AGREEMENT
For
PROFESSIONAL ENGINEERING SERVICES
Between
THE CITY OF COLUMBIA, MISSOURI
And
TREKK DESIGN GROUP, LLC

THIS AGREEMENT by and between the City of Columbia, Missouri (hereinafter called "CITY"), and **TREKK Design Group, LLC** (hereinafter called "ENGINEER"), is entered into on the date of the last signatory noted below (the "Effective Date").

WITNESSETH, that whereas CITY intends to make improvements as described below, hereinafter called the PROJECT, consisting of the following:

Inflow and Infiltration (I/I) Study, Flat Branch C and Flat Branch I

(Description of Project)

NOW, THEREFORE, in consideration of the mutual covenants set out herein the parties agree as follows:

ENGINEER shall serve as CITY's professional engineering contractor in those assignments to which this Agreement applies, and shall give consultation and advice to CITY during the performance of the services. All services shall be performed under the direction of a professional engineer registered in the State of Missouri and qualified in the particular field.

SECTION 1 - AUTHORIZATION OF SERVICES

1.1 ENGINEER shall not undertake to begin any of the services contemplated by this agreement until directed in writing to do so by CITY. CITY may elect to authorize the PROJECT as a whole or in parts.

1.2 Authorized work may include services described hereafter as Basic Services or as Additional Services of ENGINEER.

SECTION 2 - BASIC SERVICES OF ENGINEER

2.1 General

2.1.1 Perform professional engineering services as set forth in Attachment A - "Scope of Basic Services," dated **December 6, 2017** (hereinafter referred to as "Scope of Basic Services").

2.1.2 ENGINEER will designate the following listed individuals as its project team with responsibilities as assigned. ENGINEER shall dedicate whatever additional resources are necessary to accomplish the PROJECT within the specified time frame but will not remove these individuals from the assigned tasks for any reason within the control of ENGINEER without the written approval of CITY.

Name and Title	Assignment
Jeffrey Kaestner, P.E.	**Project Manager**
Kristen Wenzel	**GIS and Data Manager**
Robert Perry	**Lead Field Service Contact**

All of the services required hereunder will be performed by ENGINEER or under its supervision and all personnel engaged in the work shall be fully qualified and authorized or permitted under state and local law to perform such services.

None of the work or services covered by this Agreement shall be subcontracted without the prior written approval of CITY and any work or services so subcontracted shall be subject to the provisions of this Agreement.

2.2 ENGINEER shall furnish such periodic reports as CITY may request pertaining to the work or services undertaken pursuant to this Agreement, the costs and obligations incurred or to be incurred, and any other matters covered by this Agreement.

2.3 ENGINEER shall maintain accounts and records, including personnel, property and financial records, adequate to identify and account for all costs pertaining to the Agreement and any other records as deemed necessary by CITY to assure proper accounting for all project funds. These records must be available to CITY or its authorized representatives, for audit purposes, and must be retained for three (3) years after expiration or completion of this Agreement.

SECTION 3 - ADDITIONAL SERVICES OF ENGINEER

3.1 General

If authorized in writing by CITY, and agreed to in writing by ENGINEER, ENGINEER shall furnish or obtain from others Additional Services of the following types which are not considered normal or customary Basic Services. The scope of Additional Services may include:

3.1.1 Financial Consultation

Consult with CITY's fiscal agents and bond attorneys and provide such engineering data as required for any bond prospectus or other financing requirements.

3.1.2 Property Procurement Assistance

Provide consultation and assistance on property procurement as related to professional engineering services being performed.

3.1.3 Obtaining Services of Others

Provide through subcontract the services or data set forth in Scope of Basic Services.

3.1.4 Preliminary or final engineering design of capital facilities except as specifically identified herein.

3.1.5 Preparation of reports, data, application, etc., in connection with modifications to FEMA floodplain definition and/or mapping.

3.1.6 Extra Services

Services not specifically defined heretofore that may be authorized in writing by CITY.

SECTION 4 - RESPONSIBILITIES OF CITY

4.1 Provide full information as to CITY's requirements for the PROJECT.

4.2 Assist ENGINEER by placing at ENGINEER's disposal available information pertinent to the assignment including previous reports and other data relative thereto, including the items outlined in Scope of Basic Services.

4.3 Guarantee access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform ENGINEER's services under this Agreement.

4.4 Examine all studies, reports, sketches, estimates, Bid Documents, Drawings, proposals and other documents presented by ENGINEER and render in writing decisions pertaining thereto.

4.5 Provide such professional legal, accounting, financial and insurance counseling services as may be required for the PROJECT.

4.6 Designate **Erin Keys, Engineering & Operations Manager**, as CITY's representative with respect to the services to be performed under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define CITY's policies and decisions with respect to materials, equipment, elements and systems to be used in the PROJECT, and other matters pertinent to the services covered by this Agreement. The CITY's designated representative may be changed during the duration of this Agreement by written notice from the City Manager, or City Manager's designee, to ENGINEER.

4.7 Give prompt written notice to ENGINEER whenever CITY observes or otherwise becomes aware of any defect in the PROJECT.

4.8 Furnish approvals and permits from all governmental authorities having jurisdiction over the PROJECT and such approvals and consents from others as may be necessary for completion of the PROJECT.

4.9 Furnish ENGINEER data such as probings and subsurface explorations, with appropriate professional interpretations; property, boundary, easement, right-of-way, topographic and utility surveys; zoning and deed restriction; and other special data or consultations, all of which ENGINEER may rely upon in performing his services under this Agreement.

SECTION 5 - PERIOD OF SERVICE

5.1 This Agreement will become effective upon the first written notice by CITY authorizing services hereunder.

5.2 This Agreement shall be applicable to all work assignments authorized by CITY subsequent to the date of its execution and shall be effective as to all assignments authorized.

5.3 Services shall be started within 10 calendar days of Notice to Proceed and completed within **120** calendar days from the issuance of the Notice to Proceed. CITY shall have the right to establish performance times for individual phases or elements of the PROJECT by delivering a written schedule setting out the performance times to the ENGINEER.

SECTION 6 - PAYMENTS TO ENGINEER

6.1 Amount of Payment

6.1.1 For services performed, CITY shall pay ENGINEER the sum of amounts determined as follows:

6.1.1.1 For time spent by personnel, payment at the hourly rates indicated in the "Schedule of Hourly Labor Billing Rates" (attached). Such rates include overhead and profit. The schedule may be revised annually if the term of this Agreement exceeds one (1) year. To be effective, any revision in the Schedule of Hourly Labor Billing Rates shall be provided by ENGINEER to CITY as least thirty (30) days prior to work performed under this Agreement to which such rates apply.

6.1.1.2 For outside expenses incurred by ENGINEER, such as authorized travel and subsistence, commercial services, and incidental expenses, the cost to ENGINEER.

6.1.1.3 For reproduction, printing, long-distance telephone calls, company vehicle usage, testing apparatus, computer services and computer-assisted drafting (CAD),

amounts will be charged according to the ENGINEER's standard rates in effect at the time service is provided.

6.1.1.4 For professional services rendered by others as subcontractor(s) to ENGINEER such as surveying, real property descriptions, soil borings, subsurface investigations, laboratory testing, field quality control tests, progress photos, or other activities required or requested by CITY, will be billed at the cost to ENGINEER.

6.1.1.5 For time spent by outside individual professional consultants employed by ENGINEER in providing services to CITY, the cost to ENGINEER. Expenses incurred by such outside consultants in service to CITY shall be reimbursable in accordance with 6.1.1.2 above.

6.1.1.6 Total payment for Scope of Basic Services and all other expenses and costs to CITY under this Agreement and described herein **shall not exceed $99,408.00.**

6.2 Payments

6.2.1 ENGINEER shall submit an invoice for services rendered to CITY not more than once every month. Upon receipt of the invoice and progress report, CITY will, as soon as practical, pay ENGINEER for the services rendered, provided CITY does not contest the invoice, to the extent of ninety-five percent (95%) of the uncontested amount earned. Upon completion and acceptance of the final plans by CITY, the five percent (5%) of these services retained by CITY will be paid to ENGINEER.

SECTION 7 - GENERAL CONSIDERATIONS

7.1 Insurance

7.1.1 ENGINEER'S INSURANCE: ENGINEER agrees to maintain, on a primary basis and at its sole expense, at all times during the life of this contract the following insurance coverages, limits, including endorsements described herein. The requirements contained herein, as well as CITY's review or acceptance of insurance maintained by ENGINEER is not intended to and shall not in any manner limit or qualify the liabilities or obligations assumed by ENGINEER under this contract.

Commercial General Liability ENGINEER agrees to maintain Commercial General Liability at a limit of liability not less than **$2,000,000** combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death. Coverage shall not contain any endorsement(s) excluding nor limiting Contractual Liability or Cross Liability. If the contract involves any underground/digging operations, the general liability certificate shall include X, C and U (Explosion, Collapse and Underground) coverage.

Professional Liability ENGINEER agrees to maintain Professional (Errors & Omissions) Liability at a limit of liability not less than **$2,000,000** per claim and **$2,000,000** aggregate. For policies written on a "Claims-Made" basis, ENGINEER agrees to maintain a Retroactive Date prior to or equal to the Effective Date of this contract. In the event the policy is canceled, non- renewed, switched to an Occurrence Form, retroactive date advanced; or any other event triggering the right to purchase a Supplemental Extended Reporting Period (SERP) during the life of this contract, ENGINEER agrees to purchase a SERP with a minimum reporting period not less than two **(2)** years. The requirement to purchase a SERP shall not relieve ENGINEER of the obligation to provide replacement coverage.

Business Automobile Liability ENGINEER agrees to maintain Business Automobile Liability at a limit of liability not less than **$2,000,000** combined single limit for any one occurrence and not less than $150,000 per individual, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the ENGINEER's own automobiles, and trucks; hired automobiles, and trucks; and automobiles both on and off the site of work. Coverage shall include liability for Owned, Non-Owned & Hired automobiles. In the event ENGINEER does not own automobiles, ENGINEER agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy.

Workers' Compensation Insurance & Employers' Liability ENGINEER agrees to take out and maintain during the life of this contract, Employers' Liability and Workers' Compensation Insurance for all of their employees employed at the site of the work, and in case any work is sublet, the ENGINEER shall require the subcontractor similarly to provide Workers' Compensation Insurance for all the latter's employees unless such employees are covered by the protection afforded by the ENGINEER. Workers' Compensation coverages shall meet Missouri statutory limits. Employers' Liability minimum limits shall be $500,000 each employee, $500,000 each accident and $500,000 policy limit. In case any class of employees engaged in hazardous work under this contract is not protected under the Workers' Compensation Statute, the ENGINEER shall provide and shall cause each subcontractor to provide Employers' Liability Insurance for the protection of their employees not otherwise protected.

Excess/Umbrella Liability **The** above liability limits may be satisfied by any combination of primary and excess/umbrella liability policies.

Additional Insured ENGINEER agrees to endorse CITY as an Additional Insured with a CG 2026 Additional Insured – Designated Person or Organization endorsement, or similar endorsement, to the Commercial General Liability. The Additional Insured shall read "City of Columbia."

Waiver of Subrogation ENGINEER agrees by entering into this contract to a Waiver of Subrogation for each required policy herein except professional liability. When required by the insurer, or should a policy condition not permit ENGINEER to enter into an pre-loss agreement to waive subrogation without an endorsement, then ENGINEER agrees to notify the insurer and request the policy be endorsed with a Waiver of Transfer of Rights of Recovery Against Others, or its equivalent. This Waiver of

Subrogation requirement shall not apply to any policy, which includes a condition specifically prohibiting such an endorsement, or voids coverage should ENGINEER enter into such an agreement on a pre-loss basis.

Certificate(s) of Insurance ENGINEER agrees to provide CITY with Certificate(s) of Insurance evidencing that all coverages, limits and endorsements required herein are maintained and in full force and effect. Said Certificate(s) of Insurance shall include a minimum thirty **(30)** day endeavor to notify due to cancellation or non-renewal of coverage. The Certificate(s) of Insurance shall name the City as additional insured in an amount as required in this contract and contain a description of the project or work to be performed.

Right to Revise or Reject CITY reserves the right, but not the obligation, to review and revise any insurance requirement, not limited to limits, coverages and endorsements based on insurance market conditions affecting the availability or affordability of coverage; or changes in the scope of work / specifications affecting the applicability of coverage. Additionally, CITY reserves the right, but not the obligation, to review and reject any insurance policies failing to meet the criteria stated herein or any insurer providing coverage due of its poor financial condition or failure to operating legally.

7.1.2 HOLD HARMLESS AGREEMENT: To the fullest extent not prohibited by law, ENGINEER shall indemnify and hold harmless the City of Columbia, its directors, officers, agents and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any negligent act or failure to act, or willful misconduct, of ENGINEER, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with ENGINEER or a subcontractor for part of the services), of anyone directly or indirectly employed by ENGINEER or by any subcontractor, or of anyone for whose acts ENGINEER or its subcontractor may be liable, in connection with providing these services except as provided in this Agreement. This provision does not, however, require ENGINEER to indemnify, hold harmless or defend the City of Columbia from its own negligence, except as set out herein.

7.2 Professional Responsibility

7.2.1 ENGINEER will exercise reasonable skill, care, and diligence in the performance of its services and will carry out its responsibilities in accordance with customarily accepted good professional engineering practices. If ENGINEER fails to meet the foregoing standard, ENGINEER will perform at its own cost, and without reimbursement from CITY, the professional engineering services necessary to correct errors and omissions which are caused by ENGINEER's failure to comply with above standard, and which are reported to ENGINEER within one year from the completion of ENGINEER's services for the PROJECT.

7.2.2 In addition, ENGINEER will be responsible to CITY for damages caused by its negligent conduct during its activities at the PROJECT site or in the field.

7.2.3 Professional Oversight Indemnification

ENGINEER understands and agrees that CITY has contracted with ENGINEER based upon ENGINEER's representations that ENGINEER is a skilled professional and fully able to provide the services set out in this Agreement. In addition to any other indemnification set out in this Agreement, ENGINEER agrees to defend, indemnify and hold and save harmless CITY from any and all claims, settlements and judgments whatsoever arising out of CITY's alleged negligence in hiring or failing to properly supervise ENGINEER. ENGINEER agrees to provide CITY with Certificate(s) of Insurance evidencing that all coverages, limits and endorsements are maintained and in full force and effect.

7.3 Estimates and Projections

Estimates and projections prepared by ENGINEER relating to construction costs and schedules, operation and maintenance costs, equipment characteristics and performance, and operating results are based on ENGINEER's experience, qualifications and judgment as a design professional. Since ENGINEER has no control over weather, cost and availability of labor, material and equipment, labor productivity, construction contractor's procedures and methods, unavoidable delays, construction contractor's methods of determining prices, economic conditions, competitive bidding or market conditions and other factors affecting such estimates or projections, ENGINEER does not guarantee that actual rates, costs, performance, schedules, etc., will not vary from estimates and projections prepared by ENGINEER.

7.4 On-Site Services

PROJECT site visits by ENGINEER during construction shall not make ENGINEER responsible for construction means, methods, techniques, sequences or procedures; for construction safety precautions or programs; or for any construction contractor(s') failure to perform its work in accordance with the plans and specifications.

7.5 Changes

CITY shall have the right to make changes within the general scope of ENGINEER's services, with an appropriate change in compensation and/or schedule, upon execution of a mutually acceptable amendment or change order signed by an authorized representative of CITY and the President or any Vice President of ENGINEER.

7.6 Suspension of Services

Should CITY fail to fulfill its responsibilities as provided under Section 4 to the extent that ENGINEER is unduly hindered in ENGINEER's services or if CITY fails to make any payment to ENGINEER on account of its services and expenses within ninety (90) days after receipt of ENGINEER's bill therefor, ENGINEER may, after giving seven (7) days' written notice to CITY, suspend services under this Agreement until CITY has satisfied his obligations under this Agreement.

7.7 Termination

Services may be terminated by the CITY at any time and for any reason, and by ENGINEER in the event of substantial failure to perform in accordance with the terms hereof by CITY through no fault of ENGINEER, by ten (10) days' notice. If so terminated, CITY shall pay ENGINEER all uncontested amounts due ENGINEER for all services properly rendered and expenses incurred to the date of receipt of notice of termination.

7.7.1 In the event of CITY's termination of this Agreement pursuant to the above section, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs and reports prepared under this Agreement, shall at the option of CITY become its property.

Further, ENGINEER shall not be relieved of any liability to CITY for any damages sustained by CITY by virtue of any breach of this Agreement by ENGINEER and CITY may withhold any payments due ENGINEER for the purpose of set-off until such time as the exact amount of damages to CITY, if any, is determined.

7.8 Publications

Recognizing the importance of professional development on the part of ENGINEER's employees and the importance of ENGINEER's public relations, ENGINEER may prepare publications, such as technical papers, articles for periodicals, and press releases, pertaining to ENGINEER's services for the PROJECT. Such publications will be provided to CITY in draft form for CITY's advance review. CITY will review such drafts promptly and will provide comments to ENGINEER. CITY may require deletion of proprietary data or confidential information from such publications but otherwise will not unreasonably withhold its approval. The cost of ENGINEER's activities pertaining to any such publication shall be paid entirely by ENGINEER.

7.9 Nondiscrimination

During the performance of this Agreement, ENGINEER agrees to the following:

7.9.1 ENGINEER shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation or gender identity. ENGINEER shall take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation or gender identity. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. ENGINEER agrees to post notices in conspicuous places, available to employees and applicants for employment.

7.9.2 ENGINEER shall, in all solicitation or advertisements for employees placed by or on behalf of ENGINEER, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin, ancestry, marital status, disability, sexual orientation or gender identity.

7.9.3 ENGINEER shall comply with all provisions of State and Federal Laws governing the regulation of Equal Employment Opportunity including Title VI of the Civil Rights Act of 1964.

7.10 Successor and Assigns

CITY and ENGINEER each binds himself and his successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of such other party, in respect to all covenants of this Agreement; except as above, neither CITY nor ENGINEER shall assign, sublet or transfer his interest in the Agreement without the written consent of the other.

7.11 Rights and Benefits

ENGINEER's services will be performed solely for the benefit of the CITY and not for the benefit of any other persons or entities.

7.12 Compliance with Local Laws

ENGINEER shall comply with all applicable laws, ordinances and codes of the state and city.

7.13 Law; Submission to Jurisdiction Governing

This Agreement shall be governed by, interpreted and enforced in accordance with the laws of the State of Missouri and/or the laws of the United States, as applicable. The venue for all litigation arising out of, or relating to this Agreement, shall be Boone County, Missouri or the United States Western District of Missouri. The parties hereto irrevocably agree to submit to the exclusive jurisdiction of such courts in the State of Missouri and waive any defense of forum non conveniens.

7.14 Employment of Unauthorized Aliens Prohibited

7.14.1 ENGINEER agrees to comply with Missouri State Statute section 285.530 in that they shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.

7.14.2 As a condition for the award of this Agreement, ENGINEER shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. ENGINEER shall also sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services.

7.14.3 ENGINEER shall require each subcontractor to affirmatively state in its contract with ENGINEER that the subcontractor shall not knowingly employ, hire for

employment or continue to employ an unauthorized alien to perform work within the state of Missouri. ENGINEER shall also require each subcontractor to provide ENGINEER with a sworn affidavit under the penalty of perjury attesting to the fact that the subcontractor's employees are lawfully present in the United States.

7.15 No Waiver of Immunities

In no event shall the language of this Agreement constitute or be construed as a waiver or limitation for either party's rights or defenses with regard to each party's applicable sovereign, governmental, or official immunities and protections as provided by federal and state constitutions or laws.

In the event of a conflict between the terms and conditions of this Agreement and any attachment hereto, the terms contained in this Agreement shall prevail and the terms contained in any attachment shall subsequently prevail in the order attached hereto.

7.16 Agreement Documents

This Agreement includes the following exhibits, which are incorporated herein by reference:

Attachment	**Description**
A	Scope of Work
B	Work Authorization Affidavit
C	Hourly Fee Schedule

7.17 Entire Agreement

This Agreement represents the entire and integrated Agreement between ENGINEER and CITY relative to the Scope of Basic Services herein. All previous or contemporaneous agreements, representations, promises and conditions relating to ENGINEER's services described herein are superseded.

[SIGNATURES ON FOLLOWING PAGE]

CITY OF COLUMBIA, MISSOURI

By: _____
Mike Matthes, City Manager

Date: _____

ATTESTED BY:

_____
Sheela Amin, City Clerk

APPROVED AS TO FORM:

_____
Nancy Thompson, City Counselor

CERTIFICATION: I hereby certify that the above expenditure is within the purpose of the appropriation to which it is charged, Account No. **55506315 504990** , and that there is an unencumbered balance to the credit of such appropriation sufficient to pay therefor.

By: _____
Director of Finance

TREKK DESIGN GROUP, LLC

By: _____

Date: 1/25/2018

ATTEST:

By: _____

Name: Trent Robinett

Attachment A
Scope of Work

City of Columbia, Missouri
Inflow & Infiltration (I/I) Study
Flat Branch C and Flat Branch I

December 6, 2017

TREKK Design Group, LLC. (TREKK) will provide the labor and equipment to complete these services for areas in Flat Branch (FB) C and FB I study areas, see attached figures. The City of Columbia (City) requested a scope of work and cost estimate to identify sanitary sewer defects that contribute to wet weather flow. TREKK will collect information on sanitary sewers through manhole inspections, and smoke testing in the study areas.

Manhole inspections will be completed first. This is not the most opportune time of year to complete smoke testing because of soil moisture and temperature. If weather patterns provide acceptable conditions TREKK will communicate an accelerated schedule to smoke test.

Manhole Inspections

Manhole inspections will be completed on all accessible structures in the study area. TREKK proposes a quick score rating based on the scoring criteria developed for the City to complete a survey sample of repaired manhole structures in 2016. TREKK developed a standard field data form to record the assessment score (1 to 5). A photograph from the surface of each manhole will be collected. If significant defects (Score of 5) are observed a photograph of the defect using a pole camera will be collected. TREKK will confirm the pipe configuration on the City sewer map. Information will also be used to improve smoke testing around sensitive areas including medical facilities, schools, and businesses.

All manhole inspections will be from the surface. Major defects in manhole structures that are less than 25 feet in depth will be documented from the surface using cameras. If manholes are greater than 25 feet deep, or are raised above 3 feet high or located on unsafe working surfaces, interior inspections will not be completed. No survey grade rim elevation information will be collected.

There are a total of 721 manhole structures in the study area. TREKK will collect defect photographs and field observations and make these available through a Geo Database file provided to the City.

City Communication

TREKK will communicate with point of contacts, identified by the City, and will send out an email every day that smoke testing activities are being completed – including door hanging areas. TREKK employees will be performing work in streets, parking lots, and lawn areas in residential and commercial areas, including the portion of the downtown business district and University of Missouri Campus. The City will develop and post a general notification on the City website prior to starting work.

TREKK will update previously developed brochures and will have this information available when smoke testing is being performed to provide to residents, if requested. Prior to smoke testing TREKK will hang flyers on doors in the immediate work area. TREKK will attempt to flyer a larger area than will actually be smoke tested to provide notification to residents and business owners. TREKK will communicate schedule and completion progress so the City can review the work area and provide comment or special instructions as required.

Smoke Testing

Smoke testing will be conducted on all sewer segments located within the basin study area. Smoke testing activities will include a minimum of 48 hour advance notice to all businesses and residents via door hangers in areas adjacent to the lines to be smoke tested. TREKK staff will estimate the production rate and attempt to provide notices prior to smoking as mentioned above. The entire basin will not have door hangers provided at the same time. In the event that weather delays progress, TREKK will not place door hangers in areas more than two (2) weeks in advance.

Smoke will be used to identify line and manhole defects in these sewer segments. High rate blowers and liquid smoke will be used to create a constant supply of smoke in the segment to be tested. Field crews will canvass the immediate area near the manhole and adjacent lines and observe perimeter building locations. Observed smoke for defects will be recorded, photographed and field GPS located to create a defect map. Interior building plumbing defects, such as dry p-traps, faulty drains or vents, will not be recorded unless residents notify the field crews of smoke in the building. TREKK staff will communicate with residents and note where they say smoke was observed. Residents are advised to contact the fire department if they can not determine the source of smoke in their home or business. The smoke used has minimal odor and in most cases can be identified as not being the result of a fire. TREKK will not inspect plumbing inside buildings to determine why smoke was entering the building.

Photographic records will be used to supplement and substantiate smoke testing observations. All smoke testing inspections will be recorded on TREKK field forms and provided to the City in a database compatible with ArcView GIS software. The City will use this information to generate rehabilitation plans. TREKK is not being asked to prepare a prioritization of work or make recommendations.

TREKK proposes to utilize a drone and camera combination to assist visual observations of roof drain defects in the business district of FB C. The drone will not be used in residential areas or on the Campus of the University of Missouri. The drone will provide an opportunity to observe smoke from drains without having to access roof areas during the test. The drone will be operated by a trained pilot. Launch and landing sites will be identified and communicated with the City prior to beginning testing in those areas. The drone will be observing roof areas while segments of sewer are smoke tested. All ground surface observations will be made by TREKK staff.

There are approximately 125,622 feet of sanitary line in the study area to be smoke tested. A summary shape file layer will be prepared for the City that will include the smoke test defect location and sewer that the defect is attached to. Defect photographs and field observations will be available through a Geo Database file provided to the City.

Schedule

TREKK will begin this work immediately and will complete, weather permitting, by April 2018. Progress will be updated during the field activities by email to the City. TREKK will utilize Columbia staff when available to complete this work. It will take approximately 14 days of field work to complete the smoke testing – not including the time to create field forms, provide notifications, and post process information. This will require periods of relatively dry weather to create acceptable conditions to smoke. TREKK will also avoid weeks around holidays for field work. Smoke testing during the winter months can be accomplished but wet or frozen soil conditions may require additional time to complete.

Compensation

The estimated fee for completing these task is provided in the attached Cost Estimate. The task are broken down by unit rates. The estimated units are based on information from the City maps. Actual units completed will be invoiced. Where possible TREKK will communicate if additional units will be required before work is completed.

TREKK will self-perform this work utilizing staff from our Columbia, Missouri office as much as possible. Many of the proposed activities are weather dependent and will be completed as environmental conditions favor successful test.

TREKK

Cost Estimate

Project Cost - I&I Study

Flat Branch C and I

Cost Estimate for unit price billing

WORK TASK DESCRIPTION	Unit Costs			
	Units	Quant	Rate	Subtotal
1. Manhole Inspections				
1a. Data collection and condition rate scoring	MH	721	$46	$33,166
2. City Communication				
2a. Update brochures/business district coordination	LS	1	$1,200	$1,200
3. Smoke Testing				
3a. Smoke Testing	LF	125,622	$0.47	$59,042
3b. Drone observations on building tops	day	2	$900	$1,800
4. Project Reporting				
4b. Create Arc GIS deliverable of manhole and smoke results	LS	1	4,200	4,200
PROJECT TOTAL				$99,408

LF = Linear Foot
LS = Lump Sum
MH = Manhole

NOTICE TO VENDORS
Section 285.525 – 285.550 RSMo Effective January 1, 2009

Effective January 1, 2009 and pursuant to RSMo 285.530 (1), No business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.

As a condition for the award of any contract or grant in excess of five thousand dollars by the state or by any political subdivision of the state to a business entity, or for any business entity receiving a state administered or subsidized tax credit, tax abatement, or loan from the state, the business entity shall, by sworn affidavit and provision of
documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Every such business entity shall sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. [RSMO 285.530 (2)]

An employer may enroll and participate in a federal work authorization program and shall verify the employment eligibility of every employee in the employer's hire whose employment commences after the employer enrolls in a federal work authorization program. The employer shall retain a copy of the dated verification report received
from the federal government. Any business entity that participates in such program shall have an affirmative defense that such business entity has not violated subsection 1 of this section. [RSMO 285.530 (4)]

For vendors that are not already enrolled and participating in a federal work authorization program, E-Verify is an example of this type of program. Information regarding E-Verify is available at:
http://www.dhs.gov/xprevprot/programs/gc_1185221678150.shtm.

CITY OF COLUMBIA, MISSOURI
WORK AUTHORIZATION AFFIDAVIT
PURSUANT TO 285.530 RSMo
(FOR ALL CONTRACTS IN EXCESS OF $5,000.00)

County of Jackson)
) ss.
State of Missouri.)

My name is Kimberly Robinett. I am an authorized agent of TREKK Design Group, LLC (Bidder). This business is enrolled and participates in a federal work authorization program for all employees working in connection with services provided to the City of Columbia. This business does not knowingly employ any person who is an unauthorized alien in connection with the services being provided. **Documentation of participation in a federal work authorization program is attached to this affidavit**.

Furthermore, all subcontractors working on this contract shall affirmatively state in writing in their contracts that they are not in violation of Section 285.530.1 RSMo and shall not thereafter be in violation. Alternatively, a subcontractor may submit a sworn affidavit under penalty of perjury that all employees are lawfully present in the United States.

Affiant

Kimberly Robinett
Printed Name

Subscribed and sworn to before me this 25th day of January, 2018

Linda S Dodson
Notary Public

LINDA S. DODSON
Notary Public - Notary Seal
State of Missouri, Jackson County
Commission # 14991560
My Commission Expires Jun 30, 2018

Attachment C

Schedule of Hourly Billing Rates

City of Columbia, Missouri
Inflow & Infiltration (I/I) Study
Flat Branch C and Flat Branch I

*Billing will be per unit rates

DESCRIPTION	UNIT	RATE
Manhole condition scoring	MH	$46.00
Communication coordination	LS	$1,200.00
Smoke testing	LF	$0.47
Building observation	DAY	$900.00
Arc GIS deliverable	LS	$4,200.00