

DESIGN PROFESSIONAL SERVICES AGREEMENT

PROJECT NO. 81000893 CONTRACT NO. 1559

FOR

**ROUND GROVE BASIN SUPPLEMENTAL INFLOW AND INFILTRATION (I/I)
REDUCTION PROJECT**

WATER SERVICES DEPARTMENT

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

PART I

SPECIAL TERMS AND CONDITIONS

Sec. 1. Project description.

The services to be provided under this Agreement are for the following project (Project) and purpose:

The City of Kansas City, Missouri (City) is undertaking a project to reduce inflow and infiltration (I/I) in the City's separate sanitary sewer system in the Round Grove Basin east of the Blue River. The sewer mains in the chosen project area will be inspected, and based on the findings, preliminary recommendations and construction contract documents for sewer system rehabilitation in the project area will be developed. Final construction drawings may also include rehabilitation of additional pipes and manholes in the Blue River Central Basin depending on the results of current flow monitoring in this area.

This Project is associated with the Federal Consent Decree regarding the City of Kansas City, Missouri in the Overflow Control Plan. All rules and requirements included in the Consent Decree shall be adhered to. The Design Professional should pay special attention to Section XIII of the Consent Decree as it relates to stipulated penalties.

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 \$515,000.00, as follows:

1. \$280,802.46 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 a Schedule of Position Classifications and the salary range for each position is included as a part of **Attachment C**. In addition, field investigation labor will be compensated on a unit price basis using the unit prices listed in **Attachment D**.
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 \$188,021.00. 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 public outreach materials. Subcontractor's office personnel labor costs shall be included in the unit prices for field investigation work. Compensation for subcontractor field investigations shall be based on the unit prices listed in **Attachment D**.
4. Design Professionals' maximum amount shown in Sec. 4, Compensation and Reimbursables, includes a total allowance amount of Forty Six Thousand One Hundred Seventy-Six Dollars and Fifty-Four cents (\$46,176.54) 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. In addition, field investigation labor will be compensated on a unit price basis using the unit prices listed in **Attachment D**. Each Optional Service shall be specifically authorized by City in writing, and a maximum billing limit shall be established before the work is started. 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 set off 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, 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; and
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:

Sean Hennessy
Chief Financial Officer
4800 E. 63rd Street
Kansas City, Missouri 64130
Phone: (816) 513-0410
Facsimile: (816) 513-0172
E-mail address: sean.hennessy@kcmo.org

Design Professional:

Crawford, Murphy & Tilly, Inc
Raed Armouti
Vice President
One Memorial Drive – Suite 500
St. Louis, Missouri 63102
Phone: (314) 571-9058
Facsimile: (314) 436-0723
E-mail address: rarmouti@cmtengr.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. If required or upon recommendation of Design Professional, retains the services of a soils/geotechnical consultant.
- C. 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.

D. Provide standard City forms as required.

E. Provide City – Licensed Geographical Information System Data set forth in Attachment E, 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 (See Exhibit B)

Attachment B – Electronic Data Requirements

Attachment C – Engineering Fee Summary and Schedule of Position Classifications

Attachment D – Unit Costs

Attachment E - Licensed Geographical Information System Data

Attachment F – 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 G –Employee Eligibility Verification Affidavit

Attachment H – Truth-In-Negotiation Certificate

Attachment I – Affidavit of Compliance with the Federal Consent Decree

Regarding the City of Kansas City, Missouri Overflow Control Plan, Civil Action No. 10-cv-0487-GAF

Federal Consent Decree: an electronic copy of the Consent Decree in Civil Action No. 10-cv-00497-GAF is available at the following web location: <https://www.kcwaterservices.org/wp-content/uploads/2013/04/Consent-Decree.pdf>

Attachment J– 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 J.

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 good faith efforts in carrying out this policy by implementing its contractor utilization plan, which is attached as Attachment F. 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: 9/23/2019

By: 

Name: RAED ARMOUTI

Title: VICE PRESIDENT

KANSAS CITY, MISSOURI


Date: 10/10/19

By: 


Name: Sean Hennessy

Title: Chief Financial Officer

Approved as to form:


Assistant City Attorney Date

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.

for  10-28-19
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 affirmation 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 fails, 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.

Sec. 24. Quality Services Assurance Act. Design Professional certifies Design Professional will pay all employees who will work on this Contract in the city limits of Kansas City, Missouri at least \$10.00 per hour in compliance with the City's Quality Services Assurance Act, Section 3-66, Code of Ordinances or City has granted Contractor an exemption.

Section 25. Truth-In-Negotiation Certificate

The Design Professional shall complete and execute the Truth-In-Negotiation Certificate attached hereto as Attachment H and incorporated herein simultaneous with the Design Professional's execution of this Agreement.

Section 26. Consent Decree Project

The Project being performed by the Design Professional pursuant to this Agreement is subject the Consent Decree entered on September 27, 2010 in the U.S. District Court for the District of Western Missouri, by an between the United States of America, the State of Missouri, and the City of Kansas City, Missouri. The City shall incur significant stipulated penalties in the event that the Project is not completed within the time period required by the Consent Decree. In such case, the Contractor understands that **TIME IS OF THE ESSENCE** hereunder. The Design Professional shall be liable for the actual damages in the amounts set forth below, if the Design Professional fails to fully perform the Project, Scope of Work, Work Product, and Other Services as required

hereunder in accordance with the completion schedule and milestones accepted by the City and specified herein. This includes the Design Professional's performance of the Scope of Work, Work

Products, provision of all services, and submission in a form acceptable to the City.

The Design Professional understands and agrees that **TIME IS OF THE ESSENCE** and in the event the Project is not completed within the time period required by the Consent Decree, City shall incur significant stipulated penalties. In the event the Design Professional fails to meet and achieve the completion schedule and milestones approved by the City, Design Professional shall be liable for actual damages to be incurred per day as follows:

Day 1 through Day 30 - \$1000 per day;
Day 31 through Day 60- \$2000 per day;
Day 61 and thereafter - \$4000 per day.

These actual damages, along with any and all other damages, costs, and expenses incurred by the City in connection with this Agreement shall be the liability and obligation of the Design Professional. This shall not be the sole remedy of the City and City expressly reserves all rights and remedies available at law or in equity.

ATTACHMENT A
SCOPE OF SERVICES

ATTACHMENT A

SCOPE OF SERVICES

Design Professional: Crawford, Murphy & Tilly, Inc. (CMT)
Owner: City of Kansas City, Missouri
Project: Round Grove Basin Supplemental Inflow and Infiltration (I/I) Reduction Project
Contract No: 1559
Project No: 81000893

I. GENERAL

The following paragraphs provide a general description of the Work required of this Scope of Services. Subsequent paragraphs describe in detail the professional services to be provided by DESIGN PROFESSIONAL to facilitate the implementation of rehabilitation recommendations for reducing inflow and infiltration (I/I) flows into the sanitary sewer system in Kansas City, Missouri.

- A. The Project. The City of Kansas City (CITY), Missouri, intends to reduce Inflow and Infiltration (I/I) flows in the sanitary sewer system by implementing rehabilitation in a generalized area including portions of the Round Grove basin. Pending model results being performed by the City, DESIGN PROFESSIONAL may be requested to perform additional I/I reduction in the Blue River Central Basin to assure the Round Grove Pump Station will perform as intended. As such, the CITY is contracting with DESIGN PROFESSIONAL to provide the necessary professional services.
- B. Federal Consent Decree. This Project is included in the Federal Consent Decree pertaining to the City of Kansas City, Missouri's Overflow Control Program. As such, requirements of the Federal Consent Decree must be adhered to by the DESIGN PROFESSIONAL and its subconsultants and subcontractors.
- C. Background Information. The CITY is undertaking this Project to prepare preliminary and construction contract documents for the Inflow and Infiltration (I/I) Reduction project as part of the Smart Sewer Program. The project will focus on I/I reduction through rehabilitation of public sanitary sewers and manholes within the project area. The estimated footage of sewer pipe and number of manholes in the project area is approximately:
 - a. Project Area: 129,096 linear feet of 6-inch to 27-inch diameter sewer mains and 641 manholes.
- D. Follow-On Phases. At the discretion of the CITY, the DESIGN PROFESSIONAL may be requested to provide additional I/I reduction Work in the Blue River Central Basin and construction phase services for the projects.

- E. **General Description of Activities.** The Basic Scope of Services to be performed by DESIGN PROFESSIONAL consists of professional services for the development and implementation of rehabilitation recommendations for reducing I/I flow and volume in the project area. This Scope of Services includes review of Closed-Circuit Television (CCTV) inspection, smoke testing results, and manhole inspection data collected by CITY for the project area and smoke and dyed water testing of the public sanitary sewers 6-inches to 27-inches in the project area. The determination of which sewer lines to be rehabilitated and DESIGN PROFESSIONAL's design services for rehabilitation of sewer pipes and manholes selected by CITY shall be based on a prioritization method discussed herein. The Work consists of the following professional services:
1. Flow and Rainfall Monitoring Data Analyses
 2. Smoke Testing Analysis and Dyed Water Testing
 3. Field Data Evaluation and Rehabilitation Recommendations
 4. Development of Preliminary Recommendations for Sewer System Rehabilitation
 5. Development of Construction Contract Documents
- F. **Task Series Listing.** The Basic Scope of Services is organized under the following Task Series:
1. Task Series 100 - Project Management and Administration
 2. Task Series 200 - Public Involvement and Coordination
 3. Task Series 300 - Flow and Rainfall Data Analyses
 4. Task Series 400 - Smoke Testing Dyed Water Testing
 5. Task Series 500 - Field Data Evaluations and Rehabilitation Recommendations
 6. Task Series 600 - Develop Construction Contract Drawings and Limited Specifications
 7. Task Series 700 - Work Tracking Application
 8. Task Series 800 - GIS
 9. Task Series 900 - Bid Phase Services
- G. **Explicit Responsibilities.** The Basic Scope of Services explicitly sets forth what DESIGN PROFESSIONAL shall 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 shall not be performed without an amendment or shall be provided as Optional Services upon written authorization from the CITY.
- H. **Capital or Annual Cost Opinions.** All opinions of probable construction cost developed shall generally follow the recommendations of the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R-97 with regard to methodology and accuracy. Since DESIGN PROFESSIONAL has no control over the cost of labor, material or equipment furnished by others not under contract to DESIGN PROFESSIONAL, DESIGN PROFESSIONAL's opinion of probable cost for construction

of the Work shall be made on the basis of experience and qualifications as a DESIGN PROFESSIONAL. DESIGN PROFESSIONAL does not guarantee that proposals, bids or actual project cost will not vary from DESIGN PROFESSIONAL's opinions of probable construction cost. The cost opinions' level of accuracy presented by DESIGN PROFESSIONAL shall be as noted for in subsequent paragraphs of this Scope of Services.

II. PROJECT MILESTONES AND CITY REVIEW REQUIREMENTS

- A. DESIGN PROFESSIONAL shall complete Task Series 200, 300, 400, 500 and 600 within 450 calendar days following Notice To Proceed, and Task Series 700 and 800 within 60 calendar days thereafter, provided the CITY's distribution of field information (system characterization, manhole inspection data and CCTV data) is provided by the CITY to the DESIGN PROFESSIONAL no later than the date(s) stated in Section V. If the above stated field information is not provided by the stated date, the project schedule will be extended based upon DESIGN PROFESSIONAL substantiating the impact of not receiving any information to the satisfaction of CITY. DESIGN PROFESSIONAL's completion schedule will be extended by the CITY for delays beyond the reasonable control of the DESIGN PROFESSIONAL as approved by the CITY.
- B. The CITY hereby commits to review deliverables and provide comments within twenty-one (21) calendar days after receipt of deliverables from DESIGN PROFESSIONAL. CITY will endeavor to provide consolidated written review comments to DESIGN PROFESSIONAL within a twenty-one (21) calendar day period. A review meeting will be scheduled and conducted by DESIGN PROFESSIONAL no more than fourteen (14) calendar days after receipt of written consolidated CITY review comments, unless a mutually agreed upon date outside this schedule window is selected.

III. BASIC SCOPE OF SERVICES

The following Task Series describe the Basic Scope of Services to be provided by the DESIGN PROFESSIONAL under the 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 subcontractors employed by the DESIGN PROFESSIONAL in completion of the Work. The following management activities will be provided by DESIGN PROFESSIONAL.

Task 101 Project Management Services

DESIGN PROFESSIONAL shall provide project management services necessary throughout the project to successfully manage and complete the work, including project correspondence and consultation with CITY Staff; supervision and coordination of services; implementation of a project specific Work Plan; scheduling and assignment of personnel resources; continuous monitoring of work progress; and maintenance of project controls. Schedule shall be in Primavera (P6) or later version or Microsoft Project.

Task 102 Monthly Invoicing, Project Status Report, and Project Schedule

The DESIGN PROFESSIONAL shall prepare and submit monthly invoices on a form acceptable to the CITY and provide a monthly project status report and updated project schedule, which shall accompany the monthly invoice submittal. A PDF copy of the invoice, project status report, and project schedule shall be uploaded to the CITY's Aconex document management system. The CITY will provide a template for the project status report. Each invoice by the DESIGN PROFESSIONAL and subcontractors shall have labor hours and fee and unit price items broken down by task series and shall be in general conformance with the invoice template provided by CITY. The monthly project status report shall identify work performed by the 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 the DESIGN PROFESSIONAL's ability to meet M/WBE participation goals and project schedule milestones, including identification of any delays beyond its control, an estimate of work percent completion for each Task Series in the Basic Scope of Services based on the work completed, and the earned value of the completed work for each task series. The schedule shall be updated to reflect the progress reported in the status report. A short narrative shall be provided to describe the work activity performed for each task within each Task Series.

1. If schedule is produced in Primavera the layout shall include the following, in order.
 - a. Activity ID, Activity Name, Original Duration (OD), Remaining Duration (RD), Percent Complete (%), Start, Finish, Late Start, Late Finish, Total Float (TF), Baseline Variance (BL VAR), Predecessors, Successors, Resource ID (if requested).
2. If schedule is produced in Microsoft Project the layout shall include the following, in order.
 - a. Task ID, Activity Name, Original Duration (OD), Remaining Duration (RD), Percent Complete (%), Actual Start, Actual Finish, Start, Finish, Late Start, Late Finish, Free Slack, Baseline Variance, Predecessors, Successors, Resource ID (if requested).
3. Schedule shall be submitted in an Aconex workflow, on a monthly basis, one week prior to invoicing for approval. DESIGN PROFESSIONAL shall include the approved schedule with the monthly invoice submittal.
4. If the schedule falls behind contractual dates, DESIGN PROFESSIONAL shall propose a recovery schedule and plan for approval.

Task 103 Subconsultant Agreements and Administration

DESIGN PROFESSIONAL shall prepare a scope, budget, schedule, and agreement for its 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, subcontractor invoicing, and schedule maintenance. Prepare monthly M/WBE

subcontractor utilization reports and submit in the required format to the CITY's Human Relations Department.

Task 104 Quality Control

DESIGN PROFESSIONAL's Quality Control Program will be implemented on all phases of the project to provide an independent review of the work. Quality control reviews will include checks for conformance with regulatory agency requirements, completeness and correctness of evaluations, design accuracy, feasibility of implementing recommendations, and adherence to contract requirements.

Task 105 Project Kickoff Meeting

After Notice to Proceed is given by CITY, DESIGN PROFESSIONAL shall organize and conduct a Project Kickoff Meeting with the CITY to review and establish project goals, lines of communication, project procedures, the proposed Work Plan, and other logistics of project execution, including anticipated Project schedule and content of subsequent monthly progress meetings. DESIGN PROFESSIONAL shall prepare and submit an agenda to CITY staff prior to the meeting and prepare and distribute meeting minutes one week after the meeting date.

Task 106 Work Plan

1. **Work Plan Format.** DESIGN PROFESSIONAL shall prepare a written draft Work Plan. CITY will provide the format and a guideline for the information to be included in the Work Plan. The Work Plan for the project includes, at a minimum the following:
 - a. A summary of dedicated key team members roles and responsibilities, including all field crew leaders and contact information.
 - b. A summary of the project's scope of services.
 - c. Detailed cost-loaded schedule for performance of all work with a layout format as described in Task 102. The cost-loaded schedule shall indicate the planned value of work to be invoiced on a monthly basis through project completion.
 - d. Define any issues requiring special coordination with CITY, and/or adjacent projects.
2. **Submitting Work Plan.** Submit the draft Work Plan (a single electronic file in portable document format - PDF) within 21 calendar days of the notice to proceed. CITY will review the draft Work Plan and provide comments within 14 calendar days of receipt of the draft Work Plan. Revise the draft Work Plan as necessary to respond to CITY's comments and submit two (2) printed copies of the final Work Plan and a single electronic PDF file within fourteen (14) calendar days of receipt of CITY's comments. The Work Plan shall be updated and maintained throughout the project, with updates provided to CITY when requested.

Task 107 Monthly Progress Meetings

DESIGN PROFESSIONAL shall participate in up to twelve (12) progress meetings with CITY to provide updates on work progress, budget and schedule status, current issues, variances in the potential scope of work. Anticipated future activities and CITY action items shall be discussed. DESIGN PROFESSIONAL shall prepare and submit an agenda to CITY prior to each meeting and prepare/distribute meeting minutes.

TASK SERIES 200 - PUBLIC INVOLVEMENT AND COORDINATION

Task 201 Smoke Testing Notification and Door Hangers

Prior to mobilizing for smoke testing activities, the DESIGN PROFESSIONAL shall distribute mailers to all affected properties owners. DESIGN PROFESSIONAL shall provide CITY with a project boundary and the CITY will provide mailing addresses from the customer service system.

Prior to beginning smoke testing activities, DESIGN PROFESSIONAL shall distribute a project-specific door hanger providing notification of smoke testing. The DESIGN PROFESSIONAL shall be responsible for printing and distribution of the door hangers per Task 401. DESIGN PROFESSIONAL will be given access to a web portal containing project communication materials.

Task 202 Communication with Property Owners

DESIGN PROFESSIONAL shall assist CITY with responding to inquiries from businesses and property owners throughout the duration of the smoke testing, dye testing, and preliminary design phase of the project. Document communications with property owners and promptly provide copies of said documentation to the CITY. The CITY shall respond to requests for information from public officials and the media.

The DESIGN PROFESSIONAL shall assist the CITY in identifying up to twenty (20) property owners within the basin to directly communicate and coordinate field activities. These property owners shall include large warehouses, factories, hospitals, schools, nursing homes or other facilities that could be substantially impacted by smoke testing work. The DESIGN PROFESSIONAL shall coordinate on-site meeting with an owner's representative, provide materials prepared as part of Task 201, coordinate schedule of field activities, including access to property to perform and monitor smoke and dyed water testing. If the estimate above is not adequate, the additional large property owners, over the estimate above, shall be added as Optional Services.

TASK SERIES 300 - FLOW AND RAINFALL DATA ANALYSES

Task 301 Review and Analyze Flow and Rainfall Monitoring Data

DESIGN PROFESSIONAL shall review the pre-rehabilitation flow and rainfall data provided by CITY and perform analyses of the data in accordance with Section 5 of the November 2018, Flow Metering and Data Analysis Protocol (FMDA). Analyses activities include, but are not limited to:

1. Analysis of flow and rainfall monitoring data
2. Determination of Average Daily Dry Weather Flow (ADDF)
3. Determination of high groundwater infiltration
4. Determination of inflow
5. Determination of Peak System Flow Rates vs. System Capacity
6. Preparation of Volumetric and Statistical Analyses

Task 302 Submit Flow and Rainfall Monitoring Data Analysis Report

Submit the following for CITY review:

1. Two (2) printed copies and one (1) PDF copy of the Draft Flow and Rainfall Monitoring Data Analysis Report for determination of I/I quantities for pre-rehabilitation conditions as described in Section 5 of the FMDA Protocol.
2. Two (2) printed copies and one (1) PDF copy of the Final Flow and Rainfall Monitoring Data Report for determination of I/I quantities for pre-rehabilitation conditions that incorporates review comments and input from the CITY.

TASK SERIES 400 - SMOKE TESTING & DYED WATER TESTING

The CITY will provide smoke testing data obtained in preparation of the "Round Grove Project Area Sanitary Sewer Evaluation Study" by Wade & Associates, Inc. in June 2008. DESIGN PROFESSIONAL will review smoke testing data in conjunction with Task Series 500.

Task 401 Smoke Testing Notification

DESIGN PROFESSIONAL shall provide daily notification of smoke testing to CITY specified dispatcher and City Police and Fire Departments. Distribute smoke testing door hangers to affected residents no later than 48 hours prior to smoke testing. Notification procedures shall be conducted in accordance with requirements found in the Smoke Testing Protocol.

Task 402 Smoke Testing

Following receipt of system characterization data from CITY, perform smoke testing on up to 129,096 linear feet of 6-inch to 27-inch diameter sewer pipe in the project area to identify I/I sources from both the public and private sector. Develop field maps using system data provided by CITY. Smoke testing shall be completed in accordance with requirements found in the Water Services Department Smoke Testing Protocol. Suspect inflow sources shall not be submitted on inspection forms or in the database as "suspect". They must be investigated at the time they are initially found to confirm if the source exists. Confirmation of repair solutions must be reviewed and confirmed during design. Payment for smoke testing shall be based on the approximate linear feet of pipe listed below on a per foot basis as listed in **Attachment D**.

Task 403 Dyed Water Testing

Dyed water testing of certain confirmed and suspected I/I sources identified by smoke testing shall be performed at up to ten (10) public and ten (10) private locations in each project area to verify their direct connection to the sewer system. Obtain approval and coordinate locations for dyed water testing with CITY. Presence of dyed water in the sewer system downstream of the test verifies the I/I source connection. Dyed water testing shall be completed in accordance with requirements found in the Water Services Department's Dyed Water Testing Protocol dated September 2013 to identify I/I sources from both the public and private sector. Suspect inflow sources shall not be allowed to be submitted on inspection forms or in the database(s). All potential inflow sources identified during field activities shall be fully investigated at the time they are initially found to confirm whether or not the source exists. Solutions on specifically what to fix or repair to remove these inflow sources shall be made by experienced personnel at the time of the field confirmation, not during office analysis. Repair solutions shall be reviewed and confirmed during design. Photographic records shall be made of each confirmed source identified during dyed water testing. All dyed-water tests shall be recorded on CITY field forms. Payment for each dyed water test shall be based on a unit price basis for each test as listed in Attachment D.

Task 404 Dye Testing Defect Summary

The DESIGN PROFESSIONAL shall summarize I/I sources identified from dye testing. A running summary of identified I/I sources during the course of the project shall be kept for progress meeting review. Prepare and provide deliverables in accordance with the Protocols.

TASK SERIES 500 - FIELD DATA EVALUATIONS AND REHABILITATION RECOMMENDATIONS

Task 501 Field Data Review

1. **Identify and List Defects.** Review CCTV inspection video, smoke testing results and manhole inspection data provided by the CITY and smoke and dye testing results obtained by the DESIGN PROFESSIONAL. The reviews should identify defects in main sewers, manholes, and service lateral connections, as well as private defects. Reference the applicable Water Services Department (WSD) protocols for field data evaluation guidance and the WSD Guidance Documents for design guidance. Reference documents include:
 - a. Manhole Inspection Protocol, July 2014
 - b. Smoke Testing Protocol, October 2017
 - c. CCTV Investigation Protocol, July 2016
 - d. Dyed Water Testing Protocol, September 2013
 - e. Flow Metering and Data Analysis Protocol, November 2018
 - f. I/I Quantification and Rehabilitation Selection Guidance Document (I/I Document), July 2015

The approximate linear feet of sewer pipe and number of manholes for which CCTV

and manhole inspection data reviews are to be performed for the project area is:

a. Project Area: 129,096 linear feet of sewer pipe and 641 manholes.

2. **Assign NASSCO Quick Rating to Assets.** Modify if necessary, the NASSCO Quick Rating (QR) score assigned to each sewer main segment during CCTV inspections. Include both structural and I/I defects in the NASSCO QR. Do not consider maintenance related defects that do not contribute to I/I in the QR score.
3. **Assign I/I to Assets.** Assign I/I flow rates to each defect identified through manhole inspections and main sewer CCTV investigations. Smoke and dyed water testing data shall be used to supplement the defects identified by manhole and CCTV inspections and to help determine the severity of defects. Infiltration and Inflow (I/I) flow rates shall be assigned per the I/I Document. Follow the guidelines in the document to calculate a Project Specific Adjustment Factor for each basin to be applied to the unit defect flow rates. Using the adjusted unit defect flow rates, calculate the I/I rate per asset.
4. **I/I Flow Balance.** An I/I flow balance shall be conducted by comparing identified I/I from source defects to actual basin flow monitoring results as determined under Task Series 300. I/I percentages for manholes and main sewers as compared to total basin I/I shall be calculated.
5. **Submittals.** The following information shall be submitted to the CITY a minimum of fourteen (14) calendar days prior to the I/I Quantification Workshop to be performed under Task 502. The following information shall be provided per sub-basin. Example tables and graphs are included in the I/I Document and are referenced in parentheses below.
 - a. Master Defect Database (Figure 1) – Database to include line segments and manholes. Do not include costs for this submittal.
 - b. I/I Flow Rate versus Asset (Figure 2) – Provide separate graphs for line segments and manholes.
 - c. Main Sewer Segment QR Grade Classification Summary Table (Figure 3)
 - d. Manhole Condition Summary Table (Figure 5)
 - e. Monitored and Defect I/I Table (Figure 7)
 - f. Basin Characteristics

Task 502 Inflow and Infiltration (I/I) Quantification Workshop

DESIGN PROFESSIONAL shall arrange and facilitate a workshop, up to two hours in length, with the CITY to present the results of the I/I assignments and flow balance. The CITY will review the information and provide any recommendations on the I/I quantification to the DESIGN PROFESSIONAL. Document comments received during the workshop and any action items. Prepare workshop meeting minutes and submit to CITY within seven (7) calendar days of the workshop.

Task 503 Preliminary Assets Recommended for Repair

1. Identify Assets for Repair Recommendations. Identify for further review all sewer segments that have major defects (for example pipes with a QR of 4100 or greater). Identify sewer segments that fall within the effective area of the knee of the curve as identified at the I/I Quantification Workshop.

Identify manholes for further review if there is one or more component that receives a defect rating of “poor” or there is one or more component that receives an I/I rating of “medium” or “heavy”. Also identify manholes that fall within the effective area of the knee of the curve as identified at the I/I Quantification Workshop.

2. Determine Repairs to Assets. Develop recommended methods for rehabilitation of main sewer segments, manholes, and private lateral connections including:
 - a. Point repairs for localized defects
 - b. Complete replacement of manholes and main sewer segments using open cut methods or pipe bursting
 - c. Cured-in-place lining
 - d. Cementitious manhole lining
 - e. Alternate CITY approved rehabilitation methods

Assign a method of repair to each main sewer segment and manhole being recommended for rehabilitation.

The connections for all private service laterals on main sewer segments identified for rehabilitation shall be identified for rehabilitation for a minimum distance of 18”. Lateral rehabilitation shall address the need for repair of the lateral connection as identified during CCTV of the main sewer segment. Identify all service laterals for which reinstatement may not be needed based on CCTV inspection review. Service laterals shall be identified by service address.

3. Assign Costs. Develop asset repair costs for main sewer segments, manholes, and service laterals. The cost of rehabilitation per main sewer segment shall include the cost for service lateral rehabilitation. Costs shall be determined using rehabilitation cost data provided by the City.
4. Diminishing Returns Analysis. Calculate the cost-effectiveness ratio to remove I/I by dividing the estimated rehabilitation cost per asset by the calculated I/I flow contributed per asset.

Provide an Excel spreadsheet with the assets sorted by cost-effectiveness with the most cost-effective assets (lowest cost per I/I removed) at the top. Include in the spreadsheet the asset I/I and asset cost as well as the cumulative I/I and cumulative cost.

Prepare a graph of the cumulative dollars per gallon per day (\$/gpd) versus the percent I/I removed. Identify the point of diminishing returns on the graph. Provide a comparison of recommended segments to be rehabilitated to those determined under Task 502.

5. **Maps of Assets to Repair.** Prepare two (2) maps. The first map shall include color coding of main sewer segments based on their NASSCO QR. Color coding shall be based upon the highest defect grade (3, 4, or 5), but pipes with QR ratings of 0,1, or 2 do not need to be color coded. Label segments with pipe diameter, QR, and number of defects which contribute I/I. Color code any manhole based on a condition rating of "fair" or "poor". Rating shall be based on the worst condition rating identified per manhole.

The second map will be of all main sewer segments and manholes recommended for repair. Color code the assets based on the type of recommended repair. Label segments with pipe diameter, QR, and cost-effectiveness to repair (\$/gpd).

Task 504 Private I/I Source Identification

DESIGN PROFESSIONAL shall identify private inflow sources for possible disconnection from the sewer system. Log all defects found on each private property parcel identified by address. Private defect addresses shall also be associated with a public asset (i.e. list the public sewer main where the lateral is connected). Private property defects shall not be included in the accumulated defect flows calculated for the Public I/I evaluation. All private I/I logs shall be provided to the CITY. Include recommendations for disconnection of inlets, area drains, and other public direct inflow sources.

Task 505 Preliminary Design Workshop

The DESIGN PROFESSIONAL shall arrange and facilitate a preliminary design workshop, up to two hours in length, with the CITY to present assets to be repaired, rehabilitated, or replaced, estimated I/I removal amounts, and estimated costs. CITY construction budget will be discussed. The CITY will review the information and provide input on the assets to be included in the preliminary design documents. Document comments received during the workshop and any action items. Prepare workshop meeting minutes and submit to CITY within seven (7) days of the workshop.

Task 506 Finalize Assets Recommended for Repair

DESIGN PROFESSIONAL shall finalize asset selection for repair based on comments received at the Preliminary Design Workshop. Include the following in the recommendations:

1. **Work Orders and Basement Backup Data.** Consider and incorporate CITY's list of historical and outstanding work orders and basement backup data into the rehabilitation recommendations.
2. **Total System Approach.** As a separate alternative, give consideration for lining or replacing manholes on both ends of a main sewer segment identified for rehabilitation or replacement. Give consideration for rehabilitation or replacement of a main sewer segment not recommended for rehabilitation but that is located between segments receiving rehabilitation or replacement if it is cost effective.

Task 507 Preliminary Opinion of Probable Construction Cost

DESIGN PROFESSIONAL shall prepare a preliminary opinion of probable construction cost for assets recommended for rehabilitation or replacement. This estimate shall be a Class 3 estimate consistent with AACE standards. The expected accuracy on the low end shall be -10 to -20 percent and the expected accuracy on the high end shall be from +10 to +30 percent.

Task 508 Draft Preliminary Design Report

The DESIGN PROFESSIONAL will prepare a draft report of the findings from the field data review, Inflow and Infiltration (I/I) quantification, and preliminary recommendations for system rehabilitation for the project area as described in Tasks 501 to 507. The draft report shall include at a minimum the following sections:

1. Executive Summary
2. Introduction
3. Summary of Existing System Field Investigations
4. Inflow and Infiltration (I/I) Quantification
5. Preliminary Rehabilitation Analysis
6. Recommended Improvements
7. Estimated Inflow and Infiltration (I/I) Removal
8. Private Sector I/I
9. Preliminary Opinion of Probable Construction Cost
10. Conclusions/Recommendations

Prepare draft main sewer and manhole rehabilitation schedules in MS Excel format and submit as appendices to the Draft Preliminary Design Report.

Provide updated rehabilitation maps for submittal with the Draft Preliminary Design Report. The map shall include all main sewer segments and manholes recommended for repair. Color code the assets based on the type of recommended repair. Label segments with pipe diameter, QR, and cost-effectiveness to repair (\$/gpd).

Submit to the CITY two (2) printed copies and one (1) PDF file of the Draft Preliminary Design Report.

Task 509 Final Preliminary Design Report

Incorporate draft review comments into the Final Preliminary Design Report. Submit to the CITY two printed and bound copies and one PDF file of the Final Preliminary Design Report within thirty (30) calendar days of receiving review comments from the CITY.

TASK SERIES 600 - DEVELOP CONSTRUCTION CONTRACT DRAWINGS AND LIMITED SPECIFICATIONS

Task 601 Develop 60% Construction Contract Documents

After submittal of the final design report and approval of recommended rehabilitation measures, prepare 60% design schedules and drawings for review by CITY. The 60% design level schedules and drawings shall include a draft of the final rehabilitation maps and schedules for manhole, mainline and private lateral connection rehabilitation within the CITY right-of-way or permanent sanitary sewer easement.

Maps for rehabilitation shall be generated from the CITY's GIS data. Maps shall include CITY's orthophoto data, all manhole numbers, and shall highlight manholes and mainlines to be rehabilitated. Location of service laterals shall be tabulated on the maps.

Prepare an updated opinion of probable construction cost based on the 60% Design Plans developed and any comments received from the CITY of its review of the Preliminary Opinion of Probable Cost submitted. The 60% cost opinion shall be Class 2 consistent with AACE standards. The expected accuracy on the low end shall be -5 to -15 percent and the expected accuracy on the high end shall be from +5 to +20 percent.

The DESIGN PROFESSIONAL's services shall be based on the following understandings:

1. All of the sewer lines are located within existing permanent easements.
2. Construction Contractors shall have right of ingress and egress during construction and assume no temporary construction easements will be required.
3. Lateral line rehabilitation and repair performed in the right-of-way, if any, may be from the sewer main to sound pipe or to the approximate right-of-way line, as determined by the CITY. Right-of-way line shall be located based upon the CITY's GIS data and shall not be surveyed in the field.
4. Lateral line rehabilitation and repair performed in mainline sewer easements, if any, may consist of rehabilitation or repair of the mainline lateral connection and rehabilitation or repair of a portion of the lateral to the easement line, as determined by the CITY. Easement limits shall be established utilizing the CITY's GIS data, sewer records, and plats. Survey for identifying easement limits is not included in the basic scope of services and will be performed as an Optional Services, if required.

Task 602 Submit 60% Construction Contract Documents

DESIGN PROFESSIONAL shall submit two (2) hard copies and a PDF of 60% design documents for review by CITY. Conduct a two-hour review meeting with the CITY to discuss review comments and changes to the 60% design documents. Incorporate review comments into the 90% Construction Contract Documents as necessary.

Task 603 Plan in Hand Walk Through

Within thirty (30) calendar days of completing the 60% Construction Contract Documents DESIGN PROFESSIONAL and CITY shall perform a one (1) day plan in hand walk through. The

purpose of the walk through is to verify and analyze the accessibility of the proposed work and to identify any special conditions to be included in the contract documents. DESIGN PROFESSIONAL shall document all special conditions, take photographs, and propose solutions and specifications for the CITY to review. Submit two (2) hard copies and a PDF of the special conditions, photographs, and proposed solutions and specifications for CITY review.

Task 604 Develop 90% Construction Contract Documents

The 90% design submittal is intended to be a complete, bid-ready set of construction documents. The purpose of the 90% design submittal is to provide the CITY and Smart Sewer Team the opportunity to review the plans, specifications, and appurtenant material prior to bidding the project for construction. DESIGN PROFESSIONAL shall prepare and submit 90% contract documents for review by CITY. The 90% documents shall include the final plans, rehabilitation maps and schedules for manhole, mainline and private lateral connection rehabilitation within the CITY right-of-way or permanent sanitary sewer easements. Incorporate review comments from CITY's review of the 60% design documents. CITY staff shall be responsible for development of the Project Manual (specifications), including the standard "front end" documents and Divisions 1 through 16 (CSI format). The DESIGN PROFESSIONAL shall provide Sec. 00412 – Adjustment Unit Prices, Sec. 01015 – Specific Project Requirements and Sec. 01270 – Measurement and Payment to CITY.

Task 605 Submit Opinion of Probable Construction Cost

DESIGN PROFESSIONAL shall prepare an updated opinion of probable construction cost based on the 90% Design Plans developed and any comments received from the CITY of its review of the 60% Opinion of Probable Cost submitted. The 90% cost opinion shall be Class 1 consistent with AACE standards; the expected accuracy on the low end shall be -3 to -10 percent and the expected accuracy on the high end shall be from +3 to +15 percent. The opinion of probable construction cost shall include a break-down of work that could be subcontracted by a general contractor to women and minority business enterprise (WBE and MBE) firms.

Task 606 Submit 90% Construction Contract Documents

DESIGN PROFESSIONAL will submit the following for CITY review:

1. Four (4) printed and bound sets of 90% plans, maps, and schedules.
2. Four (4) printed and bound sets of 90% technical specifications.
3. Four (4) printed and bound sets of the 90% Opinion of Probable Cost.
4. PDF files of plans, specifications, and 90% Opinion of Probable Cost

The CITY will distribute plans to the appropriate CITY departments and staff for review. Conduct a two-hour review meeting with the CITY to discuss any comments or final changes to the 90% design documents. Incorporate review comments into the final Construction Contract Documents as necessary.

Task 607 Final Construction Contract Documents

The DESIGN PROFESSIONAL shall address review comments received from the CITY related to the 90% design completion submittal and prepare final design documents including rehabilitation drawings, maps, schedules, and specifications.

Prior to submittal of the signed and sealed Construction Contract Documents, the DESIGN PROFESSIONAL shall submit one (1) hard copy of the corrected final documents for review and acceptance by the CITY.

Task 608 Opinion of Probable Construction Cost

DESIGN PROFESSIONAL shall update the 90% Class 1 cost opinion based on the Final Bidding and Construction Contract Documents and any comments received from the CITY on the 90% design submittal.

Task 609 Deliverables

DESIGN PROFESSIONAL will submit the following final deliverables:

1. Drawings, Maps, and Schedules: One (1) copy; "D" size and sealed by a registered professional engineer licensed in the State of Missouri.
2. Electronic Contract Drawings: One (1) copy; Per **Attachment B** and AutoCAD (.dwg) files.
3. Electronic Contract Specifications: One (1) copy; all copies – PDF and WORD.
4. Final Opinion of Probable Cost.

TASK SERIES 700 - WORK TRACKING APPLICATION

DESIGN PROFESSIONAL shall enter final scheduled rehabilitation assets for each Project Area into the CITY's web-based work order management application for work order creation. DESIGN PROFESSIONAL shall follow the work tracking application user protocol provided by the CITY.

TASK SERIES 800 - GIS

Task 801 GIS Update

The DESIGN PROFESSIONAL is to prepare and provide an updated ArcGIS 10.x geodatabase that follows the geodatabase schema provided by the CITY. DESIGN PROFESSIONAL is to update the GIS database based on construction design documents by the DESIGN PROFESSIONAL following the evaluation of CCTV, manhole inspection data, smoke testing, and dyed water testing. Any updates to the GIS database will be noted on the GIS feature by the DESIGN PROFESSIONAL.

Manhole inspections and CCTV inspections provided by the CITY in the first deliverable will not contain all manholes and sewers in the project area. Throughout the course of design and CCTV, the CITY will continue to locate, open and access manholes and sewers and complete manhole

inspections. Manholes that could not be located, opened, or accessed and sewers that could not be accessed for the first deliverable will be provided by the CITY in a second deliverable. Upon DESIGN PROFESSIONAL's receipt of the second deliverable of manhole inspections and CCTV; DESIGN PROFESSIONAL shall incorporate the system characterization attributes associated with these inspections into the GIS update prior to submitting to the CITY.

DESIGN PROFESSIONAL shall assume an additional 10-15% of the total manholes and 5-10% of the total sewers will be delivered in a second inspection package.

The DESIGN PROFESSIONAL will be provided documentation that outlines the required GIS attributes per GIS layer to be edited and valid values for the attribute information. In addition to the required attribute fields being populated, DESIGN PROFESSIONAL is to ensure pipe to structure connectivity is maintained.

If the DESIGN PROFESSIONAL recommends removing or deleting a GIS feature, that feature must be added to a deleted feature class and provided to the CITY with a description of why the feature was deleted.

TASK SERIES 900 - BID PHASE SERVICES

Task 901 Pre-Bid Conference

DESIGN PROFESSIONAL shall prepare and present a pre-bid meeting, respond to questions regarding interpretation of contract drawings, specifications and technical issues, issue addenda, evaluate bids, and make recommendation of award. Project advertisement will have a duration of approximately thirty (30) calendar days.

1. In coordination with CITY Project Manager, prepare for and present a pre-bid meeting at a date, time and place provided by the CITY. DESIGN PROFESSIONAL to prepare agenda and facilitate the meeting with assistance from CITY.

Task 902 Submit Engineer's Opinion of Probable Construction Cost

DESIGN PROFESSIONAL shall update the Final Class 1 cost opinion submitted under Task 608 to reflect items impacted by addenda changes or changes in market conditions, as required. The cost opinion shall be submitted on the bidding form included in the bidding documents and provided to the CITY in a sealed envelope. The level of accuracy shall be the same as that for the final estimate

Task 903 Bid Assistance and Evaluation

1. Assist the CITY with interpretation of the Contract Documents and develop addenda (up to three) as required during the bid advertisement period to clarify Contract Documents. CITY will post the addenda.
2. Consult with and advise CITY as to the acceptability of the apparent successful bidder and the proposed major or specialty subcontractors. The review and evaluation shall include such factors as work previously completed for the CITY, work completed for others, contractor's proposed project manager and superintendent, financial resources,

technical experience, responses from references and other relevant facts. CITY shall provide one (1) copy of each bid as well as a bid tab to DESIGN PROFESSIONAL for evaluation.

3. Make written recommendation regarding the award of construction contract.

IV. OPTIONAL SERVICES

Any work requested by the CITY that is not specifically stated in one of the Basic Scope of Services listed above shall be classified as Optional Services. DESIGN PROFESSIONAL's contract maximum upper limit for compensation includes an allowance amount for Optional Services not yet authorized by CITY that may be required throughout the course of the work. This allowance amount shall not be utilized unless specifically authorized in writing by the CITY to perform Optional Services. Optional Services shall not be performed, nor is the DESIGN PROFESSIONAL approved to utilize any of the allowance amount, unless the CITY provides written authorization to DESIGN PROFESSIONAL that includes the scope of work for each Optional Service to be performed and a maximum billing limit for compensation that has been mutually agreed upon. Optional Services shall include, but not limited to:

- A. Analysis of additional flow meters and rainfall gauges for the flow monitoring periods.
- B. Performance of additional smoke testing in excess of footage quantity defined in the Basic Scope of Services.
- C. Performance of additional dyed water testing in excess of the quantity defined in the Basic Scope of Services.
- D. Survey for identifying easement limits and assisting CITY with appraisal and/or acquisition of easements.
- E. Conducting topographic survey or horizontal control survey to establish the base for layout of property and lot lines for properties anticipated to require new easements or open-cut replacement of sewers, if required.
- F. Preparation of plan and profile construction drawings for open-cut replacement of sewers.
- G. Utility coordination associated with open-cut replacement of sewers.
- H. Assistance with easement acquisition, including but not limited to obtaining Ownership Certifications (Ownership and Encumbrance reports) and preparing legal descriptions of easements and easement exhibits, if required.
- I. Meetings with local, State, or Federal agencies beyond those contemplated under the Basic Scope of Services.
- J. Appearances at public hearings or before special boards beyond those contemplated under the Basic Scope of Services.
- K. Field subsurface investigations, geotechnical investigations, environmental site assessments, or easement or right-of-way selection, preparation, negotiation, or acquisition work, requested or authorized by the CITY beyond those included in the Basic Scope of Services and any established allowances.
- L. Assistance with bid protests and re-bidding.

- M. Changes in the general scope, extent, design, or character of the project, including, but not limited to:
1. Changes in size or complexity;
 2. CITY's project schedule, design, or character of construction;
 3. Method of financing or availability of funding;
 4. A change to the method of construction procurement, which is assumed to be a conventional procurement approach (i.e. design-bid-build) herein; and
 5. A change to the number of bid packages, which is assumed herein to be two packages.

V. CITY'S RESPONSIBILITIES

CITY will furnish, as required by Basic Services and not at the expense of the DESIGN PROFESSIONAL, the following items:

- A. Provide available information pertinent to the assignment, including GIS data, previous reports, previously completed manhole inspections, drawings, specifications, and any other data relative thereto. Provide said information within thirty (30) calendar days of receipt of a written request by DESIGN PROFESSIONAL.
- B. Manhole inspection and CCTV data shall be delivered to DESIGN PROFESSIONAL by December 31, 2019.
- C. Flow metering reports shall be delivered to DESIGN PROFESSIONAL for two (2) flow metering seasons as follows:
 - a. Spring/Fall 2019 7-month Flow Data – by December 31, 2019;
 - b. Spring 2020 90-day Flow Data- by August 31, 2020.
- D. CITY's Project Manager will coordinate meetings between CITY staff and the DESIGN PROFESSIONAL.
- E. Bidding Services. CITY will provide the following bidding phase services:
 1. Prepare Bid Tabulation. Provide copies of bids to DESIGN PROFESSIONAL for evaluation.

(End of Scope of Services)

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
ENGINEERING FEE SUMMARY AND SCHEDULE OF POSITION
CLASSIFICATIONS

ATTACHMENT C

SCHEDULE OF POSITION CLASSIFICATION

CRAWFORD, MURPHY & TILLY, INC.

Classification	Regular Rate
Principal	\$60.00 - \$90.00
Project Engineer II Project Architect II Project Manager II Project Environmental Specialist II	\$50.00 - \$80.00
Project Engineer I Project Architect I Project Manager I Project Environmental Specialist I Project Structural Engineer I	\$50.00 - \$80.00
Sr. Structural Engineer II	\$40.00 - \$70.00
Sr. Technician II	\$40.00 - \$70.00
Aerial Mapping Specialist	\$40.00 - \$70.00
Sr. Engineer I Sr. Architect I Sr. Structural Engineer I Land Surveyor	\$40.00 - \$70.00
Technical Manager II Environmental Specialist III	\$30.00 - \$60.00
Sr. Technician I	\$30.00 - \$60.00
Sr. Planner I GIS Specialist Engineer I Architect I Structural Engineer I	\$30.00 - \$60.00
Environmental Specialist II Technician II	\$20.00 - \$50.00
Planner I Technical Manager I Environmental Specialist I Technician I Project Administrative Assistant	\$20.00 - \$50.00
Administrative/Accounting Assistant	\$10.00 - \$40.00

ENGINEERING FEE SUMMARY

CRAWFORD, MURPHY & TILLY, INC.
 FEE SUMMARY
 CLIENT

KC WATER SERVICES
 ROUND GROVE BASIN SUPPLEMENTAL
 INFLOW AND INFILTRATION (I/I) REDUCTION PROJECT
 61000033
 1669

KCMO PROJECT NO.
 KCMO CONTRACT NO.

TASKS SERIES CLASSIFICATIONS	TOTAL PROJECT HOURS	TOTAL LABOR GMT	REIMBURSIBLE EXPENSES	TOTAL MBE FEE T&B	TOTAL WBE FEE EAE	TOTAL WBE FEE TREKK	TOTAL FEE
Task Series 100 - Project Management and Administration	266	\$42,176.26	\$270		\$7,630.00		\$49,976.26
Task Series 200 - Public Involvement and Coordination	30	\$5,779.80	\$0,000			\$3,100.00	\$14,879.80
Task Series 300 - Flow and Rainfall Analyses	308	\$49,476.08	\$300				\$49,776.08
Task Series 400 - Smoke Testing and Dyed Water Testing	16	\$3,082.56	\$300				\$3,382.56
Task Series 500 - Field Data Evaluations and Rehabilitation	498	\$79,687.28	\$1,400	\$60,374.00			\$141,461.28
Task Series 600 - Develop Construction Contract Drawings and Limited Specs	592	\$85,162.32	\$1,400				\$86,562.32
Task Series 700 - Work Tracking Application	30	\$4,221.80			\$7,280.00		\$11,501.80
Task Series 800 - GIS	24	\$2,549.52		\$17,638.00			\$20,187.52
Task Series 900 - Bid Phase Services	56	\$8,668.84					\$8,668.84
PROJECT TOTALS	1,820	\$280,802.46	\$9,870	\$78,012.00	\$9,810.00	\$90,629.00	\$468,823.46
MBE/WBE PERCENTAGES				16.6%	2.1%	19.3%	
OPTIONAL SERVICES ALLOWANCE						21.4%	
PROJECT TOTAL FEE WITH ALLOWANCE							\$615,000.00

CRAWFORD, MURPHY & TILLY, INC.
 2019 PROFESSIONAL SERVICES COST ESTIMATE
 CLIENT
 PROJECT NAME

PREP BY: JJ
 DATE: 07/25/19

KC WATER SERVICES
 ROUND GROVE BASIN SUPPLEMENTAL
 INFLOW AND INFILTRATION (M) REDUCTION PROJECT
 81000033
 1888

APPROVED BY: [Signature]
 DATE: 07/25/19

KCNO PROJECT NO.
 KCNO CONTRACT NO.

TASK SERIES CLASSIFICATIONS	Proj Eng II Proj Mgr II	Proj Eng I	Sr. Tech II	Land Surveyor	Senior Eng I	Sr. Tech I	GIS Spec	Eng I	Proj Admin Assistant	MAN HOURS & LABOR SUMMARY	TOTAL LABOR EFFORT	MILEAGE	PRINTING	SUBS	TOTAL EXPENSE	TOTAL FEE
AVERAGE DIRECT LABOR RATES	577.08	663.06	647.21	641.26	\$37.26	\$34.33	\$34.49	\$39.06	\$35.25	TOTAL	TOTAL	\$370	\$7,530	\$7,410	\$7,410	\$10,978.26
101 Project Management and Administration	19	134	\$148.72	\$128.67	\$114.76	\$109.82	\$106.22	\$82.66	\$76.76	344	\$42,176.26				\$7,410	\$10,978.26
101 Project Management and Administration	6	24			24			40	7	64	\$8,328.24			\$7,410	\$7,410	\$18,065.24
103 Subcontract Agreements and Project Schedule	3	20			20					23	\$4,570.98					\$4,570.98
104 Quality Control	8	14			10					32	\$5,758.92					\$5,758.92
106 Permit Kickoff Meeting	2	8			4					14	\$2,000.32			\$80	\$2,080.32	\$2,470.64
107 Monthly Progress Meetings (12 Meet)	2	8			4					14	\$2,000.32				\$2,080.32	\$2,470.64
201 Smoke Testing Notification and Door Hangers	30	30			24					90	\$9,900.00	\$250			\$10,150.00	\$18,118.50
202 Communication with Property Owners	15	15								30	\$5,775.00	\$8,000			\$13,775.00	\$27,893.50
300 - Flow and Rainfall Analysis	8	168			80			40		15	\$2,008.90				\$2,008.90	\$5,089.90
302 Submit Flow and Rainfall Monitoring Data	4	100			40			20		164	\$36,664.64	\$300			\$36,964.64	\$48,776.08
400 - Stable Testing and Dye Water Testing	4	80			40			20		144	\$22,811.44				\$22,811.44	\$28,664.64
401 Smoke Testing Notification	16	16			40			20		16	\$3,002.56				\$3,002.56	\$3,811.44
402 Smoke Testing (129,086 LP @ \$7.15/LP)	4	4								1	\$770.84				\$770.84	\$770.84
403 Dye Water Testing (10 public, 10 private, 10 hrs CCTV)	4	4								4	\$770.84				\$770.84	\$770.84
404 Dye Testing Defect Summary	6	6								6	\$1,541.28				\$1,541.28	\$1,541.28
500 Field Data Review (129,086 LP @ \$4.15/Min)	26	262			168			68		438	\$76,587.26	\$100			\$76,687.26	\$141,411.28
501 Field Data Review (129,086 LP @ \$4.15/Min)	4	40			20			10		70	\$10,620.20				\$10,620.20	\$13,411.28
502 In Quantification Worksheet	4	40			20			20		42	\$7,312.72	\$400			\$7,712.72	\$7,712.72
504 Private In Source Identification	6	10			30			20		54	\$1,957.44				\$1,957.44	\$1,957.44
505 Preliminary Design Worksheet	6	20			20					10	\$1,928.60				\$1,928.60	\$1,928.60
506 Finalize Asses Recommended for Repair	4	40			20			20		46	\$9,022.48	\$400			\$9,422.48	\$9,422.48
507 Preliminary Opinion of Probable Construction Cost	2	20			20			20		64	\$12,808.64				\$12,808.64	\$12,808.64
508 Draft Preliminary Design Report	4	40			20					42	\$6,636.92				\$6,636.92	\$6,636.92
509 Final Preliminary Design Report	4	20			20					64	\$10,658.64				\$10,658.64	\$10,658.64
600 Develop Construction Contract Documents and Limited Scope	16	124	180		272					144	\$7,105.44				\$7,105.44	\$11,189.64
601 Develop 60% Construction Contract Documents	4	40	60		20					562	\$81,182.32	\$200			\$81,382.32	\$166,562.32
602 Submit 60% Construction Contract Documents	4	8			20					180	\$28,680.40				\$28,680.40	\$28,680.40
603 Plan in Hand Walk Through	4	10			10					32	\$4,763.92				\$4,763.92	\$4,763.92
604 Develop 80% Construction Contract Documents	4	20	60		80					20	\$3,074.20	\$200			\$3,274.20	\$3,274.20
605 Submit Opinion of Probable Construction Cost	2	8			8					164	\$22,734.24				\$22,734.24	\$22,734.24
606 Submit 80% Construction Contract Documents	2	8			8					8	\$2,937.88				\$2,937.88	\$2,937.88
607 Final Construction Contract Documents	4	16	60		60					140	\$19,688.40				\$19,688.40	\$19,688.40
608 Opinion of Probable Construction Cost	2	4			4					10	\$1,708.20				\$1,708.20	\$1,708.20
609 Deliverables	10	10			10					20	\$9,074.20				\$9,074.20	\$9,074.20
700 - Work Tracking Application	18	18			20					30	\$4,271.80				\$4,271.80	\$4,271.80
800 - Bid Phase Services	2	26			24			4		24	\$2,608.64				\$2,608.64	\$2,608.64
901 Pre-Bid Conference	2	10			8					18	\$2,344.68				\$2,344.68	\$2,344.68
902 Submit Opinion of Probable Construction Cost	2	8			8			4		22	\$3,362.80				\$3,362.80	\$3,362.80
903 Bid Assistance and Evaluation	8	8			8					16	\$2,458.96				\$2,458.96	\$2,458.96
TOTAL MAN HOURS	71	762	180		622			130	7	1,820						
SUBTOTAL - BASE LABOR EFFORT	\$16,967.66	\$150,660.12	\$16,226.80		\$71,366.72			\$2,974.44	\$57.32	\$286,102.86	\$1,370	\$3,400	\$178.26	\$188.01	\$188,011.21	\$488,823.66

CRAWFORD, MURPHY & TILLY, INC.
 2019 PROFESSIONAL SERVICES COST ESTIMATE
 CLIENT
 PROJECT NAME

KC WATER SERVICES
 ROUND GROVE BASIN SUPPLEMENTAL
 INFLOW AND INFILTRATION (MI) REDUCTION PROJECT
 81000633
 1589

KC MO PROJECT NO.
 KC MO CONTRACT NO.

TASKS SERIES CLASSIFICATIONS	ENVIRONMENTAL ADVISOR & ENGINEERS (EAE)						TOTAL BASE LABOR EFFORT HOURS
	Principal	Senior Eng	Asst Eng	Admin Asst.	Surveyor (GLS)	Project Admin	
AVERAGE DIRECT LABOR RATES WITH OMBP							
Task Series 900 - Project Management and Administration							
102 Monthly Reporting - Project Status Reports and Project Schedule							
103 Subcontract Agreements and Administration							
104 Quality Control							
105 Project Kickoff Meeting							
106 Work Plan							
107 Monthly Progress Meetings (12 Meetings)							
Task Series 200 - Public Involvement and Coordination							
201 Streets Traffic Mitigation and Door Hangers Included in Task 402							
202 Communication with Property Owners							
Task Series 300 - Flow and Hydraulic Analysis							
301 Review and Analyze Flow and Hydraulic Modeling Data							
302 Submit Flow and Hydraulic Modeling Data Analysis Report							
Task Series 400 - Smoke Testing and Dry Well Testing							
401 Smoke Testing Notification Included in Task 402							
402 Smoke Testing (120,000 LF @ \$30 / LF)							
403 Dry Well Testing (10 public / 10 private / 20 lbs CCTV)							
404 Dry Well Testing Detail Summary							
Task Series - 800 Field Data Evaluation and Rehabilitation							
801 Field Data Review (120,000 LF @ \$41 / Minute)							
802 Infiltration Workshop							
803 Preliminary Assets Recommended for Repair							
804 Private / Source Identification							
805 Preliminary Design Workshop							
806 Feasible Assets Recommended for Repair							
807 Preliminary Opinion of Probable Construction Cost							
808 Draft Preliminary Design Report							
809 Final Preliminary Design Report							
Task Series - 900 Develop Construction Contract Documents and Limited Specs							
901 Develop 80% Construction Contract Documents							
902 Submit 80% Construction Contract Documents							
903 Plan in Hand Work							
904 Develop 90% Construction Contract Documents							
905 Submit Opinion of Probable Construction Cost							
906 Submit 90% Construction Contract Documents							
907 Final Construction Contract Documents							
908 Opinion of Probable Construction Cost							
909 Deliverables							
Task Series 700 - Work Tracking Applications							
Task Series 800 - GIS							
Task Series 900 - BIM Phase Services							
901 Pre-Bid Conference							
902 Submit Engineer's Opinion of Probable Construction Cost							
903 Bid Assistance and Evaluation							
TOTAL MAN HOURS							12,188
SUBTOTAL - BASE LABOR EFFORT	100					\$9,500	\$9,810

CRAWFORD, MURPHY & TILLY, INC.
 2019 PROFESSIONAL SERVICES COST ESTIMATE
 CLIENT
 PROJECT NAME

KCIMO PROJECT NO.
 KCIMO CONTRACT NO.

KC WATER SERVICES
 ROUND GROVE BASIN SUPPLEMENTAL
 INFLOW AND INFILTRATION (R0) REDUCTION PROJECT
 81000633
 1888

TARMS SERIES CLASSIFICATIONS	TREKK										TOTAL WRE LABOR EFFORT TREKK
	Project Manager	Office Technician	Field Technician	Admin	Revenue Training (per hr)	Private Dyed Water Testing (per hr)	Public Dyed Water Testing (per hr)	Hourly CCTV Change with Dyed Water Testing	TOTAL HOURS	Total	
AVERAGE DIRECT LABOR RATES											
Task Series 900 - Project Management and Administration	\$165.00	\$88.00	\$88.00	\$45.00	\$4.87	\$258.00	\$460.00	\$358.00			
101 Project Management and Services											
102 Monthly Invoicing, Project Status Reports and Project Schedule											
103 Subcontract Agreements and Administration											
104 Quality Control											
105 Project Kickoff Meeting											
108 Work Plan											
107 Monthly Progress Meetings (12 Meetings)											
Task Series 200 - Public Involvement and Coordination											
201 Smoke Testing Notification and Door Invoicing (included in Task 400)											
Task Series 300 - Flow and Rainfall Analysis											
301 Review and Analyze Flow and Rainfall Monitoring Data											
302 Submittal Flow and Rainfall Monitoring Data Analysis Report											
Task Series 400 - Smoke Testing and Dyed Water Testing											
401 Smoke Testing (1200) (included in Task 400)											
402 Smoke Testing (1200) (LF A 641) (LF A 641)											
403 Dyed Water Testing (1000) (LF A 641) (LF A 641)											
404 Dyed Water Testing (1000) (LF A 641) (LF A 641)											
Task Series - 600 Field Data Evaluations and Reinstallations											
601 Field Data Review (120,000 LF A 641 Member)											
602 In Quantification Workshop											
603 Preliminary Asses Recommended for											
604 Photo /I Source Identification											
605 Preliminary Design Workshop											
606 Prebid Asses Recommended for Repair											
607 Preliminary Opinion of Probable Construction Cost											
608 Draft Preliminary Design Report											
609 Final Preliminary Design Report											
Task Series - 800 Overall Construction Contract Drawings and Limited Specs											
801 Develop 60% Construction Contract Documents											
802 Submit 60% Construction Contract Documents											
803 Plan in Hand Walk Through											
804 Develop 90% Construction Contract Documents											
805 Submit Opinion of Probable Construction Cost											
806 Submit 90% Construction Contract Documents											
807 Final Construction Contract Documents											
808 Opinion of Probable Construction Cost											
809 Deliverables											
Task Series 700 - Work Tracking Application											
Task Series 990 - Bid											
Task Series 990 - Bid Phase Services											
901 Pre-Bid Conference											
902 Submit Engineer's Opinion of Probable Construction Cost											
903 Bid Assistance and Evaluation											
TOTAL MAN HOURS											
SUBTOTAL - BASE LABOR EFFORT											\$90,559

CRAWFORD, MURPHY & TILLY, INC.
 2019 PROFESSIONAL SERVICES COST ESTIMATE
 CLIENT
 PROJECT NAME

KC WATER SERVICES
 ROUND GROVE BASIN SUPPLEMENTAL
 INFLOW AND INFILTRATION (I/I) REDUCTION PROJECT
 S1000633
 1000

KC MO PROJECT NO.
 KC MO CONTRACT NO.

TASKS SERIES CLASSIFICATIONS		TALIAFERRO & BROWNE (T&B)					TOTAL MSE LABOR EFFORT TAB
		Principal	Senior Eng	Project Eng	Asst Eng	Asst. Eng	TOTAL HOURS
AVERAGE DIRECT LABOR RATES		\$71.00	\$42.35	\$39.00	\$24.00	\$27.00	Total
AVERAGE DIRECT LABOR RATES WITH OPM		\$218.04	\$146.82	\$88.16	\$72.88	\$82.88	Total
Task Series 100 - Project Management and Administration	101 Project Management Services						
	102 Weekly Meetings, Project Status Reports and Project Schedule						
	103 Subcontract Administration and Administration						
	104 Quality Control						
	105 Project Kickoff Meeting						
	106 Work Plan						
	107 Monthly Progress Meetings (12 Meetings)						
Task Series 200 - Public Involvement and Coordination	201 Smoke Testing Notification and Door Hangers (Included in Task 402)						
	202 Communication with Property Owners						
Task Series 300 - Flow and Rainfall Analysis	301 Review and Analyze Flow and Rainfall Monitoring Data						
	302 Submit Flow and Rainfall Monitoring Data Analysis Report						
Task Series 400 - Smoke Testing and Dyed Water Testing	401 Smoke Testing Notification (Included in Task 402)						
	402 Smoke Testing (128,088 LF @ \$75/LF)						
	403 Dyed Water Testing (10 pipes, 10 events, 20 hrs CCTV)						
	404 Dyed Water Testing						
Task Series - 500 Field Data Evaluations and Rehabilitation	501 Field Data Review (120,000 L.F. @ \$641/Manhour)						
	502 I/I Quantification Workshop						
	503 Preliminary Asses Recommendation for Repair						
	504 Private I/I Source Identification						
	505 Preliminary Design Workshop						
	506 Finalize Asses Recommendation for Repair						
	507 Preliminary Openers of Manholes Construction Cost						
	508 Draft Preliminary Design Report						
	509 Final Preliminary Design Report						
Task Series - 600 Develop Construction Contract Drawings and Limited Specifications	601 Develop 80% Construction Contract Documents						
	602 Submit 80% Construction Contract Documents						
	603 Plan in House Walk Through						
	604 Develop 90% Construction Contract Documents						
	605 Submit Openers of Probable Construction Cost						
	606 Submit 90% Construction Contract Documents						
	607 Final Construction Contract Documents						
	608 Openers of Probable Construction Cost						
	609 Deliverables						
Task Series 700 - Work Tracking Application	700 Work Tracking Application						
Task Series 800 - O&M	801 Pre-Bid Conference						
	802 Submit Engineer's Opinion of Probable Construction Cost						
	803 Bid Assistance and Evaluation						
TOTAL MAN HOURS		2	10	160	20	20	192
SUBTOTAL - BASE LABOR EFFORT		\$432	\$1,468	\$14,706	\$1,642	\$1,642	\$17,830
TOTAL							\$76,012

ATTACHMENT D
UNIT COSTS

ATTACHMENT D

Unit Cost Schedule

**Round Grove Basin
Supplemental Inflow and Infiltration (I/I) Reduction Project**

Crawford, Murphy & Tilly, Inc.

ITEM	COST / ITEM
Transportation:	
CMT Owned or Employee Vehicle Mileage (2019 IRS rate)	\$ 0.58/mile
Printing and Exhibits:	
Aerial Photos, or Custom Reproductions	at actual cost
B/W 8 1/2" x 11" Copies (including Collating & Binding)	\$ 0.05 each
B/W 11" x 17" Copies (including Collating & Binding)	\$ 0.10 each
Color 8 1/2" x 11" Copies (including Collating & Binding)	\$ 0.50 each
Color 11" x 17" Copies (including Collating & Binding)	\$ 0.85 each
B/W Bond Plots	\$ 0.15/sq.ft.
Color Bond Plots	\$ 0.30 sq.ft.
Color Presentation Bond	\$ 0.40/sq.ft.
32" x 40" White Foam Board	\$ 22.00 each
32" x 40" Black Foam Board	\$ 22.00 each
40" x 60" White Foam Board	\$40.00 each
Other:	
UPS Delivery	at actual cost
Aerial photos scanned	at actual cost
Other Direct Expenses	at actual cost
TREKK Smoke Testing	\$0.57/LF
TREKK Dyed Water Testing Public Field Only	\$ 400.00 each
TREKK Dyed Water Testing Private Field Only	\$ 250.00 each
TREKK CCTV	\$295.00/HR

Direct costs are at actual cost documented by vendor invoices or employee expense reports.

ATTACHMENT E

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 F
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

CONTRACTOR UTILIZATION PLAN/REQUEST FOR WAIVER

Project/Contract Number 81000893/1559

Project Title: Round Grove Basin Supplemental Inflow and Infiltration (I/I) Reduction Project
(Department Project)

Water Services
(Department)

Crawford, Murphy & Tilly, Inc. (CMT)
(Bidder/Proposer)

STATE OF Illinois)
) ss
COUNTY OF Sanjamon)

I, Racd Armouti, 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 15 % MBE and 10% 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: 15.1% MBE 11.2% 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: Trekk Design Group, LLC. (TREKK)
Address: 1411 E. 104th Street, Kansas City, MO 64131
Telephone No.: (816) 874-4655
I.R.S. No.: 43-1953275

- b. Name of M/WBE Firm: Taliaferro & Browne, Inc. (T&B)
 Address: 1020 E. 8th Street, Kansas City, MO 64106
 Telephone No. (816) 283-3456
 I.R.S. No.: 48-0758891
- c. Name of M/WBE Firm: Environmental Advisors and Engineers, Inc. (EAE)
 Address: 19211 W. 64th Terrace, Shawnee, KS 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. _____
- f. 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:

<u>Name of MBE Firm</u>	<u>Supplier/Broker/Contractor</u>	<u>Subcontract Amount*</u>	<u>Weighted Value**</u>	<u>% of Total Contract</u>
<u>Taliaferro & Browne</u>	<u>Contractor</u>	<u>\$78,012.00</u>	<u>100%</u>	<u>15.1%</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
TOTAL MBE \$ / TOTAL MBE %:		\$ <u>78,012.00</u>	<u>15.1%</u>	

WBE FIRMS:

Name of WBE Firm	Supplier/Broker/Contractor	Subcontract Amount*	Weighted Value**	% of Total Contract
<u>Trekk Design Group</u>	<u>Contractor</u>	<u>\$48,000.00</u>	<u>100%</u>	<u>9.3%</u>
<u>Environmental Advisors and Engineers</u>	<u>Contractor</u>	<u>\$9,810.00</u>	<u>100%</u>	<u>1.9%</u>
TOTAL WBE \$ / TOTAL WBE %:		<u>\$57,810.00</u>	<u>11.2%</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: Raed Armouti
Address: One Memorial Drive, Suite 500
St. Louis, MO 63102
Phone Number: (314) 571-9058
Facsimile number: (314) 436-0723
E-mail Address: armouti@cmtengr.com

By: Raed Armouti
Title: Vice President
Date: July 4, 2019
(Attach corporate seal if applicable)

Subscribed and sworn to before me this 1st day of July, 2019

My Commission Expires: 03/26/2023

JENNIFER SALLS
Notary Public
JENNIFER L. SALLS
Notary Public - Notary Seal
State of Missouri
Commissioned for Jefferson County
My Commission Expires March 26, 2023
Commission Number 15390729



LETTER OF INTENT TO SUBCONTRACT

Project/Contract Number: 81000893/1559

Project Title: Round Grove Basin Supplemental Inflow and Infiltration (I/I) Reduction Project

Crawford, Murphy & Tilly, Inc. (CMT) ("Prime Contractor") agrees to enter into a contractual agreement with Environmental Advisors and Engineers, Inc. (EAE) ("M/W/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 M/W/DBE Subcontractor is certified are insufficient and may result in this Letter of Intent to Subcontract not being accepted.)

Provide assistance with Task Series 100 - Project Management and Administration and Task Series 700 - Work Tracking Application

for an estimated amount of \$9,810.00 or 1.0% of the total estimated contract value.

M/W/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 M/W/DBE Subcontractor in the capacities indicated herein, and M/W/DBE Subcontractor agrees to work on the above-referenced contract in the capacities indicated herein, contingent upon award of the contract to Prime Contractor.

Julie Jensen
Signature: Prime Contractor
Julie Jensen
Print Name

Project Manager
Title
7/26/2019
Date

J.P.R. Biesma
Signature: M/W/DBE Subcontractor
J.P.R. Biesma
Print Name
President
Title
7/25/2019
Date



LETTER OF INTENT TO SUBCONTRACT

Project/Contract Number: 81000893/1559

Project Title: Round Grove Basin Supplemental Inflow and Infiltration (I/I) Reduction Project

Crawford, Murphy & Tilly, Inc. (CMT) ("Prime Contractor") agrees to enter into a contractual agreement with Taliferro & Browne, Inc. (T&B) ("MW/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 MW/DBE Subcontractor is certified are insufficient and may result in this Letter of Intent to Subcontract not being accepted.)

Provide assistance with field data evaluation and rehabilitation and GIS updates

for an estimated amount of \$78,012.00 or 15.1% of the total estimated contract value.

MW/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 MW/DBE Subcontractor in the capacities indicated herein, and MW/DBE Subcontractor agrees to work on the above-referenced contract in the capacities indicated herein, contingent upon award of the contract to Prime Contractor

Julie Jensen
Signature Prime Contractor

Julie Jensen
Print Name

Project Manager
Title

7/26/2019
Date

Hagos E. Andebrhan
Signature MW/DBE Subcontractor

HAGOS E. ANDEBRHAN
Print Name

CEO
Title

07/25/2019
Date



LETTER OF INTENT TO SUBCONTRACT

Project/Contract Number: 81000893/1559

Project Title: Round Grove Basin Supplemental Inflow and Infiltration (I/I) Reduction Project

Crawford, Murphy & Tilly, Inc. (CMT) ("Prime Contractor") agrees to enter into a contractual agreement with Trekk Design Group, LLC (TREKK) ("MW/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 MW/DBE Subcontractor is certified are insufficient and may result in this Letter of Intent to Subcontract not being accepted.)

Provide assistance with Task 202- Communication with Property Owners and Task Series 400 - Smoke Testing and Dyed Water Testing

for an estimated amount of \$48,000.00 or 9.3% of the total estimated contract value.

MW/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 MW/DBE Subcontractor in the capacities indicated herein, and MW/DBE Subcontractor agrees to work on the above-referenced contract in the capacities indicated herein, contingent upon award of the contract to Prime Contractor.

Julie Jensen
Signature: Prime Contractor

Julie Jensen
Print Name

Project Manager 7/26/2019
Title Date

Lucas Gillen
Signature: MW/DBE Subcontractor

LUCAS GILLEN
Print Name

ASSOCIATE 7/25/19
Title Date

TIMETABLE FOR MBE/WBE UTILIZATION

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

I, Raed Armouti, acting in my capacity as Vice President
(Name) (Position with Firm)
Of Crawford, Murphy & Tilly, Inc., 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 75 days 135 days
30 days 90 days 150 days
45 days 105 days 165 days
60 days 120 days 180 days
Other 450 Calendar Days (Specify)

Throughout Beginning 1/3
Middle 1/3 Final 1/3
Beginning 1/3 40% Middle 1/3 20% Final 1/3 40%

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

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

Raed Armouti
(Signature)

Vice President
(Position with Firm)

July 7, 2019
(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: _____

ADDRESS: _____

PROJECT NUMBER OR TITLE: 81000893/Round Grove Basin Supplemental I/I Reduction Project

AMENDMENT/CHANGE ORDER NO: (if applicable) _____

Project Goals:	_____ % MBE	_____ % WBE
Contractor Utilization Plan:	_____ % 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:

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)



CONTRACTOR AFFIDAVIT FOR FINAL PAYMENT

Project/Contract Number _____

Project Title _____

STATE OF _____)
)SS
COUNTY OF _____)

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. 81000836/1505 and Project Title 15th Street Pump Station Upgrade and Sewer Separation.

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 _____

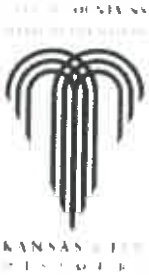
On this _____ day of _____, before me
appeared _____, to me personally known to be the
_____ of the _____

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/Contract Number _____

Project Title _____

STATE OF MISSOURI)

) ss:

COUNTY OF _____)

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 G

EMPLOYEE ELIGIBILITY VERIFICATION AFFIDAVIT

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

STATE OF ~~Illinois~~ MISSOURI
COUNTY OF ~~Sangamon~~ ST. LOUIS) ss

On this 9th day of SEPTEMBER, 2019 before me appeared Raed Armouti, 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 Vice President (title) of Crawford, Murphy & Tilly, Inc. (CMT) (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.

Neil Amos
Affiant's signature

Subscribed and sworn to before me this 9th day of SEPTEMBER, 2017

Jennifer Salls
Notary Public

My Commission expires: 03/26/2023

JENNIFER L. SALLS
Notary Public - Notary Seal
State of Missouri
Commissioned for Jefferson County
My Commission Expires: March 26, 2023
Commission Number: 15390729

**THE E-VERIFY
MEMORANDUM OF UNDERSTANDING
FOR EMPLOYERS**

**ARTICLE I
PURPOSE AND AUTHORITY**

The parties to this agreement are the Department of Homeland Security (DHS) and the Crawford, Murphy & Tilly, Inc. (Employer). The purpose of this agreement is to set forth terms and conditions which the Employer 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 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 representatives' contact information changes.
3. The Employer agrees to grant E-Verify access only to current employees who need E-Verify access. Employers must promptly terminate an employee's E-Verify access if the employer is separated from the company or no longer needs access to E-Verify.

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4. The Employer agrees to become familiar with and comply with the most recent version of the E-Verify User Manual.

5. The Employer agrees that any Employer Representative who will create E-Verify cases will complete the E-Verify Tutorial before that individual creates any cases.

a. The Employer agrees that all Employer representatives will take the refresher tutorials when prompted by E-Verify in order to continue using E-Verify. Failure to complete a refresher tutorial will prevent the Employer Representative from continued use of E-Verify.

6. The Employer agrees to comply with current Form I-9 procedures, with two exceptions:

a. If an employee presents a "List B" identity document, the Employer agrees to only accept "List B" documents that contain a photo. (List B documents identified in 8 C.F.R. § 274a.2(b)(1)(B)) can be presented during the Form I-9 process to establish identity.) If an employee objects to the photo requirement for religious reasons, the Employer should contact E-Verify at 888-464-4218.

b. If an employee presents a DHS Form I-551 (Permanent Resident Card), Form I-766 (Employment Authorization Document), or U.S. Passport or Passport Card to complete Form I-9, the Employer agrees to make a photocopy of the document and to retain the photocopy with the employee's Form I-9. The Employer will use the photocopy to verify the photo and to assist DHS with its review of photo mismatches that employees contest. DHS may in the future designate other documents that activate the photo screening tool.

Note: Subject only to the exceptions noted previously in this paragraph, employees still retain the right to present any List A, or List B and List C, document(s) to complete the Form I-9.

7. The Employer agrees to record the case verification number on the employee's Form I-9 or to print the screen containing the case verification number and attach it to the employee's Form I-9.

8. The Employer agrees that, although it participates in E-Verify, the Employer has a responsibility to complete, retain, and make available for inspection Forms I-9 that relate to its employees, or from other requirements of applicable regulations or laws, including the obligation to comply with the antidiscrimination requirements of section 274B of the INA with respect to Form I-9 procedures.

a. The following modified requirements are the only exceptions to an Employer's obligation to not employ unauthorized workers and comply with the anti-discrimination provision of the INA: (1) List B identity documents must have photos, as described in paragraph 6 above; (2) When an Employer confirms the identity and employment eligibility of newly hired employee using E-Verify procedures, the Employer establishes a rebuttable presumption that it has not violated section 274A(a)(1)(A) of the Immigration and Nationality Act (INA) with respect to the hiring of that employee; (3) If the Employer receives a final nonconfirmation for an employee, but continues to employ that person, the Employer must notify DHS and the Employer is subject to a civil money penalty between \$550 and \$1,100 for each failure to notify DHS of continued employment following a final nonconfirmation; (4) If the Employer continues to employ an employee after receiving a final nonconfirmation, then the Employer is subject to a rebuttable presumption that it has knowingly

employed an unauthorized alien in violation of section 274A(a)(1)(A); and (5) no E-Verify participant is civilly or criminally liable under any law for any action taken in good faith based on information provided through the E-Verify.

b. DHS reserves the right to conduct Form I-9 compliance inspections, as well as any other enforcement or compliance activity authorized by law, including site visits, to ensure proper use of E-Verify.

9. The Employer is strictly prohibited from creating an E-Verify case before the employee has been hired, meaning that a firm offer of employment was extended and accepted and Form I-9 was completed. The Employer agrees to create an E-Verify case for new employees within three Employer business days after each employee has been hired (after both Sections 1 and 2 of Form I-9 have been completed), and to complete as many steps of the E-Verify process as are necessary according to the E-Verify User Manual. If E-Verify is temporarily unavailable, the three-day time period will be extended until it is again operational in order to accommodate the Employer's attempting, in good faith, to make inquiries during the period of unavailability.

10. The Employer agrees not to use E-Verify for pre-employment screening of job applicants, in support of any unlawful employment practice, or for any other use that this MOU or the E-Verify User Manual does not authorize.

11. The Employer must use E-Verify for all new employees. The Employer will not verify selectively and will not verify employees hired before the effective date of this MOU. Employers who are Federal contractors may qualify for exceptions to this requirement as described in Article II.B of this MOU.

12. The Employer agrees to follow appropriate procedures (see Article III below) regarding tentative nonconfirmations. The Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee's E-Verify case. The Employer agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer agrees to provide written referral instructions to employees and instruct affected employees to bring the English copy of the letter to the SSA. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending. Further, when employees contest a tentative nonconfirmation based upon a photo mismatch, the Employer must take additional steps (see Article III.B. below) to contact DHS with information necessary to resolve the challenge.

13. The Employer agrees not to take any adverse action against an employee based upon the employee's perceived employment eligibility status while SSA or DHS is processing the verification request unless the Employer obtains knowledge (as defined in 8 C.F.R. § 274a.1(l)) that the employee is not work authorized. The Employer understands that an initial inability of the SSA or DHS automated verification system to verify work authorization, a tentative nonconfirmation, a case in continuance (indicating the need for additional time for the government to resolve a case), or the finding of a photo mismatch, does not establish, and should not be interpreted as, evidence that the employee is not work authorized. In any of such cases, the employee must be provided a full and fair opportunity to contest the finding, and if he or she does so, the employee may not be terminated or suffer any adverse employment consequences based upon the employee's perceived employment eligibility status

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(including denying, reducing, or extending work hours, delaying or preventing training, requiring an employee to work in poorer conditions, withholding pay, refusing to assign the employee to a Federal contract or other assignment, or otherwise assuming that he or she is unauthorized to work) until and unless secondary verification by SSA or DHS has been completed and a final nonconfirmation has been issued. If the employee does not choose to contest a tentative nonconfirmation or a photo mismatch or if a secondary verification is completed and a final nonconfirmation is issued, then the Employer can find the employee is not work authorized and terminate the employee's employment. Employers or employees with questions about a final nonconfirmation may call E-Verify at 1-888-464-4218 (customer service) or 1-888-897-7781 (worker hotline).

14. The Employer agrees to comply with Title VII of the Civil Rights Act of 1964 and section 274B of the INA as applicable by not discriminating unlawfully against any individual in hiring, firing, employment eligibility verification, or recruitment or referral practices because of his or her national origin or citizenship status, or by committing discriminatory documentary practices. The Employer understands that such illegal practices can include selective verification or use of E-Verify except as provided in part D below, or discharging or refusing to hire employees because they appear or sound "foreign" or have received tentative nonconfirmations. The Employer further understands that any violation of the immigration-related unfair employment practices provisions in section 274B of the INA could subject the Employer to civil penalties, back pay awards, and other sanctions, and violations of Title VII could subject the Employer to back pay awards, compensatory and punitive damages. Violations of either section 274B of the INA or Title VII may also lead to the termination of its participation in E-Verify. If the Employer has any questions relating to the anti-discrimination provision, it should contact OSC at 1-800-255-8155 or 1-800-237-2515 (TDD).

15. The Employer agrees that it will use the information it receives from E-Verify only to confirm the employment eligibility of employees as authorized by this MOU. The Employer agrees that it will safeguard this information, and means of access to it (such as PINS and passwords), to ensure that it is not used for any other purpose and as necessary to protect its confidentiality, including ensuring that it is not disseminated to any person other than employees of the Employer who are authorized to perform the Employer's responsibilities under this MOU, except for such dissemination as may be authorized in advance by SSA or DHS for legitimate purposes.

16. The Employer agrees to notify DHS immediately in the event of a breach of personal information. Breaches are defined as loss of control or unauthorized access to E-Verify personal data. All suspected or confirmed breaches should be reported by calling 1-888-464-4218 or via email at E-Verify@dhs.gov. Please use "Privacy Incident – Password" in the subject line of your email when sending a breach report to E-Verify.

17. The Employer acknowledges that the information it receives from SSA is governed by the Privacy Act (5 U.S.C. § 552a(i)(1) and (3)) and the Social Security Act (42 U.S.C. 1306(a)). Any person who obtains this information under false pretenses or uses it for any purpose other than as provided for in this MOU may be subject to criminal penalties.

18. The Employer agrees to cooperate with DHS and SSA in their compliance monitoring and evaluation of E-Verify, which includes permitting DHS, SSA, their contractors and other agents, upon

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reasonable notice, to review Forms I-9 and other employment records and to interview it and its employees regarding the Employer's use of E-Verify, and to respond in a prompt and accurate manner to DHS requests for information relating to their participation in E-Verify.

19. The Employer shall not make any false or unauthorized claims or references about its participation in E-Verify on its website, in advertising materials, or other media. The Employer shall not describe its services as federally-approved, federally-certified, or federally-recognized, or use language with a similar intent on its website or other materials provided to the public. Entering into this MOU does not mean that E-Verify endorses or authorizes your E-Verify services and any claim to that effect is false.

20. The Employer shall not state in its website or other public documents that any language used therein has been provided or approved by DHS, USCIS or the Verification Division, without first obtaining the prior written consent of DHS.

21. The Employer agrees that E-Verify trademarks and logos may be used only under license by DHS/USCIS (see M-795 (Web)) and, other than pursuant to the specific terms of such license, may not be used in any manner that might imply that the Employer's services, products, websites, or publications are sponsored by, endorsed by, licensed by, or affiliated with DHS, USCIS, or E-Verify.

22. The Employer understands that if it uses E-Verify procedures for any purpose other than as authorized by this MOU, the Employer may be subject to appropriate legal action and termination of its participation in E-Verify according to this MOU.

B. RESPONSIBILITIES OF FEDERAL CONTRACTORS

1. If the Employer is a Federal contractor with the FAR E-Verify clause subject to the employment verification terms in Subpart 22.18 of the FAR, it will become familiar with and comply with the most current version of the E-Verify User Manual for Federal Contractors as well as the E-Verify Supplemental Guide for Federal Contractors.

2. In addition to the responsibilities of every employer outlined in this MOU, the Employer understands that if it is a Federal contractor subject to the employment verification terms in Subpart 22.18 of the FAR it must verify the employment eligibility of any "employee assigned to the contract" (as defined in FAR 22.1801). Once an employee has been verified through E-Verify by the Employer, the Employer may not create a second case for the employee through E-Verify.

a. An Employer that is not enrolled in E-Verify as a Federal contractor at the time of a contract award must enroll as a Federal contractor in the E-Verify program within 30 calendar days of contract award and, within 90 days of enrollment, begin to verify employment eligibility of new hires using E-Verify. The Employer must verify those employees who are working in the United States, whether or not they are assigned to the contract. Once the Employer begins verifying new hires, such verification of new hires must be initiated within three business days after the hire date. Once enrolled in E-Verify as a Federal contractor, the Employer must begin verification of employees assigned to the contract within 90 calendar days after the date of enrollment or within 30 days of an employee's assignment to the contract, whichever date is later.

- b. Employers enrolled in E-Verify as a Federal contractor for 90 days or more at the time of a contract award must use E-Verify to begin verification of employment eligibility for new hires of the Employer who are working in the United States, whether or not assigned to the contract, within three business days after the date of hire. If the Employer is enrolled in E-Verify as a Federal contractor for 90 calendar days or less at the time of contract award, the Employer must, within 90 days of enrollment, begin to use E-Verify to initiate verification of new hires of the contractor who are working in the United States, whether or not assigned to the contract. Such verification of new hires must be initiated within three business days after the date of hire. An Employer enrolled as a Federal contractor in E-Verify must begin verification of each employee assigned to the contract within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever is later.
- c. Federal contractors that are institutions of higher education (as defined at 20 U.S.C. 1001(a)), state or local governments, governments of Federally recognized Indian tribes, or sureties performing under a takeover agreement entered into with a Federal agency under a performance bond may choose to only verify new and existing employees assigned to the Federal contract. Such Federal contractors may, however, elect to verify all new hires, and/or all existing employees hired after November 6, 1986. Employers in this category must begin verification of employees assigned to the contract within 90 calendar days after the date of enrollment or within 30 days of an employee's assignment to the contract, whichever date is later.
- d. Upon enrollment, Employers who are Federal contractors may elect to verify employment eligibility of all existing employees working in the United States who were hired after November 6, 1986, instead of verifying only those employees assigned to a covered Federal contract. After enrollment, Employers must elect to verify existing staff following DHS procedures and begin E-Verify verification of all existing employees within 180 days after the election.
- e. The Employer may use a previously completed Form I-9 as the basis for creating an E-Verify case for an employee assigned to a contract as long as:
- i. That Form I-9 is complete (including the SSN) and complies with Article II.A.6,
 - ii. The employee's work authorization has not expired, and
 - iii. The Employer has reviewed the Form I-9 information either in person or in communications with the employee to ensure that the employee's Section 1, Form I-9 attestation has not changed (including, but not limited to, a lawful permanent resident alien having become a naturalized U.S. citizen).
- f. The Employer shall complete a new Form I-9 consistent with Article II.A.6 or update the previous Form I-9 to provide the necessary information if:
- i. The Employer cannot determine that Form I-9 complies with Article II.A.6,
 - ii. The employee's basis for work authorization as attested in Section 1 has expired or changed, or
 - iii. The Form I-9 contains no SSN or is otherwise incomplete.

Note: If Section 1 of Form I-9 is otherwise valid and up-to-date and the form otherwise complies with

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Article II.C.5, but reflects documentation (such as a U.S. passport or Form I-551) that expired after completing Form I-9, the Employer shall not require the production of additional documentation, or use the photo screening tool described in Article II.A.5, subject to any additional or superseding instructions that may be provided on this subject in the E-Verify User Manual.

g. The Employer agrees not to require a second verification using E-Verify of any assigned employee who has previously been verified as a newly hired employee under this MOU or to authorize verification of any existing employee by any Employer that is not a Federal contractor based on this Article.

3. The Employer understands that if it is a Federal contractor, its compliance with this MOU is a performance requirement under the terms of the Federal contract or subcontract, and the Employer consents to the release of information relating to compliance with its verification responsibilities under this MOU to contracting officers or other officials authorized to review the Employer's compliance with Federal contracting requirements.

C. RESPONSIBILITIES OF SSA

1. SSA agrees to allow DHS to compare data provided by the Employer against SSA's database. SSA sends DHS confirmation that the data sent either matches or does not match the information in SSA's database.

2. SSA agrees to safeguard the information the Employer provides through E-Verify procedures. SSA also agrees to limit access to such information, as is appropriate by law, to individuals responsible for the verification of Social Security numbers or responsible for evaluation of E-Verify or such other persons or entities who may be authorized by SSA as governed by the Privacy Act (5 U.S.C. § 552a), the Social Security Act (42 U.S.C. 1306(a)), and SSA regulations (20 CFR Part 401).

3. SSA agrees to provide case results from its database within three Federal Government work days of the initial inquiry. E-Verify provides the information to the Employer.

4. SSA agrees to update SSA records as necessary if the employee who contests the SSA tentative nonconfirmation visits an SSA field office and provides the required evidence. If the employee visits an SSA field office within the eight Federal Government work days from the date of referral to SSA, SSA agrees to update SSA records, if appropriate, within the eight-day period unless SSA determines that more than eight days may be necessary. In such cases, SSA will provide additional instructions to the employee. If the employee does not visit SSA in the time allowed, E-Verify may provide a final nonconfirmation to the employer.

Note: If an Employer experiences technical problems, or has a policy question, the employer should contact E-Verify at 1-888-464-4218.

D. RESPONSIBILITIES OF DHS

1. DHS agrees to provide the Employer with selected data from DHS databases to enable the Employer to conduct, to the extent authorized by this MOU:

a. Automated verification checks on alien employees by electronic means, and

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- b. Photo verification checks (when available) on employees.
2. DHS agrees to assist the Employer with operational problems associated with the Employer's participation in E-Verify. DHS agrees to provide the Employer names, titles, addresses, and telephone numbers of DHS representatives to be contacted during the E-Verify process.
3. DHS agrees to provide to the Employer with access to E-Verify training materials as well as an E-Verify User Manual that contain instructions on E-Verify policies, procedures, and requirements for both SSA and DHS, including restrictions on the use of E-Verify.
4. DHS agrees to train Employers on all important changes made to E-Verify through the use of mandatory refresher tutorials and updates to the E-Verify User Manual. Even without changes to E-Verify, DHS reserves the right to require employers to take mandatory refresher tutorials.
5. DHS agrees to provide to the Employer a notice, which indicates the Employer's participation in E-Verify. DHS also agrees to provide to the Employer anti-discrimination notices issued by the Office of Special Counsel for Immigration-Related Unfair Employment Practices (OSC), Civil Rights Division, U.S. Department of Justice.
6. DHS agrees to issue each of the Employer's E-Verify users a unique user identification number and password that permits them to log in to E-Verify.
7. DHS agrees to safeguard the information the Employer provides, and to limit access to such information to individuals responsible for the verification process, for evaluation of E-Verify, or to such other persons or entities as may be authorized by applicable law. Information will be used only to verify the accuracy of Social Security numbers and employment eligibility, to enforce the INA and Federal criminal laws, and to administer Federal contracting requirements.
8. DHS agrees to provide a means of automated verification that provides (in conjunction with SSA verification procedures) confirmation or tentative nonconfirmation of employees' employment eligibility within three Federal Government work days of the initial inquiry.
9. DHS agrees to provide a means of secondary verification (including updating DHS records) for employees who contest DHS tentative nonconfirmations and photo mismatch tentative nonconfirmations. This provides final confirmation or nonconfirmation of the employees' employment eligibility within 10 Federal Government work days of the date of referral to DHS, unless DHS determines that more than 10 days may be necessary. In such cases, DHS will provide additional verification instructions.

ARTICLE III

REFERRAL OF INDIVIDUALS TO SSA AND DHS

A. REFERRAL TO SSA

1. If the Employer receives a tentative nonconfirmation issued by SSA, the Employer must print the notice as directed by E-Verify. The Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee's E-Verify

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case. The Employer also agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer agrees to provide written referral instructions to employees and instruct affected employees to bring the English copy of the letter to the SSA. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending.

2. The Employer agrees to obtain the employee's response about whether he or she will contest the tentative nonconfirmation as soon as possible after the Employer receives the tentative nonconfirmation. Only the employee may determine whether he or she will contest the tentative nonconfirmation.

3. After a tentative nonconfirmation, the Employer will refer employees to SSA field offices only as directed by E-Verify. The Employer must record the case verification number, review the employee information submitted to E-Verify to identify any errors, and find out whether the employee contests the tentative nonconfirmation. The Employer will transmit the Social Security number, or any other corrected employee information that SSA requests, to SSA for verification again if this review indicates a need to do so.

4. The Employer will instruct the employee to visit an SSA office within eight Federal Government work days. SSA will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it determines that more than 10 days is necessary.

5. While waiting for case results, the Employer agrees to check the E-Verify system regularly for case updates.

6. The Employer agrees not to ask the employee to obtain a printout from the Social Security Administration number database (the Numident) or other written verification of the SSN from the SSA.

B. REFERRAL TO DHS

1. If the Employer receives a tentative nonconfirmation issued by DHS, the Employer must promptly notify employees in private of the finding and provide them with the notice and letter containing information specific to the employee's E-Verify case. The Employer also agrees to provide both the English and the translated notice and letter for employees with limited English proficiency to employees. The Employer must allow employees to contest the finding, and not take adverse action against employees if they choose to contest the finding, while their case is still pending.

2. The Employer agrees to obtain the employee's response about whether he or she will contest the tentative nonconfirmation as soon as possible after the Employer receives the tentative nonconfirmation. Only the employee may determine whether he or she will contest the tentative nonconfirmation.

3. The Employer agrees to refer individuals to DHS only when the employee chooses to contest a tentative nonconfirmation.

4. If the employee contests a tentative nonconfirmation issued by DHS, the Employer will instruct the

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employee to contact DHS through its toll-free hotline (as found on the referral letter) within eight Federal Government work days.

5. If the Employer finds a photo mismatch, the Employer must provide the photo mismatch tentative nonconfirmation notice and follow the instructions outlined in paragraph 1 of this section for tentative nonconfirmations, generally.

6. The Employer agrees that if an employee contests a tentative nonconfirmation based upon a photo mismatch, the Employer will send a copy of the employee's Form I-551, Form I-766, U.S. Passport, or passport card to DHS for review by:

- a. Scanning and uploading the document, or
- b. Sending a photocopy of the document by express mail (furnished and paid for by the employer).

7. The Employer understands that if it cannot determine whether there is a photo match/mismatch, the Employer must forward the employee's documentation to DHS as described in the preceding paragraph. The Employer agrees to resolve the case as specified by the DHS representative who will determine the photo match or mismatch.

8. DHS will electronically transmit the result of the referral to the Employer within 10 Federal Government work days of the referral unless it determines that more than 10 days is necessary.

9. While waiting for case results, the Employer agrees to check the E-Verify system regularly for case updates.

ARTICLE IV SERVICE PROVISIONS

A. NO SERVICE FEES

1. SSA and DHS will not charge the Employer for verification services performed under this MOU. The Employer is responsible for providing equipment needed to make inquiries. To access E-Verify, an Employer will need a personal computer with Internet access.

ARTICLE V MODIFICATION AND TERMINATION

A. MODIFICATION

1. This MOU is effective upon the signature of all parties and shall continue in effect for as long as the SSA and DHS operates the E-Verify program unless modified in writing by the mutual consent of all parties.

2. Any and all E-Verify system enhancements by DHS or SSA, including but not limited to E-Verify checking against additional data sources and instituting new verification policies or procedures, will be covered under this MOU and will not cause the need for a supplemental MOU that outlines these changes.

B. TERMINATION

1. The Employer may terminate this MOU and its participation in E-Verify at any time upon 30 days prior written notice to the other parties.
2. Notwithstanding Article V, part A of this MOU, DHS may terminate this MOU, and thereby the Employer's participation in E-Verify, with or without notice at any time if deemed necessary because of the requirements of law or policy, or upon a determination by SSA or DHS that there has been a breach of system integrity or security by the Employer, or a failure on the part of the Employer to comply with established E-Verify procedures and/or legal requirements. The Employer understands that if it is a Federal contractor, termination of this MOU by any party for any reason may negatively affect the performance of its contractual responsibilities. Similarly, the Employer understands that if it is in a state where E-Verify is mandatory, termination of this by any party MOU may negatively affect the Employer's business.
3. An Employer that is a Federal contractor may terminate this MOU when the Federal contract that requires its participation in E-Verify is terminated or completed. In such cases, the Federal contractor must provide written notice to DHS. If an Employer that is a Federal contractor fails to provide such notice, then that Employer will remain an E-Verify participant, will remain bound by the terms of this MOU that apply to non-Federal contractor participants, and will be required to use the E-Verify procedures to verify the employment eligibility of all newly hired employees.
4. The Employer agrees that E-Verify is not liable for any losses, financial or otherwise, if the Employer is terminated from E-Verify.

**ARTICLE VI
PARTIES**

- A. Some or all SSA and DHS responsibilities under this MOU may be performed by contractor(s), and SSA and DHS may adjust verification responsibilities between each other as necessary. By separate agreement with DHS, SSA has agreed to perform its responsibilities as described in this MOU.
- B. Nothing in this MOU is intended, or should be construed, to create any right or benefit, substantive or procedural, enforceable at law by any third party against the United States, its agencies, officers, or employees, or against the Employer, its agents, officers, or employees.
- C. The Employer may not assign, directly or indirectly, whether by operation of law, change of control or merger, all or any part of its rights or obligations under this MOU without the prior written consent of DHS, which consent shall not be unreasonably withheld or delayed. Any attempt to sublicense, assign, or transfer any of the rights, duties, or obligations herein is void.
- D. Each party shall be solely responsible for defending any claim or action against it arising out of or related to E-Verify or this MOU, whether civil or criminal, and for any liability wherefrom, including (but not limited to) any dispute between the Employer and any other person or entity regarding the applicability of Section 403(d) of IIRIRA to any action taken or allegedly taken by the Employer.
- E. The Employer understands that its participation in E-Verify is not confidential information and may be disclosed as authorized or required by law and DHS or SSA policy, including but not limited to,

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Congressional oversight, E-Verify publicity and media inquiries, determinations of compliance with Federal contractual requirements, and responses to inquiries under the Freedom of Information Act (FOIA).

F. The individuals whose signatures appear below represent that they are authorized to enter into this MOU on behalf of the Employer and DHS respectively. The Employer understands that any inaccurate statement, representation, data or other information provided to DHS may subject the Employer, its subcontractors, its employees, or its representatives to: (1) prosecution for false statements pursuant to 18 U.S.C. 1001 and/or; (2) immediate termination of its MOU and/or; (3) possible debarment or suspension.

G. The foregoing constitutes the full agreement on this subject between DHS and the Employer.

To be accepted as an E-Verify participant, you should only sign the Employer's Section of the signature page. If you have any questions, contact E-Verify at 1-888-464-4218.

Company ID Number: 181553

Approved by:

Employer Crawford, Murphy & Tilly, Inc.	
Name (Please Type or Print) Susan J Trello	Title
Signature Electronically Signed	Date 01/16/2009
Department of Homeland Security – Verification Division	
Name (Please Type or Print) USCIS Verification Division	Title
Signature Electronically Signed	Date 01/16/2009

Company ID Number: 181553

Information Required for the E-Verify Program

Information relating to your Company:

Company Name	Crawford, Murphy & Tilly, Inc.
Company Facility Address	2750 West Washington Street Springfield, IL 62702
Company Alternate Address	
County or Parish	SANGAMON
Employer Identification Number	370844862
North American Industry Classification Systems Code	541
Parent Company	
Number of Employees	100 to 499
Number of Sites Verified for	17

Company ID Number: 181553

Are you verifying for more than 1 site? If yes, please provide the number of sites verified for in each State:

FLORIDA	2 site(s)
ILLINOIS	7 site(s)
INDIANA	1 site(s)
MISSOURI	3 site(s)
OHIO	3 site(s)
TENNESSEE	1 site(s)

Company ID Number: 181553

Information relating to the Program Administrator(s) for your Company on policy questions or operational problems:

Name Tom W Roy
Phone Number (217) 572 - 1035
Fax Number (217) 787 - 4183
Email Address troy@cmtengr.com

Name Kristine M Allen
Phone Number (217) 572 - 1129
Fax Number (217) 787 - 4183
Email Address kallen@cmtengr.com

ATTACHMENT H

Truth-In-Negotiation Certificate

City of Kansas City, Missouri Overflow Control Plan ("OCP")

Civil Action No. 4:10-cv-0487-GAF

STATE OF MISSOURI)

) ss..

COUNTY OF JACKSON)

ST. LOUIS

I, Raed Armouti, having full authority to act on behalf of Crawford, Murphy & Tilly, Inc. (CMT), do solemnly swear under oath to the following:

1. This Certificate is executed and given by the undersigned as a condition precedent to entering into a Design Professional Agreement with the City of Kansas City, Missouri for the project known as Round Grove Basin Supplemental Inflow and Infiltration (I/I) Reduction Project.
2. This Certificate shall be attached to and constitute an integral part of the above said Design Professional Agreement as provided in Part II, Sec. 24.
3. I certify under penalty of law that the wage rates, other factual unit costs, and expenses supporting the compensation for this Design Professional Agreement was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted, and that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
4. The truth of the statements made herein may be relied upon by the City and the undersigned is fully advised of the legal effect and obligations imposed upon him by the execution of this instrument.



Signature of affiant

On this 9th day of SEPTEMBER 2019 before me, JENNIFER SALLS a Notary Public in and for said state, personally appeared (RAEO ARMOUTI), known to me to be the person who executed the within affidavit, and acknowledge to me that he/she executed the same for the purposes therein stated.



Notary Public

JENNIFER L. SALLS
Notary Public - Notary Seal
State of Missouri
Commissioned for Jefferson County
My Commission Expires: March 26, 2023
Commission Number: 15390729

My commission expires: 03/26/2023

ATTACHMENT I

**Affidavit of Compliance With the Federal Consent Decree Regarding the
City of Kansas City, Missouri Overflow Control Plan ("OCP")**

Civil Action No. 4:10-cv-0487-GAF

STATE OF MISSOURI)

) ss.

COUNTY OF ^{ST. LOUIS} JACKSON)

I, Raed Armouti, having full authority to act on behalf
of Crawford, Murphy & Tilly, Inc. (CMT), do solemnly swear under
oath to the following:

I certify, under penalty of law, that the City has made an electronic copy of this Consent
Decree available to this organization at the following web location:
<http://www.kcmo.org/idc/groups/public/documents/waterservices/consentdecree.pdf> . I
further certify that the Consent Decree, along with appendices, have been reviewed in
their entirety and that said review has been performed under my direction or supervision
in accordance with a system designed to assure that qualified personnel properly
evaluated and fully understand the information contained in this Consent Decree upon
execution of any contract relating to such work, including, but not limited to,
subcontractors, equipment providers, material suppliers, or sub-consultants.



Signature of affiant

On this 9th day of SEPTEMBER 2019 before me, JENNIFER SALLS a Notary
Public in and for said state, personally appeared (RAED ARMOUTI), known to me to
be the person who executed the within affidavit, and acknowledge to me that he/she executed
the same for the purposes therein stated.



Notary Public

My commission expires: 03/26/2023



ATTACHMENT J

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: Trekk Design Group, LLC (TREKK) Lucas Gillen, PE Email: lgillen@trekkdesigngroup.com	Address: 1141 E. 104 th Street, Kansas City, MO 64131 Phone: 816-874-4664 Fax: 816-874-4675
2.	Name: Taliaferro & Browne, Inc. (T&B) Hagos Andebrhan, PE Email: hagos@tb-engr.com	Address: 1020 E. 8 th Street Kansas City, MO 64106 Phone: 816-283-3456 Fax: 816-283-0810
3.	Name: Environmental, Advisors & Engineers, Inc., (EAE) Jill Biesma, PE Email: jbiesma@eaei.com	Address: 19211 W. 64 th Terrace Shawnee, KS 66218 Phone: 913-599-4326
4.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
5.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
6.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
7.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____

Contractor – Company Name: Crawford, Murphy & Tilly, Inc. (CMT)
 Submitted By: Julie Jenson, PE
 Title: Project Manager
 Telephone No.: 816-272-8318
 Fax No.: 314-436-0723
 E-mail: jjenson@cmtengr.com
 Date: 9/4/2019

DESIGN PROFESSIONAL SERVICES

AMENDMENT NO. 1

CONTRACT NO. 1559 PROJECT NO. 81000893
PROJECT TITLE – Supplemental I/I Reduction: Round Grove Basin
WATER SERVICES DEPARTMENT

This amendment is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation (City), and Crawford, Murphy & Tilly, Inc. (Design Professional). The parties amend the Agreement entered into on October 28, 2019, as follows:

WHEREAS, City has previously entered into a contract dated October 28, 2019 in the amount of \$515,000.00; and

WHEREAS, the City desires to execute Amendment No. 1, in the amount of \$840,000.00, to amend the total contract amount to \$1,355,000.00; and

NOW, THEREFORE, in consideration of the payments and mutual agreements contained in this Amendment No. 1, City and Design Professional agree as follows:

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

- A. Add the following section(s):
 - a. Under Attachment A – Scope of Services, add Attachment A1 Scope of Services for Construction Phase Services, attached herein.
 - b. Under Attachment C – Schedule of Position Classifications, add Attachment C1 Engineering Fee Summary for Construction Phase Services, attached herein.
 - c. Sec. 8. Responsibilities of City., Subparagraph F:
Evaluate Contractor's performance at key contractual milestones per the City's Water Services Department's (WSD) Design Professional Evaluation Process. WSD may elect to have additional evaluations during construction phase services or at the end of construction phase if applicable. Evaluations shall be submitted by the WSD Project Manager to the Contractor's Project Manager and Project Principal responsible for delivering the contractual obligations of this Agreement. Contractor shall have the opportunity to comment on the evaluation and request a meeting to discuss the evaluation.
- B. Delete and replace the following section(s):
 - a. Delete Sec. 4, Compensation and Reimbursables and replace with the following Sec. 4 Compensation and Reimbursable:

Sec. 4 Compensation and Reimbursables.

- A. The maximum amount that City shall pay Design Professional under this Agreement is \$1,355,000.00, as follows:
 - 1. \$855,847.46 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 a Schedule of Position Classifications and the salary range for each position is included as a part of **Attachment C**. In addition, field investigation labor will be compensated on a unit price basis using the unit prices listed in **Attachment D**.
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 \$373,721.00. 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 public outreach materials. Subcontractor's office personnel labor costs be included in the unit prices for field investigation work. Compensation for subcontractor field investigations shall be based on the unit prices listed in **Attachment D**.
4. Design Professionals' maximum amount shown in Sec. 4, Compensation and Reimbursables, includes a total allowance amount of \$125,431.54 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. In addition, field investigation labor will be compensated on a unit price basis using the unit prices listed in **Attachment D**. Each Optional Service shall be specifically authorized by City in writing, and a maximum billing limit shall be established before the work is started. 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.

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.

Draft

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

Date: _____

By: _____

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)

ATTACHMENT A1

SCOPE OF SERVICES FOR CONSTRUCTION PHASE SERVICES

DESIGN PROFESSIONAL: Crawford, Murphy & Tilly | Engineers & Consultants
OWNER: City of Kansas City, MO
PROJECT: Supplemental I/I Reduction: Round Grove Basin
WSD CONTRACT NO: 1559
WSD PROJECT NO: 81000893

I. GENERAL

The following paragraphs provide a general description of the work required of this Scope of Services. Subsequent paragraphs describe in detail the Construction Phase Services to be provided by DESIGN PROFESSIONAL to facilitate rehabilitation of the sanitary sewer system located in the Round Grove Basin in Kansas City, Jackson County, Missouri.

- A. The Project. The Water Services Department (WSD) of the City of Kansas City (CITY), Missouri, intends to rehabilitate sanitary sewers 8-inch to 24-inch in diameter, related manholes and service laterals within the Round Grove Basin watershed. The DESIGN PROFESSIONAL has developed Construction Contract Documents for Supplemental I/I Reduction: Round Grove Basin and under this Amendment No. 1, the CITY is contracting with DESIGN PROFESSIONAL to perform Construction Phase Services for the Supplemental I/I Reduction: Round Grove Basin.
- B. Federal Consent Decree. This project is included in the Federal Consent Decree pertaining to the City of Kansas City, Missouri's Smart Sewer Program. As such, requirements of the Federal Consent Decree must be adhered to by the DESIGN PROFESSIONAL and its subconsultants and subcontractors.
- C. Background Information. The CITY, acting through its WSD, is undertaking this project as mandated by the Federal Consent Decree. DESIGN PROFESSIONAL has prepared design documents for the Round Grove Basin. Under this Amendment No. 1, the City is contracting with DESIGN PROFESSIONAL to provide Bid and Construction Phase Services for the Project.

The Design Professional shall conduct the work in accordance with the most recent version of WSD's protocols. This scope of work shall take precedence over the protocols, in case of discrepancies.

- D. Task Series Listing. This Scope of Services to be performed by DESIGN PROFESSIONAL is organized under the following Task Series:

Construction Phase Services

1. Task Series 1100 – Project Management and Administration
 2. Task Series 1200 – Public Involvement and Coordination
 3. Task Series 1300 – Construction Phase Engineering Services
 4. Task Series 1400 – Resident Project Representative Services
 5. Task Series 1500 – Project Close Out
- E. Follow-On Phases. At the discretion of the CITY, the DESIGN PROFESSIONAL may be requested to provide additional services concerning the Project.
- F. Explicit Responsibilities. This Scope of Services explicitly sets forth what DESIGN PROFESSIONAL shall perform and does not implicitly put any additional responsibilities or duties upon DESIGN PROFESSIONAL.
- G. Out of Scope Services. DESIGN PROFESSIONAL agrees to provide the specific Scope of Services as identified herein. Work, not specifically discussed herein, shall not be performed without an amendment or shall be provided as Optional Services upon written authorization from the CITY.
- H. Responsibilities of CITY and SMART SEWER PROGRAM MANAGEMENT TEAM (SSP Team).
1. The CITY's assigned project manager will coordinate communication and all activities with all CITY staff including other City Departments.
 2. The CITY's assigned project manager will serve as the primary point of contact with the DESIGN PROFESSIONAL.
 3. CONTRACTOR will provide a construction office for use by DESIGN PROFESSIONAL's Resident Project Representative (RPR) and DESIGN PROFESSIONAL's Assistant Resident Project Representatives (ARPRs).
 4. The DESIGN PROFESSIONAL shall be responsible for site safety of DESIGN PROFESSIONAL's staff and subcontract employees. The DESIGN PROFESSIONAL shall supply the required safety equipment and shall ensure that all DESIGN PROFESSIONAL employees and subcontractor employees are properly equipped and trained in all safety procedures and precautions.
 5. The CITY will provide one CONSTRUCTION MANAGER (CM) that will support the CITY's Project Manager (PM). CM will support the PM in facilitating the timely resolution of construction related issues that arise working collaboratively with DESIGN PROFESSIONAL and its RPR, Field Operations Managers (FOM) and

Contractors.

6. The CITY will provide FOMs to monitor the performance of RPRs and serve as a field resource to the CM and the CITY's PM to assist with the review of contractor pay applications, work change directives, and change orders, resolving field construction issues, and evaluating contractor claims. FOMs will also monitor the performance of the DESIGN PROFESSIONAL's RPRs and verify they understand their roles and responsibilities and are performing them to the CITY's satisfaction.
 7. The SSP Team is defined as the specific employees of the CITY and the CITY's Smart Sewer program management consultant and their sub-consultants responsible for oversight of the Smart Sewer Program on behalf of the CITY. SSP Team does not include all employees of the various CITY departments that will be involved in the project development. The DESIGN PROFESSIONAL will work directly with the SSP Team throughout the development of the project.
- I. Limits of Authority. DESIGN PROFESSIONAL shall make reasonable efforts to ensure that the completed work shall conform to the Construction Contract Documents. On the basis of site visits and on-site observations, DESIGN PROFESSIONAL shall keep CITY informed of the progress of the work and shall endeavor to guard CITY against defective work. DESIGN PROFESSIONAL's site visits and on-site observations are subject to all the limitations on DESIGN PROFESSIONAL's authority and responsibility set forth below.
1. DESIGN PROFESSIONAL shall 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 shall be as provided herein.
 2. DESIGN PROFESSIONAL's authority or responsibility under this agreement shall not create, impose or give rise to any duty owed by DESIGN PROFESSIONAL to CONTRACTOR, any subcontractor, any supplier, any other person or organization, or to any surety for or employee or agent of any of them.
 3. DESIGN PROFESSIONAL shall not 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 shall not be responsible for CONTRACTOR's failure to perform or furnish the work in accordance with the construction contract documents.
 4. DESIGN PROFESSIONAL shall 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 construction contract documents, or that will prejudice the integrity of the design concept of the completed project as a functioning whole as indicated by the construction contract documents.

5. DESIGN PROFESSIONAL shall 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.
6. 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 shall only be to determine generally that their content complies with the requirements of the contract documents. In the case of certificates of inspections, tests and approvals, DESIGN PROFESSIONAL will generally determine that the results certified indicate compliance with the contract documents.

The limitations upon authority and responsibility set forth in this agreement shall also apply to DESIGN PROFESSIONAL's consultants, subconsultants, RPR's and assistants.

II. PROJECT MILESTONES AND CITY REVIEW REQUIREMENTS

- A. DESIGN PROFESSIONAL shall complete the Task Series within the following calendar days. It is understood that the project milestones for this project shall be determined by the CITY and the CONTRACTOR:
 1. Task Series 1100. DESIGN PROFESSIONAL shall complete this Task Series 1100 within 30 calendar days after completion of Task Series 1500.
 2. Task Series 1200. DESIGN PROFESSIONAL shall complete Task Series 1200 within 425 calendar days after authorization by CITY.
 3. Task Series 1300 to 1400. DESIGN PROFESSIONAL shall complete Task Series 1300 to 1400 within 425 calendar days after CITY's issuance of a Notice to Proceed to CONTRACTOR.
 4. Task Series 1500. DESIGN PROFESSIONAL shall complete Task Series 1500 within 30 calendar days 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.
 5. DESIGN PROFESSIONAL's completion schedule may be extended by the CITY for delays beyond the reasonable control of the DESIGN PROFESSIONAL or as approved by the CITY.

III. BASIC SCOPE OF SERVICES FOR CONSTRUCTION PHASE SERVICES

The following Task Series describe the Basic Scope of Services for Construction Phase Services to be provided by the DESIGN PROFESSIONAL under the Project.

TASK SERIES 1100 - PROJECT MANAGEMENT AND ADMINISTRATION

The purpose of Project Management and Administration shall be to manage, direct and oversee each element of the Basic Scope of Services identified herein and subcontractors employed by the DESIGN PROFESSIONAL in completion of the work. The management tasks listed below shall be provided by DESIGN PROFESSIONAL. Project management and administration for Task Series 1100 through 1500 is included in Task Series 1100. It is assumed that construction phase services and design services will be concurrent.

Task 1101 Project Management Services

DESIGN PROFESSIONAL shall provide project management services necessary throughout the project to successfully manage and complete the work. This includes 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; and continuous monitoring of DESIGN PROFESSIONAL's work progress. DESIGN PROFESSIONAL's Quality Control Program shall be implemented on all phases of the project to provide an independent review of the work. Quality control reviews shall include checks for completeness and correctness of evaluations, change order design accuracy, feasibility of implementing recommendations, and adherence to contract requirements.

Task 1102 Monthly Invoicing

DESIGN PROFESSIONAL shall prepare and submit monthly invoices on a form acceptable to the CITY. PDF copies of monthly invoices shall be uploaded to the CITY's web-based document management system.

Task 1103 Monthly Project Status Report

DESIGN PROFESSIONAL shall prepare and submit a monthly project status report on forms acceptable to the CITY. PDF copies of each project status report shall be uploaded to the CITY's web based document management system (eBuilder). A project status report shall accompany each monthly invoice submittal. The monthly progress status reports shall document, at the Task Series level, work progress, the percentage of completed work, schedule status, and budget status. The monthly project status report shall 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 HRD approved M/WBE participation goals and project schedule milestones, including identification of any delays beyond its control, and an estimate of work percent completion for each Task Series in the Scope of Services based on the work completed. A short narrative shall be provided to describe the work activity performed for each task within each Task Series.

Provide a detailed invoice forecast schedule for performance of all work through the end of the contract period. The invoice forecast schedule, including a breakdown of monthly DESIGN PROFESSIONAL, MBE, and WBE invoice amounts versus forecasted monthly amounts, shall indicate the planned value of work to be invoiced on a monthly basis through project completion.

The DESIGN PROFESSIONAL shall provide a tracking graph of the forecast and results to date of invoice period that clearly shows progress to date.

Work Plan Update. DESIGN PROFESSIONAL shall prepare a written draft Work Plan of their work during the construction phase. CITY will provide the format and a guideline for the information to be included in the Work Plan. The Work Plan for the project includes, at a minimum the following:

- a. A summary of dedicated key team members roles and responsibilities, including all field crew leaders and contact information.
- b. A summary of the project's scope of services.
- c. Provide a detailed invoice forecast schedule for performance of all work through the end of the contract period. The invoice forecast schedule, including a breakdown of monthly DESIGN PROFESSIONAL, MBE, and WBE invoice amounts versus forecasted monthly amounts, shall indicate the planned value of work to be invoiced on a monthly basis through project completion. The DESIGN PROFESSIONAL shall provide a tracking graph of the forecast and results to date of invoice period that clearly shows each of the monthly amounts and progress to date versus forecast.
- d. Define any issues requiring special coordination with CITY, and/or adjacent projects.

Task 1104 Subconsultant Agreements and Administration

Prepare a scope, budget, schedule, and agreement for its 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, subcontractor invoicing, and schedule maintenance. Prepare monthly M/WBE subcontractor utilization reports and submit in the required format to the CITY's Human Relations Department.

TASK SERIES 1200 - PUBLIC INVOLVEMENT AND COORDINATION

Task 1201 Public Meeting

CITY and DESIGN PROFESSIONAL shall facilitate one public meeting prior to the start of construction. The purpose of the public meeting is to introduce the CONTRACTOR and DESIGN PROFESSIONAL/RPR, present CONTRACTOR's preliminary schedule and milestones, construction specifics, and to inform the public of what to expect during construction. DESIGN PROFESSIONAL's project manager, and RPR will attend the meeting. CITY shall prepare for the public meeting with the assistance of the DESIGN PROFESSIONAL. DESIGN PROFESSIONAL shall assist the CITY by providing a sufficient number of exhibit(s) on presentation board(s), Construction Contract Drawings, and responding to questions.

Task 1202 Correspondence and Tracking 311 Cases

DESIGN PROFESSIONAL shall respond to 311 cases, if necessary, and will track all 311 cases regarding the project. DESIGN PROFESSIONAL shall track the date the 311 case was given to

the DESIGN PROFESSIONAL, RPR and CONTRACTOR, address(es) involved, the specific issue, how it was resolved, and when it was resolved. All open 311 cases will be discussed at each monthly progress meeting.

TASK SERIES 1300 - CONSTRUCTION PHASE ENGINEERING SERVICES

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 shall 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. All the correspondence identified in this paragraph and during construction shall be maintained on eBuilder, the CITY's document management system

Task 1301 Review CONTRACTOR's Schedules

1. DESIGN PROFESSIONAL shall review and provide comments to CITY on CONTRACTOR's schedule of values and advise CITY as to acceptability.
2. DESIGN PROFESSIONAL shall receive and review the CONTRACTOR's initial schedule of estimated monthly payments and advise CITY as to its acceptability.
3. DESIGN PROFESSIONAL shall receive and review the CONTRACTOR's initial schedule of shop drawing submissions and advise CITY as to its acceptability.
4. DESIGN PROFESSIONAL shall receive, review and comment on the CONTRACTOR'S base line and monthly construction schedules. DESIGN PROFESSIONAL's review shall be for general conformity to the requirements for scheduling requirements defined in the Construction Contract Documents, to determine if the CONTRACTOR'S construction schedule, activity sequence and construction procedures include construction sequencing and any special conditions such as those required for CITY to keep existing facilities in operation as specified in the Construction Contract documents. DESIGN PROFESSIONAL shall summarize the review comments related to each schedule submittal and submit them to the CITY for consideration, input and acceptance. Review comments acceptable to the CITY shall be transmitted to CONTRACTOR

Task 1302 Meetings, Conferences, and Site Visits

1. DESIGN PROFESSIONAL shall facilitate a pre-construction conference with the CITY and CONTRACTOR to review the project communication, coordination and other procedures and discuss the CONTRACTOR's general work plan and requirements for the project. DESIGN PROFESSIONAL shall preside over the meeting, prepare meeting minutes, and submit meeting minutes to the CITY for review and approval. DESIGN PROFESSIONAL shall distribute meeting minutes to

all parties in attendance and upload the final meeting minutes to the CITY's web based document management system.

2. DESIGN PROFESSIONAL shall attend up to 14 monthly progress meetings, with CITY and CONTRACTOR, when necessary, to review and discuss construction procedures and progress scheduling, construction administration procedures and other matters concerning the project. CONTRACTOR shall be required to distribute updated schedules and agendas in advance of the monthly progress meeting, keep notes during the meeting, and distribute notes for comment prior to issuing final meeting notes to all parties in attendance. DESIGN PROFESSIONAL shall review CONTRACTOR meeting notes and provide comments to CITY, or if directed by CITY, provide comments directly to CONTRACTOR.
3. DESIGN PROFESSIONAL shall visit the site 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. The DESIGN PROFESSIONAL shall perform up to 12 periodic site visits. Periodic site visits are in addition to site visits that coincide with monthly progress meetings, the Achievement of Full Operation inspection, and the final completion inspection.

Task 1303 Document Management and Work Tracking Application

DESIGN PROFESSIONAL shall utilize the CITY's web-based document management system (eBuilder) for managing, tracking and storing documents associated with the project. DESIGN PROFESSIONAL, RPR, and staff shall attend training on CITY's web-based document management system prior to start of construction. Documents will include, but are not limited to, shop drawings, submittals, correspondence, change orders, work change directives, project status reports, pay requests, inspection reports, daily logs, meeting minutes, progress photos, and correspondence between the CONTRACTOR, DESIGN PROFESSIONAL and CITY produced during construction. DESIGN PROFESSIONAL shall comply with file protocols and procedures for the web-based document management system provided by the CITY.

DESIGN PROFESSIONAL shall enter final scheduled rehabilitation assets for each Project Area into the CITY's web-based work order management application for work order creation. DESIGN PROFESSIONAL shall follow the work tracking application user protocol provided by the CITY. DESIGN PROFESSIONAL shall update the work orders on a monthly basis as construction is completed and notify the CITY when work orders may be closed.

Task 1304 Shop Drawings and Data Submittals

DESIGN PROFESSIONAL shall receive, review, and approve submittals and data submitted by the CONTRACTOR as required by the Construction Contract Documents. Submittals include shop drawings, testing reports and affidavits, third party verification reports, affidavits and certifications required by Construction Contract Documents, excluding other submittals specific to other tasks, such as Post-Rehabilitation Submittals and CONTRACTOR's schedules. CITY shall approve all product materials which are different than the materials shown in the Construction Contract

Documents prior to sending approved submittals to the CONTRACTOR. DESIGN PROFESSIONAL's review and approval shall only be to determine if the items covered by the submittals will, after installation or incorporation into the work, conform to the information given in the Construction Contract Documents and be compatible with the design concept of the completed project as a functioning whole as indicated by the Construction Contract documents.

1. DESIGN PROFESSIONAL will respond to submittals posted to CITY's document management system within fourteen (14) consecutive calendar days for final approval.
2. To establish the basis for DESIGN PROFESSIONAL's compensation, up to 20 submittals, including re-submittals, are budgeted to be reviewed as part of the Scope of Services. Reviews of submittals shall be limited to the review of the first initial submittal and one re-submittal, if required, for each specification section. Additional submittals may be reviewed by DESIGN PROFESSIONAL as an Optional Service.

Task 1305 Payment Requisitions

DESIGN PROFESSIONAL, after initial review and recommendation by RPR, shall review the Application for Payment (up to 14) and accompanying supporting documentation for compliance with Construction Contract Documents and CITY's established procedures. Review shall include cross-checking receipt of required test or post-installation documentation that is required prior to payment. DESIGN PROFESSIONAL shall review the Application for Payment within the CITY's document management system, 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.

Task 1306 Interpretations of Contract Documents

DESIGN PROFESSIONAL shall issue with reasonable promptness written clarifications or interpretations (which may be in the form of Drawings) of the requirements of the Construction Contract Drawings and Specifications prepared by the DESIGN PROFESSIONAL. Interpretation of documents prepared by the CITY shall be performed by the CITY. DESIGN PROFESSIONAL's interpretations, proposed responses to RFIs, and clarifications shall be provided to the CITY for review and approval. The final version will be distributed by the DESIGN PROFESSIONAL to the CONTRACTOR, CITY, and RPR.

Task 1307 Assist in Evaluating Claims and Preparation of Allowance Authorizations and Change Order Requests

DESIGN PROFESSIONAL shall assist CITY in evaluating claims, and preparation of allowance authorizations and change order requests (includes all work change directives and time extensions) submitted by the CONTRACTOR or initiated by DESIGN PROFESSIONAL's issuance of request for proposal. DESIGN PROFESSIONAL shall evaluate the construction cost and schedule impact of each allowance or change order request. DESIGN PROFESSIONAL shall assist with determining a fair price for the work and evaluating the potential impact of each work change directive or change order request on the CONTRACTOR's construction schedule.

DESIGN PROFESSIONAL shall review claims by the CONTRACTOR on behalf of the CITY. DESIGN PROFESSIONAL shall review claims for accuracy, validity, and conformance with the general conditions. DESIGN PROFESSIONAL shall provide a written response on behalf of the CITY to the CONTRACTOR, based on their review within the time required by the general conditions. DESIGN PROFESSIONAL's response shall be reviewed by Smart Sewer leadership and or CITY staff prior to issuing to CONTRACTOR.

DESIGN PROFESSIONAL will review allowance authorizations and 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 allowance authorization, work change directive, and change order request and recommended action by CITY.

DESIGN PROFESSIONAL shall create and maintain a change log that tracks change order request from Contractor, change order request from Owner, Work Change Directives, RFPs and RFIs. The log shall at minimum contain corresponding number (RFI 6, RFP 1, WCD 3 etc...), dollar amount of change if applicable, date change was proposed, and status of proposed changes.

The DESIGN PROFESSIONAL will negotiate allowance authorization and 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 allowance authorization or change order request. If the CITY determines that the CONTRACTOR must competitively bid certain Subcontractor work covered under an allowance authorization or 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 allowance authorizations and change orders for the CITY. CITY will review, approve, and execute all allowance authorizations and 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 basis for DESIGN PROFESSIONAL's compensation, up to 2 claims, 5 allowance authorizations, 5 change orders, and 10 work change directives are budgeted to be evaluated and prepared. CITY shall execute all work change directives and change orders covering changes in the work, changes in the contract price or contract times for work defined in change order and work change directive requests and agreed upon by CITY and CONTRACTOR.

Task 1308 Post-Rehabilitation Submittal Reviews

1. DESIGN PROFESSIONAL shall review up to 40,800 linear feet of post-rehabilitation CIPP CCTV inspection records and associated full wrap CIPP Short or Long Liner service connections as submitted by the CONTRACTOR throughout the project in PROJECT area prior to approving CONTRACTOR's monthly pay application. DESIGN PROFESSIONAL's staff reviewing the CCTV inspection records shall be PACP certified.
2. DESIGN PROFESSIONAL shall review up to 40,800 linear feet in the PROJECT area, of the Contractor's final completion post rehabilitation CCTV submittal package prior to achievement of full operation, including all full wrap CIPP Short or Long Liner and

open cut lateral connection replacements post-rehabilitation CCTV records, as submitted by the CONTRACTOR at the end of the project for final acceptance. DESIGN PROFESSIONAL shall provide a summary of the condition of the CCTV inspected assets and any defects recorded for the Punch List. DESIGN PROFESSIONAL's staff shall be PACP certified.

Task 1309 Achievement of Full Operation Review and Final Completion Inspection

1. Achievement of Full Operation Review: DESIGN PROFESSIONAL shall perform an inspection to determine the status of completion and develop a punch list of deficiencies requiring completion or correction at achievement of full operation. DESIGN PROFESSIONAL shall submit to the CITY a statement of achievement of full operation.
2. Final Completion Inspection: DESIGN PROFESSIONAL shall perform a final inspection of the work and shall complete a punch list of deficiencies requiring completion or correction. DESIGN PROFESSIONAL shall submit to the CITY a statement of final completion.
3. DESIGN PROFESSIONAL shall review the Final Application for Payment submitted by CONTRACTOR and accompanying documentation as required by the Construction Contract Documents and provide comments to the CITY.

TASK SERIES 1400 - RESIDENT PROJECT REPRESENTATIVE SERVICES

DESIGN PROFESSIONAL shall provide a full time Resident Project Representative (RPR) to provide field observation services. The duration of RPR services is based on a 13 month period to Achievement of Full Operation and a 60 day closeout period for the project area. DESIGN PROFESSIONAL shall submit the resumes of proposed RPR candidates to CITY for its consideration and selection of RPRs to perform RPR services. CITY reserves the right to conduct informal interviews of the proposed RPR candidates and select the candidate(s) that CITY concludes to be qualified to perform RPR services.

The role of the RPR will be that of the lead observer and primary liaison with the CITY and CONTRACTOR's Superintendent. DESIGN PROFESSIONAL's RPR services include site visits for observation, attendance at monthly progress meetings, and an Achievement of Full Operation review. After Achievement of Full Operation, the RPR will participate in the Final Inspection, review the final Application for Payment, and review the CONTRACTOR'S final record drawing submittal. On a monthly basis, RPR shall review for accuracy and completeness the Contractor's record drawings.

RPR is DESIGN PROFESSIONAL's Agent at the site, shall act as directed by and under the supervision of DESIGN PROFESSIONAL, and shall confer with DESIGN PROFESSIONAL regarding their actions. RPR's dealing in matters pertaining to the on-site work shall in general be only with DESIGN PROFESSIONAL and CONTRACTOR, and dealings with subcontractors shall only be through or with the full knowledge of the CONTRACTOR.

1. Anticipated RPR Level of Effort: To establish the basis for DESIGN PROFESSIONAL's compensation for resident inspection, the RPR's effort for Task

Series 1400 is limited to 2,300 hours. The RPR's effort is based on six (6) weeks at 20 hours per week, 40 weeks at 40 hours per week, 10 weeks at 50 hours per week, and an eight (8) week final completion period at 10 hours per week. DESIGN PROFESSIONAL shall manage the effort associated with Tasks so that the work is completed within the allotted budgets based on the anticipated durations for RPR services. DESIGN PROFESSIONAL shall coordinate with the CITY on the desired level of effort on each task to provide the CITY with the services desired and achievable with the budgeted hours.

2. **General Responsibilities:** RPR shall be present for pre-construction photography/video and as necessary from the CONTRACTOR's mobilization until final completion of the work or up to the budgeted number of hours indicated herein. The RPR shall 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 Achievement of Full Operation review and final completion inspections of the work.

Task 1401 Contractor Schedules

RPR shall review the CONTRACTOR's monthly construction schedules for conformance of work completed to date and activity sequences. RPR shall provide comments to DESIGN PROFESSIONAL, who shall review comments and include with DESIGN PROFESSIONAL's review comments to the CITY concerning acceptability of schedules. CITY shall have final approval authority.

Task 1402 Preconstruction Conference, Meetings, and Field Conferences

RPR shall attend the preconstruction conference, progress meetings, and other meetings with CITY and CONTRACTOR, when necessary, to review and discuss construction procedures and progress scheduling, construction administration procedures and other matters concerning the project. CONTRACTOR shall be required to distribute updated schedules and agendas in advance of the meeting, keep notes of the meeting, and distribute notes for comment prior to issuing final meeting notes to all parties in attendance.

Task 1403 Liaison

RPR shall serve as the CITY's and DESIGN PROFESSIONAL's liaison with CONTRACTOR, working principally through CONTRACTOR's superintendent to assist CONTRACTOR in understanding the intent of the Contract Documents. RPR shall 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 while on-site and document for the CITY in a daily report. 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 by telephone.
3. Track the CONTRACTOR's progress on a daily basis and document in a daily report to be submitted to CITY. Keep a running record of work performed. Record shall 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, street address of service laterals replaced or rehabilitated, and manholes that have been rehabilitated, constructed or replaced. Record shall include quantities for payment (by asset, daily totals and to-date totals), and dates of rehabilitation, construction or replacement of each asset. Since RPR will not be observing all of the construction work, record will rely upon daily conversations with the CONTRACTOR to obtain work performed and quantities constructed. Maintain the record in Microsoft Excel and on a hard copy map; provide copies of the Excel file and hard copy map with the monthly report.
4. Provide a monthly summary of work completed by the CONTRACTOR on CITY approved record documents in the Monthly Construction Phase Services Project Status Report.
5. Witness and document testing performed by the CONTRACTOR.
6. Inspection and approval of open cut point repairs, service line repair/replacement, and manhole lining shall be the CITY's standard inspection method, by the RPR. Construction quantities, addresses, dates, etc., shall be tracked by the RPR.
7. Assist the City's Project Manager in addressing 311 action center cases. RPR shall document all public communications and coordinate all issues directly with the City's Project Manager.

Task 1404 Review of Work, Rejection of Defective Work, Inspections and Test

1. RPR shall conduct on-site observations of the work in progress to assist CITY and DESIGN PROFESSIONAL in determining if the work, in general, is proceeding in accordance with the contract documents.
2. RPR shall report to DESIGN PROFESSIONAL whenever they believe 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 they believe that work should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval. DESIGN PROFESSIONAL shall report unsatisfactory work to the CITY.
3. RPR shall verify that tests are conducted as required by the contract document and in the 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 and startups. This task is limited to that which the RPR can perform when the RPR is on site.

4. RPR shall accompany visiting inspectors representing public or other agencies having jurisdiction over the project, record the outcome of these inspections, and report to DESIGN PROFESSIONAL and CITY. This task is limited to that which the RPR can perform when the RPR is on site.

Task 1405 Records

1. RPR shall maintain in the trailer, orderly files for correspondence, reports of job conferences, shop drawings and samples submissions, reproductions of original Contract Documents, including all addenda, change orders and work change directives, 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 shall keep a diary or logbook, recording 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 on site, or as indicated by the CONTRACTOR when the RPR is not on site.
3. RPR shall record names, addresses, and telephone numbers of all contractors, 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 1501.

Task 1406 Reports and Document Review

1. Submit to DESIGN PROFESSIONAL via the web-based document management system a daily report of RPR observed events at the job site, including the following information.
 - a. Hours the CONTRACTOR worked on the job site.
 - b. CONTRACTOR and subcontractor personnel on job site (Daily Labor Force Report received from CONTRACTOR).
 - c. Construction equipment on the job 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. Daily sign-off of quantities of work completed for unit price items (separate CITY-provided form shall be used).
 - i. Observations pertaining to the progress of the work. Materials received on job site.
 - j. Construction issues and resolutions or proposed resolutions to issues
2. Furnish DESIGN PROFESSIONAL and CITY periodic reports as required by the DESIGN PROFESSIONAL and/or CITY to detail progress of the work and CONTRACTOR's compliance with the approved progress schedule and schedule of shop drawing submissions.
 3. Consult with DESIGN PROFESSIONAL and CITY in advance of scheduled major tests, inspections, or start of important phases of the work.
 4. Report immediately to DESIGN PROFESSIONAL and CITY upon the occurrence of any accident.
 5. All reports shall be prepared using CITY-provided forms and uploaded to the web-based document management system.
 6. 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.

Task 1407 Payment Requisitions

RPR shall review up to 14 applications for payment with CONTRACTOR for compliance with the CITY's established procedure for their submission 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.

Task 1408 Achievement of Full Operation and Final Completion

1. Achievement of Full Operation:
 - a. Before DESIGN PROFESSIONAL reviews CONTRACTOR's progress towards Achievement of Full Operation, and after CONTRACTOR certifies project is ready for Achievement of Full Operation, RPR shall provide the DESIGN PROFESSIONAL with an opinion as to the project's readiness.
 - b. RPR and DESIGN PROFESSIONAL shall conduct review of Achievement of Full Operation in the company of the CITY and CONTRACTOR. RPR and DESIGN PROFESSIONAL shall prepare a punch list of items to be completed or corrected by the CONTRACTOR. The punch list shall be

submitted to the CITY for review and approval prior to distribution by the CITY or by the DESIGN PROFESSIONAL if requested by the CITY.

2. Final Completion

- a. RPR and DESIGN PROFESSIONAL shall conduct Final Completion inspection in the company of the CITY and CONTRACTOR. RPR and DESIGN PROFESSIONAL shall prepare a punch list of items to be completed or corrected by the CONTRACTOR. The punch list shall be submitted to the CITY for review and approval prior to distribution by the CITY or by the DESIGN PROFESSIONAL if requested by the CITY.
- b. RPR and DESIGN PROFESSIONAL shall verify that all items on punch list have been completed or corrected and make recommendations to the CITY concerning final acceptance.

TASK SERIES 1500 - PROJECT CLOSEOUT

Task 1501 Construction Records Drawings

Upon Achievement of Full Operation and the CONTRACTOR's submittal of record drawing markups, DESIGN PROFESSIONAL shall prepare a set of construction record drawings for the Project showing record information based on the drawings and other record documents furnished by the CONTRACTOR and the DESIGN PROFESSIONAL's RPR that show changes to original drawings made during construction. DESIGN PROFESSIONAL is not responsible for any errors or omissions in the information from others that is incorporated into the record drawings. DESIGN PROFESSIONAL shall provide one full size paper copy, an electronic version of the PROJECT's GIS and CAD files, and a PDF of the PROJECT's full size drawings.

Task 1502 Furnish CONTRACTOR'S Completion Documents

1. The RPR will close out the construction contract including punch list items, warranties, liens, functional and performance testing results, outstanding claims, and final payment using the eBuilder document management system. DESIGN PROFESSIONAL will review these items with RPR before issuing a statement of final completion to the CITY. 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 using the eBuilder document management system.
2. 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 "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 "Shop Drawings and Data Submittals" in the Construction Phase Services task. 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.

3. All RPR documents and records shall be provided to the CITY.

Task 1503 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 1504 Update GIS

The DESIGN PROFESSIONAL shall prepare and provide an updated ArcGIS geodatabase that follows the geodatabase update protocol provided by the CITY. DESIGN PROFESSIONAL shall update the GIS database based on construction record or "as-built" drawings provided by the CONTRACTOR. Updates to the GIS items such as: CIPP lining, full pipe replacement material/diameter changes, manhole rehabilitation, and new manholes. Any updated to the GIS database will be noted on the GIS feature by the DESIGN PROFESSIONAL in accordance with the GIS update protocol.

DESIGN PROFESSIONAL will be provided documentation that outlines the required GIS attributes per GIS layer to be edited and valid values for the attribute information. In addition to required attribute fields being populated, DESIGN PROFESSIONAL shall ensure pipe to structure connectivity is maintained within the database.

DESIGN PROFESSIONAL shall verify that data source/data flagging attribute fields in the GIS database template have been updated based on manhole inspections (completed by others), CCTV, smoke testing, and other field verifications. DESIGN PROFESSIONAL shall update any data source/data flagging attribute field that have not previously been entered for both City performed, and DESIGN PROFESSIONAL performed investigations.

IV. 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. This allowance is for additional professional services that may be required during 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. Review of Requests for Substitutions submitted by the CONTRACTOR beyond those identified under the Basic Scope of Services.
- B. Additional meetings beyond those identified under the Basic Scope of Services.
- C. Review of submittals/shop drawings beyond those identified under the Basic Scope of Services.

- D. Assistance with development and evaluation of work change directives or change order requests beyond those identified under the Basic Scope of Services.
- E. Review of additional post-rehabilitation CCTV inspection records beyond those identified under the Basic Scope of Services.
- F. Resident Project Representative services in excess of the hours specified under the Basic Scope of Services.
- G. Meetings with public and local, State, or Federal agencies beyond those Specified under the Basic Scope of Services.
- H. Attendance at public meetings beyond those specified under the Basic Scope of Services.

(End of Scope of Services)

Draft

Attachment C1

CRAWFORD, MURPHY & TILLY, INC.
 2022 PROFESSIONAL SERVICES COST ESTIMATE
 CLIENT
 PROJECT NAME

KCMO PROJECT NO.
 KCMO CONTRACT NO.

KC WATER SERVICES
 SUPPLEMENTAL I/I REDUCTION: ROUND GROVE BASIN
 AMENDMENT NO. 1 TO CONTRACT NO. 1559
 81000833
 1559

PREP BY	JJ
DATE	05/18/22

APPROVED BY	JJ
DATE	05/18/22

TASKS SERIES CLASSIFICATIONS	CMT								MAN HOURS & LABOR SUMMARY	TOTAL LABOR EFFORT	MILEAGE	PRINTING	SUBS	TOTAL EXPENSE	TOTAL FEE
	Proj Eng II Proj Mgr II	Proj Eng I	Senior Eng I	Sr. Tech I	GIS Spec	Eng I	Tech I								
AVERAGE DIRECT LABOR RATES	\$78.95	\$67.43	\$54.28	\$47.70	\$47.70	\$47.70	\$34.54								
AVERAGE DIRECT LABOR RATES WITH OH&P	\$240.00	\$205.00	\$165.00	\$145.00	\$145.00	\$145.00	\$105.00								
Task Series 1100 - Project Management and Administration	10	205	145			73		433	\$78,935.00			\$12,070	\$12,070	\$91,005.00	
1101 Project Management Services	5	35	35					75	\$14,150.00			\$6,035	\$6,035	\$20,185.00	
1102 Monthly Invoicing		60	55			25		140	\$25,000.00			\$6,035	\$6,035	\$31,035.00	
1103 Monthly Project Status Report		50				48		98	\$17,210.00					\$17,210.00	
1104 Subconsultant Agreements and Administration	5	60	55					120	\$22,575.00					\$22,575.00	
Task Series 1200 - Public Involvement and Coordination		55	55					110	\$20,350.00	\$100	\$500		\$600	\$20,950.00	
1201 Public Meeting		20	20					40	\$7,400.00	\$100	\$500		\$600	\$8,000.00	
1202 Correspondence and Tracking 311 Cases		35	35					70	\$12,950.00					\$12,950.00	
Task Series 1300 - Construction Phase Engineering Services		466	460	155		35	16	1,132	\$200,660.00	\$2,900		\$62,750	\$65,650	\$266,310.00	
1301 Review Contractor's Schedules		50	54					104	\$19,160.00					\$19,160.00	
1302 Meetings, Conferences, and Site Visits		100	100	95				295	\$50,775.00	\$2,500		\$20,690	\$23,190	\$73,965.00	
1303 Document Management and Work Tracking Application		30	40	60		30		160	\$25,800.00					\$25,800.00	
1304 Shop Drawings and Data Submittals		40	20					60	\$11,500.00					\$11,500.00	
1305 Payment Requisitions		60	60					120	\$22,200.00					\$22,200.00	
1306 Interpretations of Contract Documents		40	40					80	\$14,800.00			\$3,560	\$3,560	\$18,360.00	
1307 Assist in Evaluating Claims and Preparation of Allowance Authorizations and Change Order Requests		50	50			5		105	\$19,225.00					\$19,225.00	
1308 Post Rehabilitation Submittal Reviews		80	80					130	\$29,600.00			\$38,500	\$38,500	\$68,100.00	
1309 Achievement of Full Operation Review and Final Completion Inspection		16	16				16	48	\$7,600.00	\$400			\$400	\$8,000.00	
Task Series 1400 - Resident Project Representative Services		80	80	1140				253	\$221,465.00	\$10,600		\$89,830	\$100,430	\$321,895.00	
1401 Contractor Schedules				20				20	\$2,900.00			\$1,610	\$1,610	\$4,510.00	
1402 Preconstruction Conference, Meetings, and Field Conferences				50				50	\$7,250.00			\$1,175	\$1,175	\$8,425.00	
1403 Liaison				12				24	\$3,000.00			\$31,800	\$31,800	\$34,800.00	
1404 Review of Work, Rejection of Defective Work, Inspections and Test		80	80	800			156	1,116	\$161,980.00	\$10,000		\$50,070	\$60,070	\$222,050.00	
1405 Records				100			85	185	\$23,425.00			\$5,175	\$5,175	\$28,600.00	
1406 Reports and Document Review				30				30	\$4,350.00					\$4,350.00	
1407 Payment Requisitions				70				70	\$10,150.00					\$10,150.00	
1408 Achievement of Full Operation Review and Final Completion Inspection				58				58	\$8,410.00	\$600			\$600	\$9,010.00	
Task Series 1500 - Project Close Out	5	89	89	64		64	9	320	\$53,635.00			\$6,900	\$6,900	\$60,535.00	
1501 Construction Records Drawings	5	24	24	24		24	9	110	\$17,985.00					\$17,985.00	
1502 Furnish Contractor's Completion Documents		25	25					50	\$9,250.00					\$9,250.00	
1503 Project Closeout Documentation		40	40					80	\$14,800.00					\$14,800.00	
1504 Update GIS				40		40		80	\$11,600.00			\$6,900	\$6,900	\$18,500.00	
Task Series 1600 - Optional Services	25	201	45	50	40	40	55	456	\$79,255.00		\$50			\$79,305.00	
TOTAL MAN HOURS	40	1,096	874	1,409	40	212	333	4,004							
SUBTOTAL - BASE LABOR EFFORT	\$9,600.00	\$224,680.00	\$144,210.00	\$204,305.00	\$5,800.00	\$30,740.00	\$34,965.00		\$654,300.00	\$13,600	\$550	\$171,550	\$185,700	\$840,000.00	