utility contacts, and field investigations. Additional fiber route investigations or utility locates will be provided through Optional Services.
- Design will include installation of new radio repeaters at the East Tank and Waldo Tank. A \$20,000 allowance is provided to identify and negotiate installation of a radio repeater in mid-town Kansas City. Conceptual design identified a possible repeater being required at 31<sup>st</sup> and Grand Avenue. If it is determined pump stations in the area around this tower cannot be reached from the fiber backbone, ENGINEER, together with City designee, will negotiate placement of an antenna and radio at the tower owner's site. The tower owner is KCTV5.
- An evaluation of NEC compliance and any required alterations will be considered for each site.
- Coordination with NRTC for two additional frequency pairs.
- ENGINEER will not be responsible for design of utility relocations for installation of new fiber. More detailed notes will be included on the drawings directing the contractor on this issue.
- ENGINEER will not be responsible for design of new pavement associated with the installation of new fiber. More detailed notes will be included on the drawings directing the contractor on this issue.
- ENGINEER to negotiate an approach with Rockwell Automation and Rensenhouse to become informed of and respond to changing standard offerings and pricing structure. ENGINEER will provide regular bi-monthly updates to WSD.
- Base scope assumes that programming/configuration of the SCADA system will be done by the construction contractor. ENGINEER can offer programming/configuration services as an optional service.

Preliminary Design shall include:

1. **Project Initiation Meeting/Field Investigations.** Conduct a Project Initiation Meeting with WSD to review ENGINEER's scope of work and WSD responsibilities. PROJECT schedule and budget commitments will also be covered. Four hours are budgeted for the Project Initiation Meeting.

A site visit will be conducted for each wastewater plant, pump station, and radio repeater for each site listed in this scope document. A current version of the City's fiber optic network will be brought to each site to determine the feasibility of routing the fiber optic backbone to the site. If fiber does not appear to be an option, then provisions for placing and installing a radio antenna will be investigated.

2. **Design Memorandum.** Prepare a design memorandum and preliminary drawings as required to establish agreement on the scope, design parameters, performance requirements and PROJECT approach for improvements. Submit electronic .pdf file to WSD for review. The design memorandum will include the following:

**Design Criteria (Level 1) Review Document**

- Preliminary Communications architecture diagram including OIT and thin client locations. Review of locations will be conducted with WSD operations staff prior to receiving the Level 1 documents.
  - The plant/pump station process and instrumentation diagrams will be coordinated with WSD Operations to include reporting for support of the O&M dashboard.
  - Preliminary input/output card quantities
  - Engineer provided computer-generated radio path studies if proposed and third-party agreements if proposed. Computer-generated radio path studies are anticipated for 35 sites.
  - Engineer will provide the services of a qualified firm to conduct physical radio path profile studies. Anticipated cost of physical path study is in the order of \$35,000.
  - Primary equipment layouts and furnishings
  - Preliminary physical environment control and conditioning measures
  - Preliminary lighting and security related to control room modifications and construction
  - Number and size of equipment
  - Regulatory and code requirements review. Potential alterations that may be required to achieve code compliance to be defined in the Design Memorandum.
  - Preliminary cost opinions for recommended work
  - Preliminary construction methodology, sequence, and schedule
3. **Design Memorandum Review.** Meet with the WSD and obtain WSD's comments on the design memorandum and preliminary drawings. Resolve questions and revise documents, if necessary and submit electronic pdf copy of final Design Memorandum to WSD.
  4. **Standard Wastewater I&C Specifications.** Prepare standard I&C specifications for WSD wastewater projects. Standard specifications are expected to include the following:

<b>Description</b>	<b>Spec No.</b>
Instrumentation and Control System	13500
Computer System Hardware	13510
Computer System Software	13520
Programmable Logic Controllers	13530
Radio Equipment	13540
Software Control Block Descriptions	13550
Panel Mounted Instruments	13561
Flow Instruments	13562
Pressure and Level Instruments	13563
Process Analytical Instruments	13564
Temperature Instruments	13565
Miscellaneous Instruments	13566
Panels and Appurtenances	13570
Static Uninterruptible Power Supply	13580
Network Systems	13590
Metallic Communication Cables and Connectors	13591
Fiber Optic Communication Cables and Connectors	13592

Engineer will meet with WSD prior to beginning work on the standard specifications to denote any changes to the above listing and to provide preliminary review of specification topics.

A preliminary submittal will be made in electronic (pdf) format. WSD will review for three weeks before conducting review meeting for Engineer to collect comments. A final submission will be made with all documents turned over to WSD in electronic (MS Word) format for their use.

5. **Update Wastewater SCADA System Standards.** Engineer will update the Wastewater SCADA System Standards (formerly referred to as “TM-4”) to reflect standards introduced during SCADA Phase 1.

Engineer will meet with WSD prior to beginning work on the standards to denote any changes in philosophy by WSD since the first version was released.

A preliminary submittal will be made in electronic (pdf) format. WSD will review for three weeks before conducting review meeting for Engineer to collect comments. A final submission will be made with all documents turned over to WSD in electronic (MS Word) format for their use.

6. **Quality Assurance/Quality Control.** Designate a QA/QC review team to provide QA/QC reviews at the Preliminary Design phase. Team shall consist of a technical advisor or senior technical staff not associated with the day-to-day design work.
7. **WSD's Responsibilities.** will furnish, as required by the herein described Scope of Services and not at the expense of the ENGINEER, the following items:
  - a. Provide access to sites for field investigations by ENGINEER.
  - b. Provide assistance by placing at ENGINEER's disposal available information pertinent to the assignment, including previous reports, drawings, panel wiring diagrams, specifications, operation and maintenance records and any other data relative thereto. Provide said information within fourteen (14) calendar days of receipt of a written request by ENGINEER.
  - c. WSD hereby commits to review periods for interim deliverables of no more than fourteen (14) calendar days from receipt of deliverables from ENGINEER. WSD shall provide consolidated written review comments to ENGINEER within that period. The schedule shall be extended one day for each additional day beyond the fourteen (14) calendar day review period.
  - d. WSD's Project Manager will coordinate the scheduling of meetings between the WSD's management, engineering and operations and maintenance groups and the ENGINEER.
  - e. WSD's Fiber Optic Coordinator, Chris Lockey, will be available to complete field investigation with ENGINEER along each proposed fiber route prior to Final Design.
  - f. WSD's Project Manager will facilitate a coordination meeting and field investigations with the Responsible Agencies for the existing radio enclosure maintenance at the East Tank and Waldo Tank. WSD will coordinate and procure the required radio licenses.
  - g. WSD's Project Manager or authorized proxy will participate in negotiations regarding mid-town radio tower access.
  - h. WSD will be responsible for coordinating permits associated with the new fiber installation including but not limited to railroad companies, USACE, and other entities.
  - i. WSD will provide available existing electronic versions of existing plans, including facility plans and P&ID drawings to ENGINEER for all sites.

- D. PHASE 2 - FINAL DESIGN.** The Scope of Services for Final Design and the subtasks discussed below explicitly set forth what ENGINEER will perform and does not implicitly put additional responsibilities or duties upon ENGINEER. The same assumptions made for Preliminary Design are included in the Final Design Phase. This Final Design task will be completed by ENGINEER within two hundred forty-five (245) calendar days of WSD's written acceptance of the Final Design Memorandum. The time required for bidding, award and construction contracting is expected to take one hundred fifty (150) calendar days; this is in addition to the time required for Final Design.

All opinions of probable construction cost developed for Final Design will follow the recommendations of the AACE International Recommended Practice No. 18R with regard to methodology and accuracy. The cost opinion level of accuracy presented by ENGINEER for the 60-percent deliverable will be a Class 2 control or bid cost opinion in accordance with accepted industry guidelines and as defined by AACE. The cost opinion level of accuracy presented by ENGINEER for the 90-percent and final deliverable will be a Class 1 check estimate or bid cost opinion in accordance with accepted industry guidelines and as defined by AACE. Since ENGINEER has no control over the cost of labor, material or equipment furnished by others not under contract to ENGINEER, ENGINEER's opinion of probable cost for construction of the work will be made on the basis of experience and qualifications as an ENGINEER. ENGINEER does not guarantee or warranty that proposals, bids or actual PROJECT costs will not vary from ENGINEER's opinions of probable cost.

Final Design shall include:

- 1. Construction Contract Documents.** Prepare detailed drawings, specifications and other Construction Contract Documents for the proposed construction work and for materials and equipment required. The documents shall be prepared for selection of a private construction Contractor on a competitive bid basis. Construction Contract Documents shall be in accordance with WSD standards, detailed specifications and approved preliminary plans developed in Preliminary Design. Construction Contract Documents will be prepared in stages to facilitate review by WSD and provide an orderly progression of the design. Interim deliverables will be as follows:

60-percent Review Documents

- Equipment physical locations and layouts
- Engineer provided computer-based radio path study
- Electrical systems one-lines
- Communications Network architecture diagram including major components
- Site plans required for fiber conduit, if required
- Control narratives required to support SCADA upgrades at all sites.
- Draft construction methodology, sequence, and schedule



- Draft technical specifications for major equipment
- Draft Front End Documents

90-percent Review Documents

- Complete specifications
- Complete drawings

Bid Set Documents

- Signed and sealed drawings and specifications

2. **Construction Cost Opinions.** At each design level, prepare an opinion of probable construction cost for the proposed work covered by the Construction Contract Documents.
3. **Quality Assurance/Quality Control.** Designate a QA/QC review team to provide QA/QC reviews at the 60- and 90-percent review document stages. Team shall consist of technical advisors or senior technical staff not associated with the day-to-day design work.
4. **Design Reviews.** ENGINEER shall provide electronic .pdf file of Construction Contract Documents for the 60- and 90-percent complete sets of Construction Contract Documents to WSD for review. Meet with WSD at the 60- and 90-percent complete stages to present the design and obtain WSD review comments. Resolve questions and address WSD comments at each level.
5. **Permitting and Regulatory Reviews.** ENGINEER will provide documentation required for local building permits: electronic .pdf file of Construction Contract Documents. Respond to questions from agencies via telephone or through written correspondence.
6. **Final Cost Opinion.** Upon completion of the Construction Contract Documents reviews, update the opinion of probable construction cost and revise as required.
7. **CAD Files.** ENGINEER will incorporate review comments concerning the 90-Percent Complete Construction Contract. Upon WSD approval of check set, the electronic CAD Drawings and reference files will be provided on a single thumb drive to be archived by the City. The construction as-built drawings will supplement or replace these files at the digression of the City.
8. **Bidding Services.** The Project will be advertised for construction by a general contractor as one bid package for all five sites, control room, and ancillary control room. ENGINEER will provide the following services prior to, during and immediately following Project advertisement.

- a. **Prepare Advertisement and Bidding Documents.** Assist WSD in establishing bid opening dates and prepare Construction Contract Documents for distribution by the WSD for the construction project.
  - b. **Pre-Bid Assistance.** Address inquiries prior to the bid opening from contractors, subcontractors, suppliers and public officials. Interpret bidding documents. Prepare up to five (5) addenda to the Construction Contract Documents, as required. Create conformed to bid drawings and specifications prior to award.
  - c. **Pre-Bid Conference.** Attend and assist WSD, at a date and time selected and a place provided by WSD, with a pre-bid conference to:
    - Confirm the types of information required by the Construction Contract Documents and the format in which bids are to be presented.
    - Review special PROJECT requirements and Construction Contract Documents in general.
    - Receive requests for interpretations that will be issued to plan holders by addendum, if necessary.
  - d. **Bid Opening/Final Cost Opinion.** Submit a sealed, final opinion of probable construction cost prior to bid opening. Assist WSD in reviewing the bids for completeness and accuracy.
  - e. **Pre-Award Services.** Consult, advise, and submit information on the responsiveness of the apparent low Bidder, the acceptability of its major subcontractors and the substitution of material and equipment proposed by the apparent low Bidder. Pre-award services will include:
    - Qualifications of Apparent Successful Bidder. Review and evaluate the qualifications of the apparent successful bidder and the proposed major or specialty subcontractors. The review and evaluation will include financial resources and reference checks on previous experience.
    - Bid Tabulations. Prepare and distribute a signed and sealed bid tabulation sheet, evaluate bids and make a recommendation to Owner concerning contract award.
9. **WSD's Responsibilities.** WSD will furnish, as required by the herein described Scope of Services and not at the expense of the ENGINEER, the following items:
- a. WSD will handle all copying and reproduction and all aspects of bidding document distribution during PROJECT advertisement.
  - b. WSD will issue all addenda during bidding services.
  - c. WSD hereby commits to review periods for interim deliverables of no more than fourteen (14) calendar days from receipt of deliverables from ENGINEER. WSD shall provide consolidated written review comments to ENGINEER within that period. The schedule

shall be extended one day for each additional day beyond the fourteen (14) calendar day review period.

- d. WSD's project manager will coordinate the scheduling of meetings between WSD's management, engineering and operations and maintenance groups and the ENGINEER.

- a. **E. Optional or Supplemental Services.** DESIGN PROFESSIONAL's contract upper limit includes an Optional Services Allowance amount of \$636,838.00. This allowance is for additional professional services that may be required during the course of the Project. Optional Services will not be performed nor is the DESIGN PROFESSIONAL approved to utilize any allowance monies unless specifically authorized in writing by the CITY. Compensation for Optional Services will be as mutually agreed upon and included in CITY's written authorization that will include the specific scope of work for each Optional Services task to be performed. Optional Services may include the following. \_\_

- a. Additional performance of field testing services. Field testing services is planned to be the responsibility of the DESIGN PROFESSIONAL under the Construction Contract Documents.
- b. Additional RPR Services or Office Phase Services beyond the quantities defined in the Basic Scope of Services.
- c. Survey Services beyond the quantity defined in the Basic Scope of Services.
- d. Review of Substitutions: The DESIGN PROFESSIONAL will record time required by DESIGN PROFESSIONAL in evaluating substitutes proposed or submitted by CONTRACTOR pursuant to the Contract Documents and in making changes in the Contract Documents (or in the provisions of any other direct contract with CITY for work on the Project) occasioned thereby. CITY will reimburse DESIGN PROFESSIONAL for evaluating each such proposed substitute.
- e. Regulatory Coordination: Liaison with Regulatory Agencies beyond coordination already completed or associated with Amendment No. 1 of the Work.
- f. Review and analysis of the CONTRACTOR's claims for differing subsurface and physical conditions.
- g. Services resulting from significant delays, changes, or price increases caused directly or indirectly by shortages of materials, equipment, or energy.
- h. Additional or extended services during construction made necessary by (1) work damaged by fire or other cause during construction, (2) a significant amount of defective or neglected work by any Contractor, (3) acceleration of the progress schedule involving

service beyond normal working hours, (4) default by any Contractor, and (5) failure of the Contractor to complete the work within the construction contract time.

- i. Evaluation of unusually complex or unreasonably numerous claims submitted by the Contractor or others in connection with the work.
- j. Providing Construction Phase Services beyond the original date for completion and readiness for final payment of Contractor
- k. Development of unavailable Record Documents. ENGINEER will research, document, develop drawings, tables, data bases, or other agreed upon format in the interest of project development.
- l. Engineering Services associated with adding SCADA sites. ENGINEER will specify and provide construction phase services related to SCADA sites beyond the listing herein. This work may be also be related to design assistance with new WSD construction projects to aid in the transition between SCADA systems.
- m. Control Room or other ancillary site. ENGINEER will design and provide construction phase services related to construction of spaces required to house system components and allow use of the system by operators whether that is a control room, office, or other spaces.
- n. Remote Site Visits - Up to two remote site visits within a six hour drive for up to four City participants or for an overnight trip including airfare may be included to discuss details and strategies of other operating utilities. All travel expenses will be paid by the Engineer's Agreement Fees and include airfare (if needed), 2 rental cars, fuel, meals for two days, and hotel rooms for one overnight stay per trip.
- o. Radio. Provide design memo and preliminary drawings for construction of a radio tower (assumed to be on City-owned property). Additional radio path studies if necessary.
- p. Easement and Permitting Assistance. Providing assistance with developing easement documents and permitting coordination for installation of the new fiber network.
- q. Additional Survey and Utility Locates. Provide additional survey or utility locations as needed beyond the base contract budgeted allowance.
- r. Code Compliance. Provide additional design services to complete recommended alterations at individual sites for current code compliance.
- s. BIM Modeling. BIM modeling of existing facilities modified during the project.
- t. Sensor Network. Coordinate with field services providers and design professional for hardware and software connection to SCADA.

Owner: KCMO WSD

Project: Wastewater SCADA Phase 2 Design and Bid

PHASE/Task		Project Manager	Engineering Manager	Civil Engineer	I&C Sr. Engineer	I&C Engineer	BIM Technician	Finance	Sr. Project Controls	SUBTOTAL, Hours	SUBTOTAL, Billings \$	Travel/Per Diem Expenses	SUBTOTAL, EXPENSES	SUBCONTRACTS			TOTAL Billings
														EAE (Architecture)	Custom (HVAC and Electrical)	Taliferro & Brown (Site and Survey)	
(Billing Rate, \$\$,Hr.)		\$282.00	\$188.00	\$126.00	\$282.00	\$126.00	\$104.00	\$104.00	\$195.00								
WORK BREAKDOWN STRUCTURE	Task																
Additional CPS Services	0200	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -				\$ -
Additional Contractor Coordination	0201	-	1,120	-	40	-	-	-	-	1,160	\$ 221,840	\$ -	\$ -				\$ 221,840
Additional RFI	0203	-	80	40	40	-	-	-	-	160	\$ 31,360		\$ -				\$ 31,360
Additional Submittal Review	0204	-	104	80	20	120	-	-	-	324	\$ 50,392		\$ -				\$ 50,392
Additional Change Order Support	0209	-	80	-	-	-	-	-	-	80	\$ 15,040		\$ -				\$ 15,040
Coordinate with Westside Team	0214	-	-	-	40	50	-	-	-	90	\$ 17,580	\$ -	\$ -				\$ 17,580
BIM Model of Admin Building	0215	4	8	-	-	-	240	4	2	258	\$ 28,398	\$ 2,400	\$ 2,400				\$ 30,798
Additional RPR	0300	-	-	-	-	80	-	-	-	80	\$ 10,080	\$ -	\$ -				\$ 10,080
B.3. Optional or Supplemental Services	0230	36	112	76	-	90	590	-	-	904	\$ 113,484	\$ 400	\$ 400	\$ 16,000			\$ 129,884
Total, Hours		40	1,504	196	140	340	830	4	2	3,056							
Total, Billings		\$ 11,280	\$ 282,752	\$ 24,696	\$ 39,480	\$ 42,840	\$ 86,320	\$ 416	\$ 390		\$ 488,174	\$ 2,800	\$ 2,800	\$ 16,000	\$ -	\$ -	\$ 506,974

Owner: KCMO WSD

Project: Wastewater SCADA Phase 2 Design and Bid

PHASE/Task		Project Director	Project Manager	Admin	Sr. Engineering Manager	Engineering Manager	Civil Engineer	Civil Director/OC	Structural Sr. Engineer	Electrical Sr. Engineer	I&C Director/OC	I&C Sr. Engineer	I&C Engineer	I&C Sr. Technician	I&C Technician	BIM Coordinator	BIM Manager	BIM Sr. Technician	BIM Technician	Estimator Director/OC	Estimator	Finance	Sr. Project Controls	SUBTOTAL, Hours	SUBTOTAL, Billings \$	Travel/Per Diem Expenses	Other Expenses	SUBTOTAL, EXPENSES	EAE (Architecture)	Custom (HVAC and Electrical)	SUBCONTRACTS Tailferro & Brown (Site and Survey)		Trek	Commence	SUBTOTAL, SUBCONTRACTS w/o MULTIPLIER	SUBTOTAL, SUBCONTRACTS	TOTAL Billings	
		\$338.00	\$277.00	\$93.00	\$215.00	\$185.00	\$123.00	\$200.00	\$194.00	\$200.00	\$261.00	\$277.00	\$126.00	\$148.00	\$120.00	\$145.00	\$179.00	\$123.00	\$102.00	\$231.00	\$185.00	\$108.00	\$191.00															
(Billing Rate, \$\$/Hr.)																																						
WORK BREAKDOWN STRUCTURE	PHASE																																					
A. Project Administration	0100	18	96	12	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	24	192	\$ 44,298	\$ 150	\$ -	\$ 150							\$ -	\$ -	\$ 44,448	
A.1. Project Administrative Services	0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -	\$ 49,444	\$ 177,159	\$ 57,893	\$ 80,000	\$ 38,500	\$ 402,996	\$ 402,996	\$ 402,996		
A.4 Progress Reporting and Invoicing	0100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -						\$ -	\$ -	\$ -		
B.1. Phase 2 - Preliminary Design	0200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -						\$ -	\$ -	\$ -		
B.1.1. Project Initiation Mtg and Review Mtgs	0210	6	6	-	-	8	4	-	-	-	-	6	2	-	-	4	-	-	-	-	-	-	-	36	\$ 8,156	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 8,156		
Field Investigations	0210	-	-	-	-	12	-	-	-	-	-	220	220	-	-	-	-	-	-	-	-	-	-	452	\$ 90,880	\$ 3,650	\$ -	\$ 3,650						\$ -	\$ -	\$ 94,530		
B.1.2. Design Memorandum	0220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -						\$ -	\$ -	\$ -		
Preliminary Drawings	0220	-	12	-	-	50	120	-	-	4	-	30	160	16	50	-	12	98	139	-	-	-	-	691	\$ 93,352	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 93,352		
Design Memo	0220	-	8	4	35	8	16	-	4	4	-	20	60	-	-	-	-	-	-	-	-	-	159	\$ 28,237	\$ -	\$ 20,000	\$ 20,000						\$ -	\$ -	\$ 48,237			
QA/QC	0230	-	2	-	-	8	4	8	20	-	4	40	2	8	-	-	-	-	-	-	-	-	96	\$ 20,800	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 20,800			
OPCC	0240	-	2	-	-	8	8	-	-	-	-	2	8	-	-	-	-	-	-	-	4	-	72	\$ 12,904	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 12,904			
B.1.4 Standard Wastewater I&C Specifications	0250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -						\$ -	\$ -	\$ -			
Preliminary Submittal	0250	-	-	-	-	-	-	-	-	-	-	12	48	-	-	-	-	-	-	-	-	-	60	\$ 9,372	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 9,372			
QA/QC	0250	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	8	\$ 2,088	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 2,088			
Final Submittal	0250	-	-	-	-	-	-	-	-	-	-	8	24	-	-	-	-	-	-	-	-	-	32	\$ 5,240	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 5,240			
B.1.5 Update Wastewater SCADA Standards	0260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -						\$ -	\$ -	\$ -			
Preliminary Submittal	0260	-	-	-	-	-	-	-	-	-	-	10	40	-	-	-	-	-	-	-	-	-	50	\$ 7,810	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 7,810			
QA/QC	0260	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	8	\$ 2,088	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 2,088			
Final Submittal	0260	-	-	-	-	-	-	-	-	-	-	8	24	-	-	-	-	-	-	-	-	-	32	\$ 5,240	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 5,240			
B.2 Final Design	0300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -						\$ -	\$ -	\$ -			
B.2.1. 60% Contract Documents	0310	-	-	16	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	\$ 5,368	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 5,368			
60% Drawings	0310	-	12	-	-	50	90	-	-	16	-	120	360	120	200	-	70	98	249	-	-	-	1,385	\$ 197,198	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 197,198			
60% Specifications	0310	-	8	-	40	30	60	-	-	8	-	40	80	-	-	-	-	-	-	-	-	-	266	\$ 46,506	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 46,506			
QA/QC	0320	-	2	-	-	8	-	20	-	8	50	2	8	-	-	-	-	-	-	-	-	-	98	\$ 22,246	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 22,246			
OPCC	0330	-	2	-	-	8	4	-	-	-	2	-	-	-	-	-	-	-	-	4	40	-	60	\$ 11,404	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 11,404			
Review Meetings with KCMO	0340	4	8	-	8	8	-	-	-	-	8	8	-	-	-	-	-	-	-	-	-	-	52	\$ 10,976	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 10,976			
B.2.2. 95% Contract Documents	0410	-	-	8	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	20	\$ 3,072	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 3,072			
95% Drawings	0410	-	12	-	-	30	70	-	-	16	-	60	180	80	140	-	35	98	214	-	-	-	935	\$ 128,771	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 128,771			
95% Specifications	0410	-	8	-	8	20	40	-	-	4	-	20	40	-	-	-	-	-	-	-	-	-	140	\$ 23,936	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 23,936			
QA/QC	0420	-	2	-	-	4	8	20	-	8	100	2	8	-	-	-	-	-	-	-	-	-	152	\$ 35,540	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 35,540			
OPCC	0430	-	2	-	-	4	8	-	-	-	2	-	-	-	-	-	-	-	-	-	4	-	60	\$ 11,196	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 11,196			
Review Meetings with KCMO	0440	4	8	-	8	8	8	-	-	-	8	8	-	-	-	-	-	-	-	-	-	-	52	\$ 10,976	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 10,976			
B.2.3. Bid Services	0500	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	\$ 676	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 676			
Bid Set Contract Documents	0500	-	-	16	-	16	40	-	-	-	-	8	16	-	8	-	4	-	35	-	-	-	143	\$ 18,846	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 18,846			
Pre-Bid Conference	0500	-	4	-	-	4	8	-	-	-	-	6	6	-	-	-	-	-	-	-	-	-	28	\$ 5,250	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 5,250			
Addendum Response	0500	-	4	-	-	16	24	-	-	-	2	-	4	16	-	4	-	-	-	-	-	-	70	\$ 11,024	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 11,024			
Award Services	0500	-	2	-	-	8	4	-	-	-	-	4	-	-	-	-	-	-	-	-	2	-	20	\$ 4,004	\$ -	\$ -	\$ -						\$ -	\$ -	\$ 4,004			
B.3. Optional or Supplemental Services	0600	-	40	-	30	120	100	-	-	-	-	44	100	-	-	20	100	800	1,068	-	-	-	2,422	\$ 304,954	\$ 2,000	\$ -	\$ 2,000	\$ 50,000			\$ 100,000	\$ 50,000	\$ 200,000	\$ 200,000	\$ 506,954			
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -						\$ -	\$ -	\$ -			
Total, Hours		34	240	56	137	442	628	60	36	74	206	648	1,424	216	402	24	221	1,094	1,705	12	122	24	24	7,829														
Total, Billings		\$ 11,492	\$ 66,480	\$ 5,208	\$ 29,455	\$ 81,770	\$ 77,244	\$ 12,000	\$ 6,984	\$ 14,800	\$ 53,766	\$ 179,496	\$ 179,424	\$ 31,968	\$ 48,240	\$ 3,480	\$ 39,559	\$ 134,562	\$ 173,910	\$ 2,772	\$ 22,570	\$ 2,592	\$ 4,584		\$ 1,182,356	\$ 5,800	\$ 20,000	\$ 25,800	\$ 99,444	\$ 177,159	\$ 57,893	\$ 180,000	\$ 88,500	\$ 602,996	\$ 1,811,152			

**DESIGN PROFESSIONAL SERVICES**  
**AMENDMENT NO. 3**  
**CONTRACT NO. 1443      PROJECT NO. 81000819**  
**WASTEWATER SCADA**  
**WATER SERVICES DEPARTMENT**

This amendment is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation (City), and Black & Veatch Corporation (Design Professional). The parties amend the Agreement entered into on July 2, 2018, as follows:

WHEREAS, City has previously entered into a contract dated July 2, 2018 in the amount of \$1,370,672.00; and

WHEREAS, the City executed Amendment No. 1 on September 29, 2020, in the amount of \$999,189.00, and executed Amendment No. 2 on February 16, 2022, in the amount of \$2,318,126.00, to amend the total contract amount to \$4,687,987.00; and

WHEREAS, the City desires to execute Amendment No. 3, in the amount of \$2,043,121.00, to amend the total contract amount to \$6,731,108.00; and

NOW, THEREFORE, in consideration of the payments and mutual agreements contained in this 1<sup>st</sup> Amendment, City and Design Professional agree as follows:

**Sec. 1. Sections Amended.** The Contract is amended as follows:

- A. Add the following attachments:
  - a. Attachment No. A-3, Scope of Services for Amendment No. 3.
  - b. Attachment No. C-3, Engineering Fee Summary and Schedule of Position Classifications for Amendment No. 3.
  - c. Attachment H, CREO Contract Assurances Addendum.
- B. Delete and replace the following section/attachment:
  - a. Delete Design Professional Services Part II, Standard Terms and Conditions, and replace with the attached Design Professional Services Part II, Standard Terms and Conditions.
  - b. Delete Sec. 4, Compensation and Reimbursables, and replace with the following Sec. 4, Compensation and Reimbursables:

**Sec. 4. Compensation and Reimburseables.**

A. The maximum amount that City shall pay Design Professional under this Agreement is \$6,731,108.00, as follows:

- 1. \$ [REDACTED] for the services performed by Design Professional under this Agreement.

2. For Design Professional services described in the Scope of Services, City shall pay Design Professional compensation amounting to actual salary of personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and schedule of position classifications and the salary range for each position is included as a part of **Attachments C** through **C-3**. The Attachment C hourly rates for an employee may be increased by the Design Professional during the term of this Agreement a maximum of 5% annually. Design Professional will provide the City for approval on April 1st of each City's fiscal year proposed salary rate ranges for the job classification listed. New job classification will be added to the above list as applicable.
3. Actual reasonable expenses incurred by Design Professional directly related to Design Professional's performance under this Agreement, to include only the following, in an amount not to exceed \$ [REDACTED]. The following are the reimbursable expenses that City has approved: Subcontractor direct costs paid by Design Professional, outside reproduction of final deliverables, local transportation in the project area, and non-local travel expenses for the cyber security specialist. Subcontractors office personnel labor costs shall be included in the unit prices for field investigation work.
4. Design Professionals' maximum amount shown in Sec. 4, Compensation and Reimbursables, includes a total allowance amount of \$ [REDACTED] for Optional Services not yet authorized by the City that may be required throughout the course of work. This allowance amount will not be utilized by Design Professional unless specifically authorized in writing by the City to perform Optional Services. Optional Services will not be performed, nor is the Design Professional approved to utilize any allowance monies unless the City provides written authorization to Design Professional that includes the scope of work for each optional task to be performed and a maximum billing limit for compensation that has been mutually agreed upon.
5. Compensation for all Optional Services will be based on the actual salary of office personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and schedule of position classifications and the salary range for each position is included as a part of **Attachments C** through **C-3**. The amount billed for each Optional Service shall not exceed the amount established for it without further written authorization. Additional amounts for Optional Services may be authorized, if deemed by CITY to be necessary, as the work progresses.
6. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Agreement.

**B. Method of Payment.**

Design Professional shall invoice City monthly setting forth the total effort expended on an hourly basis and all actual reasonable expenses incurred and allowed under this Agreement. Each invoice shall provide the subtotal of the hours and costs invoiced by the Design Professional for each Task Series identified in **Attachments A** through **A-3** and a sum total of hours and costs for each invoice period. Design Professional shall submit a copy of invoices received from its subcontractors with labor hours per person, salary rate per person, effective salary multiplier, and direct expenses for each Task Series. Design Professional shall also submit monthly project status report with each monthly invoice containing the information defined in **Attachments A** through **A-3**. City, upon approving the invoice, shall remit payment.

**C. Condition Precedent to Payment.**

1. It shall be a condition precedent to payment of any invoice from Design Professional that Design Professional is in compliance with, and not in breach or default of, all terms, covenants and conditions of this Agreement. If damages are sustained by City as a result of breach or default by Design Professional, City may withhold payment(s) to Design Professional for the purpose of offset until such time as the exact amount of damages due City from Design Professional may be determined.
2. No request for payment will be processed unless the request is in proper form, correctly computed, accompanied by a monthly status report, and is approved as payable under Agreement. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Agreement.
3. No request for payment will be processed unless it is accompanied by a copy of the most recent 00485.01 M/WBE Monthly Utilization Report submitted to the City's Civil Rights & Equal Opportunity (CREO KC) Department.

**Sec. 2. Sections not Amended.** All other sections of the Agreement shall remain in full force and effect.

**Sec. 3. Authorization.** If the amount of the original Agreement plus the amount of any amendments to the original Agreement total over \$400,000.00, then this amendment requires City Council authorization. Notwithstanding the foregoing, City Council authorization is not required if (1) the total amount of the original Agreement plus the amount of any amendments to the original Agreement are within ten percent (10%) of the maximum amount authorized by the City Council or (2) a previous ordinance or Resolution authorized amendments without further City Council approval.

**Sec. 4. Effectiveness; Date.** This amendment will become effective when the City's Director of Finance has signed it. The date this amendment is signed by the City's Director of Finance will be deemed the date of this amendment.



Each party is signing this amendment on the date stated opposite that party's signature.

**DESIGN PROFESSIONAL**

I hereby certify that I have authority to execute this document on behalf of Design Professional

Date: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_  
\_\_\_\_\_

**KANSAS CITY, MISSOURI**

By: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_  
\_\_\_\_\_

Approved as to form:

\_\_\_\_\_  
Assistant City Attorney

I hereby certify that there is a balance, otherwise unencumbered, to the credit of the appropriation to which the foregoing expenditure is to be charged, and a cash balance, otherwise unencumbered, in the Treasury, to the credit of the fund from which payment is to be made, each sufficient to meet the obligation hereby incurred.

\_\_\_\_\_  
Director of Finance (Date)