

DESIGN PROFESSIONAL SERVICES AGREEMENT
PROJECT NO. 81000918 CONTRACT NO. 1586
FOR INFLOW AND INFILTRATION (I/I) REDUCTION: NORTHERN BASINS
PROJECT 2 EAST
WATER SERVICES DEPARTMENT

This design professional services agreement is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation (“City”), and Environmental Advisors and Engineers, 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 project will involve review of Closed Circuit Television (CCTV) inspection data, manhole inspection data, smoke testing data, dye testing data, and field investigations to gather the necessary sanitary sewer collection system information to identify and quantify structural deficiencies and develop rehabilitation recommendations and construction contract documents for reducing the occurrence of basement backups and Inflow and Infiltration (I/I) flows in the sanitary sewer collection system. The basin location, project number, and contract number for the project is listed below:

- a. Inflow and Infiltration (I/I) Reduction: Northern Basins Project 2 East, Project/Contract No. 81000918/1586

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 **\$396,000.00**, as follows:

1. **\$191,392.00** for the services performed by Design Professional under this Agreement.
2. For Design Professional services described in the Scope of Services, City shall pay Design Professional compensation amounting to actual salary of personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and 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 **\$168,603.00**. 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 **\$36,005.00** for Optional Services not yet authorized by the City that may be required throughout the course of work. This allowance amount will not be utilized by Design Professional unless specifically authorized in writing by the City to perform Optional Services. Optional Services will not be performed, nor is the Design Professional approved to utilize any allowance monies unless the City provides written authorization to Design Professional that includes the scope of work for each optional task to be performed and a maximum billing limit for compensation that has been mutually agreed upon.
5. Compensation for all Optional Services will be based on the actual salary of office personnel for time charges directly to the project, times an approved multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and

schedule of position classifications and the salary range for each position is included as a part of **Attachment C**. The amount billed for each Optional Service shall not exceed the amount established for it without further written authorization. Additional amounts for Optional Services may be authorized, if deemed by City to be necessary, as the work progresses. 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, and
2. No request for payment will be processed unless the request is in proper form, correctly computed, accompanied by a monthly status report, Non-Construction Application for Payment and is approved as payable under Agreement. City is not liable for any obligation incurred by Design Professional except as approved under the provisions of this Agreement.
3. No request for payment will be processed unless it is accompanied by a copy of the most recent 00485.01 M/WBE Monthly Utilization Report submitted to the City's Human Relations Department.

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

City:

Water Services Department
D. Matt Bond, P.E.
Deputy Director
4800 E. 63rd Street
Kansas City, MO 64130
Phone: (816) 513-0168
Facsimile: (816) 513-0543
E-mail address: matt.bond@kcmo.org

Design Professional:

Environmental Advisors and Engineers, Inc.
Jill R. Biesma
19211 W. 64th Terrace
Shawnee, KS 66218
Phone: 913-559-4326
E-mail address: jbiesma@eaei.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

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 – Employee Eligibility Verification Affidavit

Attachment G – Truth-In-Negotiation Certificate

Attachment H – 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 I – Non-Construction Subcontractors Listing

Attachment J – Non-Construction Application for Payment

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 I**.

Sec. 11. Subcontractor Participation Reporting. Design Professional shall report all subcontractor participation on the City’s Human Relations Department’s B2G system. The Design Professional shall also report self-performance of the work in the City’s Human Relations Department’s B2G system. This report shall be submitted monthly.

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.

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 G** 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

Design Professional: Environmental Advisors and Engineers, Inc.

Owner: City of Kansas City, Missouri

Project: Inflow and Infiltration (I/I) Reduction: Northern Basins Project 2 East

City Contract No: 1586

City Project No: 81000918

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 (DP) to facilitate of rehabilitation recommendations for reducing inflow and infiltration (I/I) flows into the sanitary sewer system in the North Basin Project Area 2, Kansas City, Missouri.

- A. The Project. The Water Services Department (WSD) of the City of Kansas City (CITY), Missouri, intends to reduce I/I flows in the sanitary sewer system by implementing rehabilitation recommendations in the Northern Basin Project Area 2 East, which is located in Kansas City, Missouri. As such, the CITY is contracting with DP 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 as mandated by the Federal Consent Decree to prepare preliminary and construction contract documents for the Northern Basin Project Area 2 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:
 - 1. *Northern Basin 2 East: 563 manholes and 133,994 linear feet of sewer mains*
- D. Follow-On Phases. At the discretion of the CITY, the DESIGN PROFESSIONAL may be requested to provide construction phase services for the project.
- 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 areas. This

Scope of Services includes review of closed circuit television (CCTV) inspection and manhole inspection data collected by CITY for the project area and smoke and dyed water testing of the public sanitary sewers 8-inches to 24-inches in the project areas. 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 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 and Dyed Water Testing
5. Task Series 500 - Field data evaluations and rehabilitation recommendations
6. Task Series 600 - Develop construction contract drawings and limited specifications for sewer system rehabilitation
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 NTP 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. Task Series 700, 800 and 900 will be completed within 90 days of the completion of Task Series 200 through 600 or of the CITY's advertisement to Bid, whichever is later.
- 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

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 Microsoft Project.

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

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 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 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).
2. Schedule shall be submitted in an Aconex workflow, on a monthly basis, one week prior to invoicing for approval. DP shall include the approved schedule with the monthly invoice submittal.
3. If the schedule falls behind contractual dates, DP shall propose a recovery schedule and plan for approval.

Task 103 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 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. Five (5) EAE team members will attend this meeting.

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. A schedule of monthly cost progression shall also be provided in the form of an S-curve or other format indicating 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 2 printed copies of the final Work Plan and a single electronic PDF file within 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

Participate in up to eighteen (18) 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 at least 3 days prior to each meeting and prepare/distribute meeting minutes no more than 2 days following the meeting.

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. 1704 properties are estimated within the area. An additional five (5) percent smoke testing notifications will be printed for a total of 1790. 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 City will be responsible for drafting the door hanger. 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

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.

Assist the City in identifying up to 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 (or latest), Flow Metering and Data Analysis Protocol (FMDA) for a maximum of four (4) flow meters. 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 groundwater infiltration
4. Determination of rainfall derived inflow and infiltration
5. Determination of Peak System Flow Rates vs. System Capacity

6. Preparation of Volumetric and Statistical Analyses

All flow meter data will be provided by the City per the protocol and will include weekly maintenance checks and calibrations and related deliverables from the flow monitoring consultant.

Task 302 Submit Flow and Rainfall Monitoring Data Analysis Report

Submit the following for CITY review:

1. One (1) black & white printed copy and one 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. One (1) color printed copy and one 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 AND DYED WATER TESTING

Task 401 Smoke Testing Notification

Daily notification of smoke testing to the 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 October 2018, Smoke Testing Protocol.

Task 402 Smoke Testing

Following receipt of system characterization data from the CITY, perform smoke testing on up to 137,661 linear feet of sewer pipe in the East project area on pipe segments 8-inch up to 24-inch to identify I/I sources from both the public and private sector. Pipe segments >24 inches are estimated to be no more than 7,630 linear feet. This task includes two days of field QA/QC by and senior staff member and associated travel costs. Develop field maps using system data provided by the CITY. Smoke testing shall be completed in accordance with requirements found in the WSD Smoke Testing Protocol, dated October 2018. Suspect inflow sources shall not be allowed to be submitted on inspection forms or in the database. All potential inflow sources identified during field activities shall be investigated at the time they are initially found to confirm whether or not the source exists. No private property building inspections shall be performed. Confirmation of repair solutions must be reviewed and confirmed during design. Payment for smoke testing shall be based on the estimated linear feet of pipe listed above 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 no 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 WSD 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. It is assumed that dyed water testing will be performed concurrently with smoke testing. 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

Summarize I/I sources identified from smoke and dye testing. A running summary of identified I/I sources during the course of the project shall be kept for progress meeting review.

Task 405 Deliverables

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 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 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 estimated 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. Northern Basin 2 East: 571 manholes and 60,000 linear feet of sewer mains.

It has been assumed that initial CCTV inspection QR ratings for remaining pipe will be low enough that detailed CCTV review and I/I quantification will be unnecessary.

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. 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 10 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 I/I Quantification Workshop

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. Five (5) EAE team members will attend the I/I Quantification Workshop. 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 10 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 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

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

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. Three (3) EAE team members will attend the Preliminary Design Workshop. 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 10 days of the workshop.

Task 506 Finalize Assets Recommended for Repair

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

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

Prepare a draft report of the findings from the field data review, 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. I/I Quantification
5. Preliminary Rehabilitation Analysis
6. Recommended Improvements
7. Estimated 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 one (1) black & white printed copies and one PDF file of the Draft Preliminary Design Report. One (1) black & white printed copy will be prepared for the DESIGN PROFESSIONAL.

Task 509 Final Preliminary Design Report

Incorporate draft review comments into the Final Preliminary Design Report. Submit to the CITY one (1) printed color copies and one PDF file of the Final Preliminary Design Report within 30 days of receiving review comments from the CITY.

TASK SERIES 600 - DEVELOP CONSTRUCTION CONTRACT DRAWINGS AND LIMITED SPECIFICATIONS FOR SEWER SYSTEM REHABILITATION

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. Drawings will be prepared in GIS. The drawing plan scale may be reduced to 200-scale for "D" size drawings (22X34) to minimize the number of drawing sheets.

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 ACE 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. Research for identifying easement limits is not included in the basic scope of services and will be performed as an Optional Service once the lines recommended for rehabilitation have been determined.

Task 602 Submit 60% Construction Contract Documents

Submit two hard copies and a PDF of 60% design documents for review by CITY. Drawings will be "B" size (11X17) and in black & white. Three (3) additional hard copies will be prepared for the DESIGN PROFESSIONAL. Conduct a two-hour review meeting with the City to discuss review comments and changes to the 60% design documents. Three (3) EAE team members will attend the meeting. Incorporate review comments into the 90% Construction Contract Documents as necessary.

Task 603 Plan in Hand Walk Through

Within 30 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. Three (3) EAE team

members will attend the Plan in Hand Walk Through. DESIGN PROFESIONAL shall document all special conditions, take photographs, and propose solutions and specifications for the CITY to review. Submit two 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. CITY shall submit the Project Manual to DESIGN PROFESSIONAL for review and comment.

Task 605 Submit Opinion of Probable Construction Cost

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 ACE 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

Submit the following for City review:

1. One (1) printed and bound set of black & white "D" size (22X34) 90% plans, maps, and schedules.
2. One (1) printed and bound sets of 90% technical specifications.
3. One (1) 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. Three (3) EAE team members will attend the 90% review meeting. One (1) additional hard copy of all documents will be prepared for the DESIGN PROFESSIONAL. Incorporate review comments into the final Construction Contract Documents as necessary.

Task 607 Final Construction Contract Documents

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

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

Submit the following final deliverables:

1. Drawings, Maps, and Schedules: 1 copy; "D" size and sealed by a registered professional engineer licensed in the State of Missouri. One (1) copy will be prepared for the DESIGN PROFESSIONAL.
2. Electronic Contract Drawings: 1 copy; Per **Attachment B** and GIS files compatible with KC Water's GIS.
3. Electronic Contract Specifications: 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 10.4 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 have been completed and will be provided by the City. CCTV inspections provided by the CITY in the first deliverable will not contain all sewers in the project area. Throughout the course of design and CCTV, the CITY will continue to identify sewers. Additional sewers may be identified in the 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 5-10% of the total sewers will be delivered in a second inspection package. This does not affect the linear feet of pipe assumed under Tasks 402 and 501.

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

Prepare and present a 2-hour pre-bid meeting, respond to questions regarding interpretation of contract drawings, specifications and technical issues, issue addenda, evaluate bids, and make recommendation of award. Three (3) EAE team members will attend the Pre-Bid Conference. Project advertisement will have a duration of approximately 30 days.

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

Task 902 Submit Engineer's Opinion of Probable Construction Cost

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 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 one package.

Optional services are assumed to represent 10 percent of the estimated total project cost.

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, 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 Data and System Characterized GIS shall be delivered to DESIGN PROFESSIONAL within 30 calendar days of NTP.
- C. CCTV data shall be delivered to DESIGN PROFESSIONAL by June 1, 2020.
- D. Flow metering data shall be delivered to DESIGN PROFESSIONAL for two flow metering seasons as follows:
 - a. Spring/Fall 2019 Flow Data – within 30 calendar days of NTP
 - b. Spring 2020 Flow Data – by August 31, 2020
- E. CITY's Project Manager will coordinate meetings between City staff and the DESIGN PROFESSIONAL.
- F. Bidding Services. CITY will provide the following bidding phase services:
 1. Prepare Bid Tabulation. Provide copies of bids to DESIGN PROFESSIONAL for evaluation.
 2. The CITY will reproduce and submit Construction Contract Documents and construction permit application to MDNR for approval.

(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.

B. General Requirements

1. Professional Services Consultant/Contractor and its Sub-Consultant/Contractor(s) shall provide at a minimum, the following to its staff:
 - a. **Computer:** Minimum Intel Pentium® 4 Processor 2.4 GHz or equivalent processor with 512MB of RAM; recommended Centrino Duo® Processors 1.6 GHz or equivalent with 2GB of RAM, or higher.
 - b. **Computer Operation System:** Windows XP, Windows Vista, or Windows 7
 - c. **Web Browser:** Microsoft Internet Explorer 9
 - d. **Work and Spreadsheet Processors:** Microsoft Office Word, Excel and Outlook
 - e. **Scheduling Software:** Microsoft Project or Primavera
 - f. **Internet Service Provider:** A reliable ISP in the area of the Project
 - g. **Connection Speed/Minimum Bandwidth:** DSL, ADSL or T1 Line for transferring a minimum of **3 Mbps Downstream and 512 Kbps Upstream**

C. Contract Information Management System - Project Web Requirements

1. The City will utilize a web based contract information management system/project management tool in the administration of this Contract. This web based application

database is a collaboration tool selected and provided by City, which will allow all project team members continuous access through the Internet to important contract/project data as well as up to the minute decision and approval status information.

2. Design Professional shall provide and shall require its sub-consultants to provide its management personnel assigned to this Contract with access to personal computers and the Internet on a daily basis same.
3. Design Professional shall conduct Project controls, outlined by the City utilizing the web based application database selected and provided by City. **This designated web based application database will be provided by the** Design Professional to its sub-consultants. No additional software will be required. City will assist Design Professional in providing training of sub-Consultant's personnel.
4. Design Professional shall have and shall require its sub-consultants the responsibility for visiting the Project web site on a daily basis, and as necessary to be kept fully appraised of Contract/Project developments, for correspondence, assigned tasks and other matters that transpire on the site and .
 - a. These may include but are not limited to: Contracts, Contract Exhibits, Contract Amendments, Drawing Issuances, Addenda, Bulletins, Permits, Insurance & Bonds, Safety Program Procedures, Safety Notices, Accident Reports, Personnel Injury Reports, Schedules, Site Logistics, Progress Reports, Daily Logs, Non-Conformance Notices, Quality Control Notices, Punch Lists, Meeting Minutes, Requests for Information, Submittal Packages, Substitution Requests, Monthly Payment Request Applications, Supplemental Instructions, Owner Variation Directives, Potential Variation Orders, Variation Order Requests, Variation Orders, and the like.
 - b. All supporting data including but not limited to shop drawings, product data sheets, manufacturer data sheets and instructions, method statements, safety MSDS sheets, Substitution Requests and required documentation will be submitted in digital format via the web based application database selected and provided by City.

D. Electronic File Requirements – Closeout

1. All documents (including as-built drawings) shall be converted or scanned into the Adobe Acrobat (.PDF) file format and uploaded to the web based application database selected and provided by City.
2. In addition to the standard closeout submittal requirements detailed elsewhere in the Contract Documents, the Prime Design Professional/Consultant and Sub-Consultants shall also submit all closeout documents including but not limited to all “As-Built Drawings”, catalog cuts and Owner's Operation and Maintenance manuals in digital format.

E. Project Management Communications - Construction

1. The Contractor shall use the Internet web based contract information management system/project management communications tool selected and provided by City, and protocols included in that software during the term of this Contract. The use of project management communications as herein described does not replace or change any contractual responsibilities of the participants.

2. The project communications database is on-line and fully functional. User registration, electronic and computer equipment, and Internet connections are the responsibility of each project participant. The sharing of user accounts is prohibited.
3. Training: City's software service provider will provide a group training sessions scheduled by City, the cost of which is included in the initial users fee. Users are required to attend the scheduled training sessions they are assigned. Requests for specific scheduled classes will be on a first come first served basis for available spaces. Companies may also obtain group training from City's software service provider at their own expense
4. Support: City's software service provider will provide on-going support through on-line help files.
5. Project Archive: The archive shall be available to each team member at a nominal cost. The archive set will contain only documents that the firm has security access to during construction. All legal rights in any discovery process are retained. Archive material shall be ordered from City's software service provider.
6. Copyrights and Ownership: Nothing in this specification or the subsequent communications supersedes the parties' obligations and rights for copyright or document ownership as established by the Contract Documents. The use of CAD files, processes or design information distributed in this system is intended only for the project specified herein.
7. Purpose: The intent of using a project management communication tool is to improve project work efforts by promoting timely initial communications and responses. Secondly, to reduce the number of paper documents while providing improved record keeping by creation of electronic document files.
8. Authorized Users: Access to the web site will be by individuals who are licensed users.
 - a. Individuals may use the User Application included in these specifications or may request the User Application.
 - b. Authorized users will be contacted directly by the web site provider, who will assign the temporary user password.
 - c. Individuals shall be responsible for the proper use of their passwords and access to data as agents of the company in which they are employed.
9. Administrative Users: Administrative users have access and control of user licenses and all posted items. **DO NOT POST PRIVATE OR YOUR COMPANY CONFIDENTIAL ITEMS IN THE DATABASE!** Improper or abusive language toward any party or repeated posting of items intended to deceive or disrupt the work of the project will not be tolerated and will result in deletion of the offensive items and revocation of user license at the sole discretion of the Administrative User(s).

ATTACHMENT C

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

EAE Engineering Fee Estimate

Tasks ID	Description	Principle-in-Charge	Project Manager	Sr. Engineer	Proj. Engr.	Engr. Tech	Engr. Tech	Project Admin.	Field Manager	EAE Total	Expenses	Sub-Consultant Labor & Exp	Total
100	Project Management and Administration												
101	Project Management Services									\$ -		\$ -	\$ -
102	Monthly Invoicing and Status Reports	4	18			32		18		\$ 7,970.00		\$ 6,048.00	\$ 14,018.00
103	Subconsultant Agreements and Administration	8	8							\$ 2,552.00		\$ -	\$ 2,552.00
104	Quality Control									\$ -		\$ 20,000.00	\$ 20,000.00
105	Project Kickoff Meeting	2	8		2	8				\$ 2,664.00		\$ 924.00	\$ 3,588.00
106	Work Plan		24		4				4	\$ 4,888.00		\$ 924.00	\$ 5,812.00
107	Monthly Progress Meetings		36			48				\$ 10,476.00		\$ 3,024.00	\$ 13,500.00
	SUB-TOTALS (Labor Hours)	14	94	0	6	88	0	18	4	224			
	SUB-TOTALS	\$ 2,296.00	\$ 14,570.00	\$ -	\$ 840.00	\$ 8,976.00	\$ -	\$ 1,260.00	\$ 608.00	\$ 28,550.00	\$ -	\$ 30,920.00	\$ 59,470.00
200	Public Involvement and Coordination												
201	Smoke Test Notifications and Hangers							4		\$ 280.00	\$ 806.00	\$ -	\$ 1,086.00
202	Communication with Property Owners		2			12		24		\$ 3,214.00		\$ -	\$ 3,214.00
	SUB-TOTALS (Labor Hours)	0	2	0	0	12	0	28	0	42			
	SUB-TOTALS	\$ -	\$ 310.00	\$ -	\$ -	\$ 1,224.00	\$ -	\$ 1,960.00	\$ -	\$ 3,494.00	\$ 806.00	\$ -	\$ 4,300.00
300	Flow and Rainfall Data Analyses												
301	Review and Analyze Data		4	24	28					\$ 8,116.00		\$ 600.00	\$ 8,716.00
302	Submit Flow and Rainfall Report	2	4	30	30					\$ 9,618.00	\$ 44.00	\$ 600.00	\$ 10,262.00
	SUB-TOTALS (Labor Hours)	2	8	54	58	0	0	0	0	122			
	SUB-TOTALS	\$ 328.00	\$ 1,240.00	\$ 8,046.00	\$ 8,120.00	\$ -	\$ -	\$ -	\$ -	\$ 17,734.00	\$ 44.00	\$ 1,200.00	\$ 18,978.00
400	Smoke and Dyed Water Testing												
401	Smoke Testing Notification						36	36		\$ 6,300.00	\$ 621.00	\$ -	\$ 6,921.00
402	Smoke Testing									\$ -	\$ 28,737.07	\$ 57,803.73	\$ 86,540.80
403	Dyed Water Testing									\$ -	\$ 1,360.00	\$ 2,640.00	\$ 4,000.00
404	Dyed Water Testing Defect Summary		4						8	\$ 1,836.00		\$ 924.00	\$ 2,760.00
405	Deliverables	2	4			8	32	4	4	\$ 6,012.00		\$ 2,592.00	\$ 8,604.00
	SUB-TOTALS (Labor Hours)	2	8	0	0	8	68	40	12	138			
	SUB-TOTALS	\$ 328.00	\$ 1,240.00	\$ -	\$ -	\$ 816.00	\$ 7,140.00	\$ 2,800.00	\$ 1,824.00	\$ 14,148.00	\$ 30,718.07	\$ 63,959.73	\$ 108,825.80

EAE Engineering Fee Estimate

Tasks ID	Description	Principle-in-Charge	Project Manager	Sr. Engineer	Proj. Engr.	Engr. Tech	Engr. Tech	Project Admin.	Field Manager	EAE Total	Expenses	Sub-Consultant Labor & Exp	Total
500 Field Data Evaluations and Rehabilitation Recommendations													
501	Field Data Review		16	40		80	40			\$ 20,800.00		\$ 5,280.00	\$ 26,080.00
502	I/I Quantification Workshop		8		8	16				\$ 3,992.00		\$ 600.00	\$ 4,592.00
503	Preliminary Assets Recommended for Repair	4	24			80				\$ 12,536.00		\$ 2,832.00	\$ 15,368.00
504	Private I/I Source Identification		1				8			\$ 995.00		\$ -	\$ 995.00
505	Preliminary Design Workshop		8		4	8				\$ 2,616.00		\$ 600.00	\$ 3,216.00
506	Finalize Assets Recommended for Repair		4		8	32				\$ 5,004.00		\$ 1,200.00	\$ 6,204.00
507	Preliminary Opinion of Probable Cost	2	4							\$ 948.00		\$ 4,920.00	\$ 5,868.00
508	Draft Preliminary Design Report	4	36		8	24				\$ 9,804.00	\$ 45.00	\$ 1,200.00	\$ 11,049.00
509	Final Preliminary Design Report		16			10				\$ 3,500.00	\$ 54.00	\$ 600.00	\$ 4,154.00
SUB-TOTALS (Labor Hours)		10	117	40	28	250	48	0	0	493			
SUB-TOTALS		\$ 1,640.00	\$ 18,135.00	\$ 5,960.00	\$ 3,920.00	\$ 25,500.00	\$ 5,040.00	\$ -	\$ -	\$ 60,195.00	\$ 99.00	\$ 17,232.00	\$ 77,526.00
600 Develop Construction Contract Drawings and Limited Specifications for Sewer System Rehabilitation												\$ -	
601	Develop 60% Construction Contract Documents	2	12	40		64				\$ 14,676.00		\$ 7,600.00	\$ 22,276.00
602	Submit 60% Construction Contract Documents		2			8		8		\$ 1,686.00	\$ 40.00	\$ -	\$ 1,726.00
603	Plan in Hand Walk Through		16			16		4		\$ 4,392.00	\$ 69.00	\$ -	\$ 4,461.00
604	Develop 90% Construction Contract Documents		8	32		40				\$ 10,088.00		\$ 1,800.00	\$ 11,888.00
605	Submit Opinion of Probable Construction Cost	2	4							\$ 948.00		\$ 3,480.00	\$ 4,428.00
606	Submit 90% Construction Contract Documents		8			8		8		\$ 2,616.00	\$ 270.00	\$ -	\$ 2,886.00
607	Final Construction Contract Documents	4	8	32		40		2		\$ 10,884.00	\$ 135.00	\$ 1,800.00	\$ 12,819.00
608	Opinion of Probable Cost									\$ -		\$ 3,480.00	\$ 3,480.00
609	Deliverables		8			8		16		\$ 3,176.00	\$ 390.00	\$ -	\$ 3,566.00
SUB-TOTALS (Labor Hours)		8	66	104	0	184	0	38	0	400			
SUB-TOTALS		\$ 1,312.00	\$ 10,230.00	\$ 15,496.00	\$ -	\$ 18,768.00	\$ -	\$ 2,660.00	\$ -	\$ 48,466.00	\$ 904.00	\$ 18,160.00	\$ 67,530.00
700 Work Tracking Application										\$ -			
SUB-TOTALS (Labor Hours)		0	4	0	0	40	0	0	0	44			
SUB-TOTALS		\$ -	\$ 620.00	\$ -	\$ -	\$ 4,080.00	\$ -	\$ -	\$ -	\$ 4,700.00	\$ -	\$ -	\$ 4,700.00
800 GIS Update										\$ -			
SUB-TOTALS (Labor Hours)		0	0	16	0	16	0	0	0	32			
SUB-TOTALS		\$ -	\$ -	\$ 2,384.00	\$ -	\$ 1,632.00	\$ -	\$ -	\$ -	\$ 4,016.00	\$ -	\$ -	\$ 4,016.00

EAE Engineering Fee Estimate

Tasks ID	Description	Principle-in-Charge	Project Manager	Sr. Engineer	Proj. Engr.	Engr. Tech	Engr. Tech	Project Admin.	Field Manager	EAE Total	Expenses	Sub-Consultant Labor & Exp	Total
900	Bid Phase Services												
901	Pre-bid Conference	2	4			8			8	\$ 2,980.00	\$ -	\$ 600.00	\$ 3,580.00
902	Submit Engineer's Opinion of Probable Construction Cost			1						\$ 149.00		\$ 2,760.00	\$ 2,909.00
903	Bid Assistance and Evaluation	2	8		8	24			12	\$ 6,960.00		\$ 1,200.00	\$ 8,160.00
	SUB-TOTALS (Labor Hours)	4	12	1	8	32	0	0	20	77			
	SUB-TOTALS	\$ 656.00	\$ 1,860.00	\$ 149.00	\$ 1,120.00	\$ 3,264.00	\$ -	\$ -	\$ 3,040.00	\$ 10,089.00	\$ -	\$ 4,560.00	\$ 14,649.00
	TOTAL LABOR HOURS	40	311	215	100	630	116	124	36	1572			
	BILLING RATES	\$ 164.00	\$ 155.00	\$ 149.00	\$ 140.00	\$ 102.00	\$ 105.00	\$ 70.00	\$ 152.00				
	TOTAL COST	\$ 6,560.00	\$ 48,205.00	\$ 32,035.00	\$ 14,000.00	\$ 64,260.00	\$ 12,180.00	\$ 8,680.00	\$ 5,472.00	\$ 191,392.00	\$ 32,571.00	\$ 136,032.00	\$ 359,995.00

Total Design Professional Services = \$ 191,392.00
Total Expenses & Sub-Consultant Costs = \$ 168,603.00
Total Contract Amount = \$ 359,995.00

Optional Services													
	Miscellaneous estimated as 10% of total contract amount.	-	-	-	-	-	-	-	-	-			\$ 36,005.00

KCMO-WSD Northern Basin Area 2 East

2/21/2020

EAE Engineering Fee Estimate: Subcontractor Labor

Tasks ID	Description	QA/QC	QA/QC (Field)	Project Engineer	CADD/GIS	Cost Estimator	Admin	CDM Total	Engineering Tech.	Engineer	SE3 Total	
100	Project Management and Administration											
101	Project Management Services							\$ -			\$ -	\$ -
102	Monthly Invoicing and Status Reports			18			18	\$ 4,590.00	18		\$ 1,458.00	\$ 6,048.00
103	Subconsultant Agreements and Administration							\$ -			\$ -	\$ -
104	Quality Control	56	48	24				\$ 20,000.00			\$ -	\$ 20,000.00
105	Project Kickoff Meeting			4				\$ 600.00	4		\$ 324.00	\$ 924.00
106	Work Plan			4				\$ 600.00	4		\$ 324.00	\$ 924.00
107	Monthly Progress Meetings			18				\$ 2,700.00	4		\$ 324.00	\$ 3,024.00
	SUB-TOTALS (Labor Hours)	56	48	68	0	0	18	190	30	0	30	220
	SUB-TOTALS	\$ 8,960.00	\$ 7,440.00	\$ 10,200.00	\$ -	\$ -	\$ 1,890.00	\$ 28,490.00	\$ 2,430.00	\$ -	\$ 2,430.00	\$ 30,920.00
200	Public Involvement and Coordination											
201	Smoke Test Notifications and Hangers							\$ -			\$ -	\$ -
202	Communication with Property Owners							\$ -			\$ -	\$ -
	SUB-TOTALS (Labor Hours)	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTALS	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
300	Flow and Rainfall Data Analyses											
301	Review and Analyze Data			4				\$ 600.00			\$ -	\$ 600.00
302	Submit Flow and Rainfall Report			4				\$ 600.00			\$ -	\$ 600.00
	SUB-TOTALS (Labor Hours)	0	0	8	0	0	0	8	0	0	0	8
	SUB-TOTALS	\$ -	\$ -	\$ 1,200.00	\$ -	\$ -	\$ -	\$ 1,200.00	\$ -	\$ -	\$ -	\$ 1,200.00
400	Smoke and Dyed Water Testing											
401	Smoke Testing Notification							\$ -			\$ -	\$ -
402	Smoke Testing							\$ -			\$ -	\$ -
403	Dyed Water Testing							\$ -			\$ -	\$ -
404	Dyed Water Testing Defect Summary			4				\$ 600.00	4		\$ 324.00	\$ 924.00
405	Deliverables							\$ -	32		\$ 2,592.00	\$ 2,592.00
	SUB-TOTALS (Labor Hours)	0	0	4	0	0	0	4	36	0	36	40
	SUB-TOTALS	\$ -	\$ -	\$ 600.00	\$ -	\$ -	\$ -	\$ 600.00	\$ 2,916.00	\$ -	\$ 2,916.00	\$ 3,516.00

KCMO-WSD Northern Basin Area 2 East

2/21/2020

EAE Engineering Fee Estimate: Subcontractor Labor

Tasks ID	Description	QA/QC	QA/QC (Field)	Project Engineer	CADD/GIS	Cost Estimator	Admin	CDM Total	Engineering Tech.	Engineer	SE3 Total	
500	Field Data Evaluations and Rehabilitation Recommendations											
	501 Field Data Review			8				\$ 1,200.00		40	\$ 4,080.00	\$ 5,280.00
	502 I/I Quantification Workshop			4				\$ 600.00			\$ -	\$ 600.00
	503 Preliminary Assets Recommended for Repair			8				\$ 1,200.00		16	\$ 1,632.00	\$ 2,832.00
	504 Private I/I Source Identification							\$ -			\$ -	\$ -
	505 Preliminary Design Workshop			4				\$ 600.00			\$ -	\$ 600.00
	506 Finalize Assets Recommended for Repair			8				\$ 1,200.00			\$ -	\$ 1,200.00
	507 Preliminary Opinion of Probable Cost			4		24		\$ 4,920.00			\$ -	\$ 4,920.00
	508 Draft Preliminary Design Report			8				\$ 1,200.00			\$ -	\$ 1,200.00
	509 Final Preliminary Design Report			4				\$ 600.00			\$ -	\$ 600.00
	SUB-TOTALS (Labor Hours)	0	0	48	0	24		72	0	56	56	128
	SUB-TOTALS	\$ -	\$ -	\$ 7,200.00	\$ -	\$ 4,320.00		\$ 11,520.00	\$ -	\$ 5,712.00	\$ 5,712.00	\$ 17,232.00
600	Develop Construction Contract Drawings and Limited Specifications for Sewer System Rehabilitation											
	601 Develop 60% Construction Contract Documents			16	40			\$ 7,600.00			\$ -	\$ 7,600.00
	602 Submit 60% Construction Contract Documents							\$ -			\$ -	\$ -
	603 Plan in Hand Walk Through							\$ -			\$ -	\$ -
	604 Develop 90% Construction Contract Documents			12				\$ 1,800.00			\$ -	\$ 1,800.00
	605 Submit Opinion of Probable Construction Cost			4		16		\$ 3,480.00			\$ -	\$ 3,480.00
	606 Submit 90% Construction Contract Documents							\$ -			\$ -	\$ -
	607 Final Construction Contract Documents			12				\$ 1,800.00			\$ -	\$ 1,800.00
	608 Opinion of Probable Cost			4		16		\$ 3,480.00			\$ -	\$ 3,480.00
	609 Deliverables							\$ -			\$ -	\$ -
	SUB-TOTALS (Labor Hours)	0	0	48	40	32		120	0	0	0	120
	SUB-TOTALS	\$ -	\$ -	\$ 7,200.00	\$ 5,200.00	\$ 5,760.00		\$ 18,160.00	\$ -	\$ -	\$ -	\$ 18,160.00
700	Work Tracking Application											
	SUB-TOTALS (Labor Hours)							0			0	0
	SUB-TOTALS	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -
800	GIS Update											
	SUB-TOTALS (Labor Hours)							0			0	0
	SUB-TOTALS	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -

EAE Engineering Fee Estimate: Subcontractor Labor

Tasks ID	Description	QA/QC	QA/QC (Field)	Project Engineer	CADD/GIS	Cost Estimator	Admin	CDM Total	Engineering Tech.	Engineer	SE3 Total	
900	Bid Phase Services											
901	Pre-bid Conference			4				\$ 600.00			\$ -	\$ 600.00
902	Submit Engineer's Opinion of Probable Construction Cost			4		12		\$ 2,760.00			\$ -	\$ 2,760.00
903	Bid Assistance and Evaluation			8				\$ 1,200.00			\$ -	\$ 1,200.00
	SUB-TOTALS (Labor Hours)	0	0	16	0	12		28	0	0	0	28
	SUB-TOTALS	\$ -	\$ -	\$ 2,400.00	\$ -	\$ 2,160.00		\$ 4,560.00	\$ -	\$ -	\$ -	\$ 4,560.00
	TOTAL LABOR HOURS	56	48	192	40	68	18	422	66	56	122	544
	BILLING RATES	\$ 160.00	\$ 155.00	\$ 150.00	\$ 130.00	\$ 180.00	\$ 105.00		\$ 81.00	\$ 102.00	-	
	TOTAL COST	\$ 8,960.00	\$ 7,440.00	\$ 28,800.00	\$ 5,200.00	\$ 12,240.00	\$ 1,890.00	\$ 64,530.00	\$ 5,346.00	\$ 5,712.00	\$ 11,058.00	\$ 75,588.00

KCMO-WSD Northern Basin Area 2 East
EAE Engineering Fee Estimate: Expenses

Task #	Task Name	Mileage	Reproduction	Testing	CDM Exp	SE3 Exp	Total
200 Public Involvement							
	201 Smoke Test Notifications and Hangers		\$ 806.00				\$ 806.00
300 Field Data Evaluation and Rehabilitation							
	302 Submit Flow and Rainfall Data Analysis Report		\$ 44.00				\$ 44.00
400 Smoke and Dyed Water Testing							
	401 Smoke Testing Notification	\$ 621.00					\$ 621.00
	402 Smoke Testing			\$ 28,737.07	\$ 2,020.00	\$ 55,783.73	\$ 86,540.80
	403 Dyed Water Testing			\$ 1,360.00		\$ 2,640.00	\$ 4,000.00
	sub-total	\$ 621.00	\$ -	\$ 30,097.07	\$ 2,020.00	\$ 58,423.73	\$ 91,161.80
500 Field Data Evaluation and Rehabilitation							
	508 Draft Preliminary Design Report		\$ 45.00				\$ 45.00
	508 Final Preliminary Design Report		\$ 54.00				\$ 54.00
	509 sub-total		\$ 99.00				\$ 99.00
600 Develop Construction Contract Documents							
	602 60% Construction Contract Documents		\$ 40.00				\$ 40.00
	603 Plan in Hand Walk Through	\$ 69.00					\$ 69.00
	606 90% Construction Contract Documents		\$ 270.00				\$ 270.00
	607 Final Construction Contract Documents		\$ 135.00				\$ 135.00
	609 Deliverables		\$ 390.00				\$ 390.00
	sub-total	\$ 69.00	\$ 835.00	\$ -	\$ -	\$ -	\$ 904.00
Grand Total		\$ 690.00	\$ 1,784.00	\$ 30,097.00	\$ 2,020.00	\$ 58,424.00	\$ 93,015.00

KCMO-WSD Northern Basin Area 2 East
EAE Engineering Fee Estimate: Unit Costs

Item	Unit	Unit Cost
Smoke Testing	Linear Foot	\$ 0.65
Dyed Water Testing	Per Public Test	\$ 400.00
Smoke Testing Notification Printing	Per Hanger	\$ 0.45
Black and White Printing*	Per 11X17	\$ 0.40
Color Printing*	Per 11X17	\$ 1.45
Color Printing*	Per "D" size (22X34)	\$ 6.00
Black and White Printing*	Per "D" size (22X34)	\$ 3.00
Black and White Printing*	Per 8X11	\$ 0.15
Color Printing*	Per 8X11	\$ 0.60
Mileage	Per Mile	\$ 0.575
Flight Columbus to Kansas City	Per Round Trip	\$ 600.00
Hotel	Per Night	\$ 130.00
Car and Gas	Per Day	\$ 65.00
Meals	Per Day	\$ 75.00

*Includes binding

Attachment C

Schedule of Position Classifications

**Environmental Advisors and Engineers, Inc. Staff Labor Rates
(Rates are for period from January 1, 2020 through May 31, 2021)**

Labor Categories	Unburdened Hourly Labor Rates
Principals	\$54.00-\$58.00
Quality Control Manager	\$50.00- \$90.00
Project Managers	\$44.53-\$55.00
Senior Engineers	\$41.29-\$60.00
Project Engineers	\$33.31-\$48.50
Senior Architects	\$47.40-\$60.00
Senior Specifications Specialist	\$90.00-\$90.00
Engineering Technicians	\$23.00-\$37.00
Mid Level Scientists	\$28.75-\$41.00
Senior Drafter	\$47.40-58.00
Mid Level Drafter	\$32.19-\$38.00
Public Relations /Client Service Representative	\$18.63-\$37.00
Contract Administrator/Accounting	\$18.00-\$42.00
Administrative Assistant	\$18.93-\$37.00

CDM SMITH

SCHEDULE OF POSITION CLASSIFICATIONS

RAW BILLING RATE SCHEDULE

(Rates are for the period from January 1, 2020 through December 31, 2020)

<u>LABOR CATEGORIES</u>	<u>HOURLY LABOR RATES</u>
<u>PROFESSIONAL SERVICES:</u>	
ENGINEER 1-2	\$21 to \$49
ENGINEER 3-4	\$35 to \$63
ENGINEER 5-6	\$45 to \$75
ENGINEER 7-8	\$51 to \$84
PROJECT MANAGER (PM)	\$60 to \$96
SENIOR PROJECT MANAGER (SPM)	\$63 to \$101
CLIENT SERVICE LEADER (CSL)	\$70 to \$111
QUALITY CONTROL MANAGER	\$65 to \$103
PRINCIPAL IN CHARGE (PIC)	\$70 to \$110
<u>PROFESSIONAL SUPPORT SERVICES:</u>	
DRAFTER 1-2	\$17 to \$34
DRAFTER 3-4	\$23 to \$42
DRAFTER 5-6	\$28 to \$48
DRAFTER 7-8	\$34 to \$54
<u>PROFESSION ADIMINSTRATION:</u>	
ADMINISTRATIVE ASSISTANT	\$18 to \$47
PROJECT ADMINISTRATOR	\$20 to \$50
CONTRACT ADMINISTRATOR	\$23 to \$54



Schedule of Position Classifications

(Rates are for period from January 1, 2020 through May 31, 2021)

Labor Categories	Unburdened Hourly Labor Rates
Principals	\$52.00-\$76.00
Quality Control Manager	\$28.00-\$56.00
Project Managers	\$32.00-\$58.00
Senior Engineers	\$41.00-\$60.00
Project Engineers	\$33.00-\$48.50
Engineering Technicians	\$23.00-\$37.00
Senior Drafter	\$32.00-\$44.00
Drafter	\$22.00-\$38.00
Senior GIS/Data Technician	\$32.00-\$44.00
GIS/Data Technician	\$22.00-\$38.00
Senior Field Technician	\$18.00-\$24.50
Field Technician	\$16.00-\$22.00
Senior Right A Way Agent	\$32.00-\$42.00
Right A Way Agent	\$24.00-\$36.00
Public Relations /Marketing	\$18.00-\$28.00
Administrative Assistant	\$18.00-\$37.00

ATTACHMENT D

UNIT COSTS

KCMO-WSD Northern Basin Area 2 East
EAE Engineering Fee Estimate: Unit Costs

Item	Unit	Unit Cost
Smoke Testing	Linear Foot	\$ 0.65
Dyed Water Testing	Per Public Test	\$ 400.00
Smoke Testing Notification Printing	Per Hanger	\$ 0.45
Black and White Printing*	Per 11X17	\$ 0.40
Color Printing*	Per 11X17	\$ 1.45
Color Printing*	Per "D" size (22X34)	\$ 6.00
Black and White Printing*	Per "D" size (22X34)	\$ 3.00
Black and White Printing*	Per 8X11	\$ 0.15
Color Printing*	Per 8X11	\$ 0.60
Mileage	Per Mile	\$ 0.575
Flight Columbus to Kansas City	Per Round Trip	\$ 600.00
Hotel	Per Night	\$ 130.00
Car and Gas	Per Day	\$ 65.00
Meals	Per Day	\$ 75.00

*Includes binding

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.

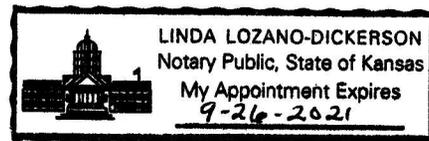
I acknowledge that I am signing this affidavit as the free act and deed of the business entity and that I am not doing so under duress.

Jill R. Brasma
Affiant's signature

Subscribed and sworn to before me this 20th day of April, 2020.

Linda Lozano-Dickerson
Notary Public

My Commission expires: 9-26-2021



ATTACHMENT G

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)

I, Jill R. Biesma, having full authority to act on behalf of Environmental Advisors and Engineers, Inc., 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 Inflow and Infiltration (I/I) Reduction: Northern Basins Project 2 East
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.

Jill R. Biesma
Signature of affiant

On this 20th day of April, 2020 before me, Linda Lozano-Dickerson, a Notary Public in and for said state, personally appeared (Jill R. Biesma), 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.

Linda Lozano-Dickerson

Notary Public

My commission expires: 9-26-2021



Attachment H

**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 JACKSON)

I, Jill R. Biesma, having full authority to act on behalf of Environmental Advisors and Engineers, Inc., do solemnly swear under oath to the following:

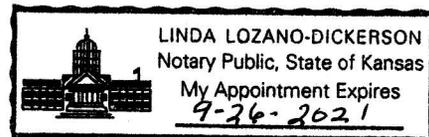
I certify, under penalty of law, that the City has made an electronic copy of this Consent Decree available to this organization at the following web location:
<https://www.kcwaterservices.org/wp-content/uploads/2013/04/Consent-Decree.pdf>. I further certify that the Consent Decree, along with appendices, 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.

Jill R. Biesma
Signature of affiant

On this 20th day of April, 2020 before me, Linda Lozano-Dickerson, a Notary Public in and for said state, personally appeared (Jill R. Biesma), 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.

Linda Lozano-Dickerson
Notary Public

My commission expires: 9-26-2021



ATTACHMENT I

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: CDM Smith Chris Burns Email:burnscl@cdmsmith.com	Address: 9200 Ward Parkway, suite 320 Kansas City, MO 64114 Phone: (816) 412-3172 Fax: NA
2.	Name: SE3 LeRon Fields Email:lfields@se3.us	Address: 8401 E M 350 Highway Kansas City, MO 64133 Phone: 816-272-5545 Fax: NA
3.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
4.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
5.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
6.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
7.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
8.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____
9.	Name: _____ Email: _____	Address: _____ Phone: _____ Fax: _____

Contractor – Company Name: Environmental Advisors and Engineers, Inc.
 Submitted By: Jill R. Biesma
 Title: President
 Telephone No.: (913) 599-4326
 Fax No.: NA
 E-mail: jbiesma@eaei.com
 Date: 04/20/2020

ATTACHMENT J

NON-CONSTRUCTION APPLICATION FOR PAYMENT



**NON-CONSTRUCTION
APPLICATION FOR PAYMENT**

Project Number _____
Contract Number _____
Project Title _____

Final Payment

Application Number: _____ Date: _____
 Ordinance Number: _____ Ordinance Date: _____
 City PO Number: _____

Design Professional/Contractor:

Legal Name: _____
 Mail Address: _____
 City, ST Zip: _____
 Vendor Number: _____
 Application for Work Accomplished: From _____ To: _____
 Name of Kansas City, MO Project Mgr: _____
 Kansas City, MO Contract Administrator: _____

Original Contract Amount	[1]	_____	\$0.00
Net by Amendments ___ through ___	[2]	_____	\$0.00
Optional Services Amount in Contract	[3]	_____	\$0.00
Net by Optional Services Authorizations ___ through ___	[4]	_____	\$0.00
Unauthorized Optional Services Amount Remaining (3-4)	[5]	_____	\$0.00
Maximum Obligation Authorized ((1+2+4) - [3])	[6]	_____	\$0.00
Total Work Completed to Date	[7]	_____	\$0.00
Total Previous Payments	[8]	_____	\$0.00
PAYMENT DUE CONTRACTOR (7-8)	[9]	_____	\$0.00

Instructions to Design Professional/Contractor:

- Complete and sign this Application and attach the following items: A) **documentation** of expenses (direct payroll, direct expenses, and sub-consultants) per contract (ie. services performed; actual salary of personnel for time charges directly to the project; and/or actual reasonable expenses incurred, AND, B) **aphotocopy** of your most recent **00485.01 HRD MWBE Monthly Utilization Report** submitted to Human Relations Dept., if required by contract, AND C) Monthly Progress Report, if required by contract.
- If this is the First application for payment and if Contract amount exceeds \$150,000.00, then also attach proof of tax compliance (**Revenue Clearance Letter**).
- If this is the Final application for payment, then also attach: **01290.14 Contractor Affidavit for Final Payment; 01290.15 Subcontractor Affidavit for Final Payment**, if required by contract; and proof of tax compliance (**Revenue Clearance Letter**).
- Submit current insurance certificate for the following policies General Liability, Automobile, Workers Compensation and Professional Liability upon renewal.

5. Submit Application to: Water Services Department
 Name, Project Manager
 4800 E 63rd St
 Kansas City, MO 64130

Contractor:

Submitted By: _____ Signature: _____ Date: _____
 Phone: _____ Fax: _____ E-mail: _____

Kansas City:

Approved By: _____ Project Manager Date: _____
 Approved By: _____ Director or Designee Date: _____

DESIGN PROFESSIONAL SERVICES

AMENDMENT NO. 1

CONTRACT NO. 1586 PROJECT NO. 81000918

**PROJECT TITLE – INFLOW AND INFILTRATION (I/I) REDUCTION: NORTHERN
BASINS PROJECT 2 EAST**

WATER SERVICES DEPARTMENT

This amendment is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation (City), and Environmental Advisors and Engineers, Inc. (Design Professional). The parties amend the Agreement entered into on May 14, 2020, as follows:

WHEREAS, City has previously entered into a contract dated May 14, 2020 in the amount of \$396,000.00; and

WHEREAS, the City desires to execute Amendment No. 1, in the amount of \$370,000.00, to amend the total contract amount to \$766,000.00; 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 – Engineering Fee Summary and Schedule of Position Classifications, add Attachment C1 – Engineering Fee Summary and Schedule of Position Classifications, 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, Subparagraphs A.1-4 and replace with the following Sec. 4 Compensation and Reimbursables, Subparagraphs A. 1-4:

A. The maximum amount that City shall pay Design Professional under this Agreement is **\$766,000.00**, as follows:

1. **\$560,809.00** for the services performed by Design Professional under this Agreement.

2. For Design Professional services described in the Scope of Services, City shall pay Design Professional compensation amounting to actual salary of personnel for time charges directly to the project, times an Approved Multiplier. The multiplier to be used shall not exceed 3.04. Engineering Fee Summary and Schedule of Position Classifications and the salary range for each position is included as a part of Attachment C. 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 **\$174,965.00**. 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. Subcontractors 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 in Attachment D.

4. Design Professionals' maximum amount shown in Sec. 4, Compensation and Reimbursables, includes a total allowance amount of **\$30,226.00** for Optional Services not yet authorized by the City that may be required throughout the course of work. This allowance amount will not be utilized by Design Professional unless specifically authorized in writing by the City to perform Optional Services. Optional Services will not be performed, nor is the Design Professional approved to utilize any allowance monies unless the City provides written authorization to Design Professional that includes the scope of work for each optional task to be performed and a maximum billing limit for compensation that has been mutually agreed upon.

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

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

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

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

DESIGN PROFESSIONAL

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

Date: _____

By: _____

Title: _____

KANSAS CITY, MISSOURI

Date: _____

By: _____

Name: D. Matt Bond, P.E.

Title: Deputy Director
Water Services Department

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
CONSTRUCTION PHASE SERVICES**

Design Professional: Environmental Advisors and Engineers Inc.
Owner: City of Kansas City, Missouri
Project: Inflow and Infiltration Reduction: Northern Basin Project 2 - West
City Contract No.: 1586
City Project No.: 81000918

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 within the Northern Basins and in the vicinity of the Rocky Branch watershed Missouri 169 and Interstate 435, Kansas City, Clay County, Missouri.

The Project. The Water Services Department (WSD) of the City of Kansas City (CITY), Missouri, intends to rehabilitate sanitary sewers 8-inch to 27-inch in diameter, related manholes and service laterals within the Northern Basins watershed. The project, Inflow and Infiltration (I/I) Reduction: Northern Basins Project 2 comprises two separate projects - Inflow and Infiltration (I/I) Reduction: Northern Basins Project 2 East and Inflow and Infiltration (I/I) Reduction: Northern Basins Project 2 West – located in two separate areas, East and West, and contracted to two separate Design Professionals. The Design Professional for this Scope of Services herein referred to as DESIGN PROFESSIONAL. Inflow and Infiltration (I/I) Reduction: Northern Basins Project 2 East herein referred to as NB2E and Inflow and Infiltration (I/I) Reduction: Northern Basins Project 2 West herein referred to as NB2W.

- A. The DESIGN PROFESSIONAL has developed Construction Contract Documents for Inflow and Infiltration (I/I) Reduction: Northern Basin Project 2 East and under this Amendment No. 1, the CITY is contracting with DESIGN PROFESSIONAL to perform Construction Phase Services for the Inflow and Infiltration (I/I) Reduction: Northern Basins Project 2 East and perform select tasks to support Infiltration (I/I) Reduction: Northern Basins Project 2 West. Select tasks shall be performed in coordination with NB2W. Select tasks for this Scope of Services are herein referred to as SELECT TASKS. SELECT TASKS shall require coordination with Design Professional and or RPR for the NB2W Project Area.

- 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 sub-consultants 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 Inflow and Infiltration (I/I) Reduction: Northern Basins Project 2 East. Under this Amendment No. 2, the City is contracting with DESIGN PROFESSIONAL to provide Bid and Construction Phase Services for Inflow and Infiltration (I/I) Reduction: Northern Basins Project 2 East and perform SELECT TASKS to support Infiltration (I/I) Reduction: Northern Basins Project 2 West. DESIGN PROFESSIONAL is required to coordinate with the Design Professional for NB2W on SELECT TASKS for NB2W Project area.
- D. The CITY is undertaking this Project as mandated by the Federal Consent Decree to prepare construction contract documents for this project as part of the Smart Sewer Program. The project will focus on inflow and infiltration reduction improvements through rehabilitation of public sanitary sewers and manholes and laterals within the project area.

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.

- E. 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
- F. Follow-On Phases. At the discretion of the CITY, the DESIGN PROFESSIONAL may be requested to provide additional services concerning the Project.
- G. 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.
- H. 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.
- I. 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. It is assumed that confined space entry will not be required.
 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 construction. The DESIGN PROFESSIONAL will work directly with the SSP Team throughout the construction of the project.
 8. 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.
- J. 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 for NB2E 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 Design Professional of NB2W Project Area, 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 for both project areas, 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, sub-consultants, 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 420 calendar days after authorization by CITY.
 2. Task Series 1200. DESIGN PROFESSIONAL shall complete Task Series 1200 within 330 calendar days after authorization by CITY.
 3. Task Series 1300 to 1400. DESIGN PROFESSIONAL shall complete Task Series 1300 to 1400 within 330 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 90 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 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. SELECT TASKS are specified herein under this Task Series.

Task 1101 Project Management Services

Task 1101 is not a SELECT TASK. 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. Level of effort is based on fourteen (14) months. Documents generated by EAE will be reviewed by CDM Smith.

Task 1102 Monthly Invoicing

Task 1102 is not a SELECT TASK. DESIGN PROFESSIONAL shall prepare and submit monthly invoices for both project areas 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 shall require coordination with the Design Professional for the NB2W Project Area. Fourteen (14) invoices are assumed.

Task 1103 Monthly Project Status Report

Task 1103 is not a SELECT TASK. 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 brief project status report for both project areas 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, contractual action items required by CITY, potential project scope variances with corrective action, a general assessment of DESIGN PROFESSIONAL's ability to meet project goals and 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. Task shall require coordination with the Design Professional for the NB2W Project Area. Fourteen (14) monthly status reports are assumed.

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. Assumes one internal conference and review of insurance certificate and monthly invoices.

TASK SERIES 1200 - PUBLIC INVOLVEMENT AND COORDINATION

SELECT TASKS are specified herein under this Task Series.

Task 1201 Public Meeting

Task 1201 is a SELECT TASK. DESIGN PROFESSIONAL shall work with CITY to facilitate one public meeting prior to the start of construction. The City shall facilitate and coordinate the Public Meeting. 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 one exhibit on presentation board, two (2) copies D-size Construction Contract Drawings and responding to questions. Task shall require coordination with the Design Professional for the NB2W Project Area. Travel expense is budgeted from EAE Corporate Office to NE Cunningham Drive and N Oak Trafficway. Actual mileage up to 30 miles each way will be charged.

Task 1202 Correspondence and Tracking 311 Cases

Task 1202 is not a SELECT TASK. DESIGN PROFESSIONAL shall respond to 311 cases, if necessary, and will track all 311 cases regarding the entire 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. Eight (8) 311 cases are assumed with a level of effort of one (1) hour of PM time and two (2) hours of administrative time each. Additional time spent by RPR or ARPR is assumed to be captured under Task Series 1400.

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. SELECT TASKS are specified herein under this Task Series.

Task 1301 Review CONTRACTOR's Schedules

Task 1301 is a SELECT TASK.

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 shall require coordination with the Design Professional for the NB2W Project Area. In addition to time for one (1) initial review of schedules of values, monthly payments, shop drawings, and baseline schedule, 11 months of reviews of the monthly schedules are assumed for Design Professional PM. Coordination with NB2W is assumed on 10 (ten) reviews to include both initial and monthly. Time has been budgeted for the RPR for the initial reviews, which will occur prior to field construction.

Task 1302 Meetings, Conferences, and Site Visits

Task 1302 is a SELECT TASK.

1. DESIGN PROFESSIONAL shall facilitate a 2-hour 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. Task shall require coordination with the Design Professional for the NB2W Project Area. Preparation and copying of handouts for the meeting are included.

2. DESIGN PROFESSIONAL shall attend up to 11 one-(1)hour monthly progress meetings at the CONTRACTOR'S field office, 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 site visits for one hour that coincide with monthly progress meetings, one full-day site visit for the Achievement of Full Operation inspection, and one half-day site visit for the final completion inspection.

Level of effort includes travel time for the monthly meetings. Travel expense is budgeted from EAE Corporate Office to NE Cunningham Drive and N Oak Trafficway. Actual mileage up to 30 miles each way will be charged.

Task 1303 Document Management and Work Tracking Application

Task 1303 is not a SELECT TASK. 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. One (1) hour of training for each of five (5) staff members is included for eBuilder training. 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 for eleven (11) months as construction is completed and notify the CITY when work orders may be closed.

Task 1304 Shop Drawings and Data Submittals

Task 1304 is a SELECT TASK. DESIGN PROFESSIONAL shall receive, review, and approve submittals and data submitted by the CONTRACTOR as required by the Construction Contract Documents for each Project Area. 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 40 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. The level of effort assumes forty (40) original submittals and twenty (20) resubmittals and includes review by lead RPR, which may occur before field construction. Additional submittals may be reviewed by DESIGN PROFESSIONAL as an Optional Service. Coordination with NB2W was assumed for ten (10) submittals.

Task shall require coordination with the Design Professional and RPR for the NB2W Project Area.

Task 1305 Payment Requisitions

Task 1305 is a SELECT TASK. DESIGN PROFESSIONAL, after initial review and recommendation by RPR, shall review the Application for Payment (up to 11) 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 shall require coordination with the Design Professional and RPR for the NB2W Project Area. Coordination with NB2W was assumed on all the payment requisitions. Review of one (1) draft and one (1) final application is assumed.

Task 1306 Interpretations of Contract Documents

Task 1306 is not a SELECT TASK. DESIGN PROFESSIONAL shall issue with reasonable promptness up to four (4) 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

Task 1307 is a SELECT TASK. 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.

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 4 claims, allowance authorizations, change orders, or 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 shall require coordination with the Design Professional for the NB2W Project Area. Level of effort includes consultation with lead RPR on all claims. RPR time is budgeted under Task 1403.

Task 1308 Post-Rehabilitation Submittal Reviews

Task 1308 is not a SELECT TASK.

1. DESIGN PROFESSIONAL shall review up to 20,000 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 Northern Basins 2 East 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 20,000 linear feet in the Northern Basins Area 2 East 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

Task 1309, Sub Task 3 is a SELECT TASK.

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. Sub Task shall require coordination with the Design Professional for the NB2W Project Area.

This task includes preparation of statements and reviews required under items 1-3 above. It is assumed that this task involves compilation of existing documents. Associated site visits are budgeted under Task 1302.

TASK SERIES 1400 - RESIDENT PROJECT REPRESENTATIVE SERVICES

DESIGN PROFESSIONAL shall provide a Resident Project Representative (RPR) for NB2E Project Area to provide field observation services. The duration of RPR services is based on an 8-month period to Achievement of Full Operation and a 90-day closeout period for the project. 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 on Northern Basin 2 East: To establish the basis for DESIGN PROFESSIONAL's compensation for resident inspection, the RPR's effort for Task Series 1400 is limited to 1380 hours. Travel time up to an hour to and from the site and undefined travel within the site is included in this RPR level of effort.
1. RPR Level of Effort is based on 26 weeks at an average of 45 hours per week and 9 weeks at an average of 21 hours per week. Lead RPR Level of Effort is assumed to be approximately 16 percent of the total hours. 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. Review of 11 monthly schedules, with a second review of 6 schedules is assumed.

Task 1402 Preconstruction Conference, Meetings, and Field Conferences

DESIGN PROFESSIONAL and RPR shall attend the two-hour preconstruction conference and up to 8 - (1-) hour monthly progress meetings and up to 2 other one- (1) hour 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. RPR shall also meet for one (1) hour monthly for 11 months with RPR from NB2W to review CONTRACTOR'S Schedule and Pay Application. 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. The RPR is assumed to already be on-site for the monthly project and RPR meetings.

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 methods, 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.
8. Review claims and support DP and City PM in preparing Allowance Authorizations and Change Requests.

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.

All RPR travel expense is budgeted under this task and is based on travel from EAE Corporate Office to NE Cunningham Drive and N Oak Trafficway for 150 days at the site. Actual mileage up to 30 miles each way will be charged.

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 11 applications for payment (draft and final) 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

SELECT TASKS are specified herein under this Task Series.

Task 1501 Construction Records Drawings

Task 1501 is not a SELECT TASK. 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 NB2E Project Area 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 NB2E Project Area GIS and CAD files, and a PDF of NB2E Project Area full size drawings. One revision of the documents is assumed in response to comments.

Task 1502 Furnish CONTRACTOR'S Completion Documents

Task 1502 is a SELECT TASK.

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 for each project area 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. For each project area, 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 shall require coordination with the Design Professional for the NB2W Project Area. All documents will be provided electronically through the CITY's web-based document management system (eBuilder) for managing, tracking and storing documents associated with the project. Expenses based on scanning up to 500 8X11 pages.

Task 1503 Project Closeout Documentation

Task 1503 is a SELECT TASK. 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 shall require coordination with the Design Professional for the NB2W Project Area. All documents will be provided electronically through the CITY's web-based document management system (eBuilder) for managing, tracking and storing documents associated with the project.

Task 1504 Update GIS

Task 1504 is not a SELECT TASK. The DESIGN PROFESSIONAL shall prepare and provide an updated ArcGIS geodatabase that follows the geodatabase update protocol provided by the CITY for NB2E Project Area. 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)

Attachment C1

KCMO-WSD Northern Basin Area 2 East

EAE Engineering Fee Estimate

Tasks ID	Description	Principal-in-Charge	Project Manager	Sr. Engineer	Lead RPR	ARPR	Engr. Tech	Project Admin.	Project Admin.	EAE Total	Expenses	Sub-Consultant Labor & Exp	Total
1100 Project Management and Administration													
1101	Project Management Services	7	56							\$ 10,640.00		\$ 2,960.00	\$ 13,600.00
1102	Monthly Invoicing	7	28					28		\$ 9,184.00		\$ 2,950.00	\$ 12,134.00
1103	Monthly Project Status Report	7	28							\$ 5,936.00			\$ 5,936.00
1104	Subconsultant Agreements and Administration	8	14					7		\$ 4,572.00		\$ 740.00	\$ 5,312.00
SUB-TOTALS (Labor Hours)		29	126	0	0	0	0	35	0	190			
SUB-TOTALS		\$ 5,104.00	\$ 21,168.00	\$ -	\$ -	\$ -	\$ -	\$ 4,060.00	\$ -	\$ 30,332.00	\$ -	\$ 6,650.00	\$ 36,982.00
1200 Public Involvement and Coordination													
1201	Public Meeting	2	6		3		16			\$ 3,743.00	\$ 370.20	\$ -	\$ 4,113.20
1202	Correspondence and Tracking of 311 Cases		8					16		\$ 3,200.00		\$ -	\$ 3,200.00
SUB-TOTALS (Labor Hours)		2	14	0	3	0	16	16	0	51			
SUB-TOTALS		\$ 352.00	\$ 2,352.00	\$ -	\$ 495.00	\$ -	\$ 1,888.00	\$ 1,856.00	\$ -	\$ 6,943.00	\$ 370.20	\$ -	\$ 7,313.20
1300 Construction Phase Engineering Services													
1301	Review Contractor's Schedules	4	12		8					\$ 4,040.00		\$ 740.00	\$ 4,780.00
1302	Meetings, Conferences, Site Visits	4	53					4		\$ 10,072.00	\$ 646.40	\$ 2,590.00	\$ 13,308.40
1303	Document Management and Work Tracking Application		12		1	1	67	1		\$ 10,321.00		\$ -	\$ 10,321.00
1304	Shop Drawings and Data Submittals		25		50					\$ 12,450.00		\$ 2,960.00	\$ 15,410.00
1305	Payment Requisitions		16							\$ 2,688.00		\$ -	\$ 2,688.00
1306	Interpretations of Contract Documents		8				24			\$ 4,176.00		\$ 1,110.00	\$ 5,286.00
1307	Assist in Evaluating Claims and Preparation of Allowance Authorizations and Change Order Requests		16							\$ 2,688.00		\$ 1,110.00	\$ 3,798.00
1308	Post-Rehabilitation Submittal Reviews		8				80			\$ 10,784.00		\$ 1,850.00	\$ 12,634.00
1309	Acheivement of Full Operation Review and Final Completion Inspection	4	16				24			\$ 6,224.00		\$ 740.00	\$ 6,964.00
SUB-TOTALS (Labor Hours)		12	166	0	59	1	195	5	0	438			
SUB-TOTALS		\$ 2,112.00	\$ 27,888.00	\$ -	\$ 9,735.00	\$ 118.00	\$ 23,010.00	\$ 580.00	\$ -	\$ 63,443.00	\$ 646.40	\$ 11,100.00	\$ 75,189.40

KCMO-WSD Northern Basin Area 2 East
EAE Engineering Fee Estimate

3/17/2022

Tasks ID	Description	Principal-in-Charge	Project Manager	Sr. Engineer	Lead RPR	ARPR	Engr. Tech	Project Admin.	Project Admin.	EAE Total	Expenses	Sub-Consultant Labor & Exp	Total
1400 Resident Project Representative Services													
1401	Contractor Schedules				17					\$ 2,805.00	\$ -	\$ -	\$ 2,805.00
1402	Preconstruction Conference, Meetings, and Field Conferences				23					\$ 3,795.00	\$ -	\$ -	\$ 3,795.00
1403	Liaison				53	290				\$ 42,965.00		\$ 3,168.00	\$ 46,133.00
1404	Review of Work, Rejection of Defective Work, Inspections, and Tests				70	415				\$ 60,520.00	\$ 4,967.41	\$ 5,280.00	\$ 70,767.41
1405	Records				16	84				\$ 12,552.00	\$ -	\$ 1,056.00	\$ 13,608.00
1406	Reports and Document Review				24	140				\$ 20,480.00	\$ -	\$ 1,056.00	\$ 21,536.00
1407	Payment Requisitions				8	36				\$ 5,568.00	\$ -	\$ -	\$ 5,568.00
1408	Acheivement of Full Operation Review and Final Completion Inspection				14	112				\$ 15,526.00	\$ -	\$ -	\$ 15,526.00
SUB-TOTALS (Labor Hours)		0	0	0	225	1,077	0	0	0	1302			
SUB-TOTALS		\$ -	\$ -	\$ -	\$ 37,125.00	\$ 127,086.00	\$ -	\$ -	\$ -	\$ 164,211.00	\$ 4,967.41	\$ 10,560.00	\$ 179,738.41
1500 Project Closeout													
1501	Construction Record Drawings		8		8		80	32		\$ 15,816.00	\$ 400.00	\$ 1,480.00	\$ 17,696.00
1502	Furnish Contractor's Completion Documents		8		8	32		40		\$ 11,080.00	\$ 250.00	\$ -	\$ 11,330.00
1503	Project Closeout Documentation		8					40		\$ 5,984.00	\$ 160.00	\$ -	\$ 6,144.00
1504	Update GIS				4		40			\$ 5,380.00	\$ -	\$ -	\$ 5,380.00
SUB-TOTALS (Labor Hours)		0	24	0	20	32	120	112	0	308			
SUB-TOTALS		\$ -	\$ 4,032.00	\$ -	\$ 3,300.00	\$ 3,776.00	\$ 14,160.00	\$ 12,992.00	\$ -	\$ 38,260.00	\$ 810.00	\$ 1,480.00	\$ 40,550.00
TOTAL LABOR HOURS		43	330	0	307	1110	331	168	0	2289			
BILLING RATES		\$ 176.00	\$ 168.00	\$ 149.00	\$ 165.00	\$ 118.00	\$ 118.00	\$ 116.00	\$ 152.00				
TOTAL COST		\$ 7,568.00	\$ 55,440.00	\$ -	\$ 50,655.00	\$ 130,980.00	\$ 39,058.00	\$ 19,488.00	\$ -	\$ 303,189.00	\$ 6,795.00	\$ 29,790.00	\$ 339,774.00

Jill Deb Julie, if used Rick Used Clint, but could be Daniel Clint Linda NA

Total Design Professional Services = \$ 303,189.00
Total Expenses & Sub-Consultant Costs = \$ 36,585.00
Total Contract Amount = \$ 339,774.00

Optional Services													
Miscellaneous ~10% of total contract amount.	-	-	-	-	-	-	-	-	-	\$ 30,226.00			

Including Optional Services \$ 370,000.00

KCMO-WSD Northern Basin Area 2 East
EAE Engineering Fee Estimate: Subcontractor Labor

3/17/2022

Tasks ID	Description	QA/QC	ARPR	Project Engineer	CADD/GIS	Cost Estimator	Admin	CDM Total	Engineering Tech.	Expenses	
1100 Project Management and Administration											
1101	Project Management Services	16						\$ 2,960.00		\$ -	\$ 2,960.00
1102	Monthly Invoicing	10					10	\$ 2,950.00		\$ -	\$ 2,950.00
1103	Monthly Project Status Report							\$ -		\$ -	\$ -
1104	Subconsultant Agreements and Administration	4						\$ 740.00		\$ -	\$ 740.00
	SUB-TOTALS (Labor Hours)	30	0	0	0	0	10	40	0	0	40
	SUB-TOTALS	\$ 5,550.00	\$ -	\$ -	\$ -	\$ -	\$ 1,100.00	\$ 6,650.00	\$ -	\$ -	\$ 6,650.00
1200 Public Involvement and Coordination											
1201	Public Meeting							\$ -		\$ -	\$ -
1202	Correspondence and Tracking of 311 Cases							\$ -		\$ -	\$ -
	SUB-TOTALS (Labor Hours)	0	0	0	0	0		0	0	0	0
	SUB-TOTALS	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -
1300 Construction Phase Engineering Services											
1301	Review Contractor's Schedules	4						\$ 740.00		\$ -	\$ 740.00
1302	Meetings, Conferences, Site Visits	14						\$ 2,590.00		\$ -	\$ 2,590.00
1303	Document Management and Work Tracking Application							\$ -		\$ -	\$ -
1304	Shop Drawings and Data Submittals	16						\$ 2,960.00		\$ -	\$ 2,960.00
1305	Payment Requisitions							\$ -		\$ -	\$ -
1306	Interpretations of Contract Documents	6						\$ 1,110.00		\$ -	\$ 1,110.00
1307	Assist in Evaluating Claims and Preparation of Allowance Authorizations and Change Order Requests	6						\$ 1,110.00		\$ -	\$ 1,110.00
1308	Post-Rehabilitation Submittal Reviews	10						\$ 1,850.00		\$ -	\$ 1,850.00
1309	Acheivement of Full Operation Review and Final Completion Inspection	4						\$ 740.00		\$ -	\$ 740.00
	SUB-TOTALS (Labor Hours)	60	0	0	0	0		60	0	0	60
	SUB-TOTALS	\$ 11,100.00	\$ -	\$ -	\$ -	\$ -		\$ 11,100.00	\$ -	\$ -	\$ 11,100.00

EAE Engineering Fee Estimate: Subcontractor Labor

Tasks ID	Description	QA/QC	ARPR	Project Engineer	CADD/GIS	Cost Estimator	Admin	CDM Total	Engineering Tech.	Expenses	
1400 Resident Project Representative Services											
1401	Contractor Schedules							\$ -		\$ -	\$ -
1402	Preconstruction Conference, Meetings, and Field Conferences							\$ -		\$ -	\$ -
1403	Liaison		24					\$ 3,168.00		\$ -	\$ 3,168.00
1404	Review of Work, Rejection of Defective Work, Inspections, and Tests		40					\$ 5,280.00		\$ 305.22	\$ 5,585.22
1405	Records		8					\$ 1,056.00		\$ -	\$ 1,056.00
1406	Reports and Document Review		8					\$ 1,056.00		\$ -	\$ 1,056.00
1407	Payment Requisitions							\$ -		\$ -	\$ -
1408	Acheivement of Full Operation Review and Final Completion Inspection							\$ -		\$ -	\$ -
SUB-TOTALS (Labor Hours)		0	80	0	0	0	0	80	0	0	80
SUB-TOTALS		\$ -	\$ 10,560.00	\$ -	\$ -	\$ -	\$ -	\$ 10,560.00	\$ -	\$ -	\$ 306.00
1500 Project Closeout											
1501	Construction Record Drawings	8						\$ 1,480.00		\$ -	\$ 1,480.00
1502	Furnish Contractor's Completion Documents							\$ -		\$ -	\$ -
1503	Project Closeout Documentation	6						\$ -		\$ -	\$ -
1504	Update GIS							\$ -		\$ -	\$ -
SUB-TOTALS (Labor Hours)		14	0	0	0	0	0	14	0	0	14
SUB-TOTALS		\$ 2,590.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,480.00	\$ -	\$ -	\$ 1,480.00
TOTAL LABOR HOURS		104	80	0	0	0	10	194	0	0	194
BILLING RATES		\$ 185.00	\$ 132.00	\$ 150.00	\$ 130.00	\$ 180.00	\$ 110.00	\$ 81.00	\$ 102.00	-	-
TOTAL COST		\$ 19,240.00	\$ 10,560.00	\$ -	\$ -	\$ -	\$ 1,100.00	\$ 29,790.00	\$ -	\$ -	\$ 306.00

KCMO-WSD Northern Basin Area 2 East
EAE Engineering Fee Estimate: Expenses

Task #	Task Name	Mileage	Reproduction	Poster Board	CDM Exp	SE3 Exp	Total
1200 Public Involvement							
1201	Public Meeting	\$ 70.20	\$ 240.00	\$ 60.00			\$ 370.20
1300 Field Data Evaluation and Rehabilitation							
1302	Meetings	\$ 491.40	\$ 155.00				\$ 646.40
1400 RPR Services							
1404	Review of Work	\$ 5,265.00					\$ 5,265.00
1500 Project Closeout							
1501	Construction Record Drawings		\$ 400.00				\$ 400.00
1502	Furnish Contractor's Completion Documents		\$ 250.00				\$ 250.00
1503	Project Closeout Documentation		\$ 160.00				\$ 160.00
	sub-total			\$ -	\$ -	\$ -	\$ -
Grand Total		\$ 5,827.00	\$ 395.00	\$ 60.00	\$ -	\$ -	\$ 6,282.00

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KCMO-WSD Northern Basin Area 2 East
EAE Engineering Fee Estimate: Unit Costs

Item	Unit	Unit Cost
Black and White Printing*	Per 11X17	\$ 0.40
Color Printing*	Per 11X17	\$ 1.45
Color Printing*	Per "D" size (22X34)	\$ 6.00
Black and White Printing*	Per "D" size (22X34)	\$ 3.00
Black and White Printing*	Per 8X11	\$ 0.15
Color Printing*	Per 8X11	\$ 0.60
Poster Board	Per 24 x 36	\$ 60.00
Scanning	Per "D" size (22X34)	\$ 4.00
Scanning	Per 8X11	\$ 0.50
Mileage	Per Mile	\$ 0.585

*Includes binding

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