

**CONTRACT FOR
PROFESSIONAL SERVICES**

This contract, made by and between the City of Independence, Missouri (hereinafter called City) and,
Olsson, Inc., a Corporation (hereinafter called consultant).

WITNESSETH:

WHEREAS, City requires Engineering Design services and,
WHEREAS, consultant is prepared to provide said professional services and shall give consultation and
advice to City during the performance of said services;

NOW THEREFORE, City and Consultant in consideration of the mutual covenants contained in this
contract, agree as follows:

ARTICLE 1 – EFFECTIVE DATE

The effective date of this contract shall be _____.

ARTICLE 2 – SERVICES TO BE PERFORMED BY CONSULTANT

Consultant shall perform the services set forth in the documents attached hereto and made a part of
this contract, which include one or more of these documents: Request for Proposals, scope of work,
statement of work, consultant’s proposal, and pricing.

ARTICLE 3 – PERIOD OF SERVICE

The services shall be completed by November 15, 2025.

ARTICLE 4 – COMPENSATION

For services performed, the City shall pay the consultant, an amount not to exceed
\$998,785.

Regular (e.g. monthly) invoices shall be submitted by the consultant to the City for payment of services
performed and expenses incurred during the preceding month. Invoices shall indicate the hours
expended for each individual person, the total labor billing, and a summary of other expenses and
charges with supporting documentation.

The City’s payment terms are Net 30. Payment will be made by the City within thirty (30) days of receipt
of the complete invoice. The City’s preferred method of payment is via City credit card with no added
fees. If credit is not acceptable, payment will be made by check.

The City is exempt from State of Missouri sales and use taxes on purchases made directly for the City.
Consultant shall not include any sales or use taxes on transactions between the consultant and City.

ARTICLE 5 – PERMITS AND LICENSES

The consultant shall procure all necessary local construction permits and licenses and a City of
Independence occupation license, unless exempt under state law. Consultant will abide by all applicable
laws, regulations, and ordinances of all federal, state, and local governments in which work under this
contract is performed, and will require the same of all sub-consultants. The consultant must furnish and
maintain certification of authority to conduct business in the State of Missouri.

ARTICLE 6 – OWNERSHIP OF DOCUMENTS AND INTELLECTUAL PROPERTY

Except as otherwise provided herein, documents, drawings, and specifications prepared by consultant as part of the services shall become the property of City, provided consultant has the unrestricted right to their use. Notwithstanding the foregoing, City accepts that any re-use of the documents or intellectual property shall be at City’s sole risk and liability.

ARTICLE 7 – CHANGES, DELETIONS, OR ADDITIONS TO CONTRACT

Either party may request changes within the general scope of this Contract. If a requested change causes an increase or decrease in the cost or time required to perform this contract, City and consultant will agree to an equitable adjustment of the contract price, period of service, or both, and will reflect such adjustment in a change order or formal modification.

ARTICLE 8 – STANDARD OF CARE

Consultant shall exercise the same degree of care, skill, and diligence in the performance of the services as is ordinarily possessed and exercised by a peer professional under similar circumstances.

ARTICLE 9 – LIABILITY AND INDEMNIFICATION

Having considered the potential liabilities that may exist during the performance of a potential contract and the consultant’s fee, and in consideration of the mutual covenants contained in the contract, City and consultant agree to allocate and limit such liabilities in accordance with this section:

Consultant agrees, to the fullest extent permitted by law, to indemnify and hold harmless the City, its officers, directors, and employees, against all damages liabilities or costs, including reasonable attorneys’ fees and defense costs, to the extent caused by consultant’s negligent performance of services under the contract and that of its sub-consultants, or anyone for whom the consultant is legally liable. Consultant shall indemnify City against legal liability for damages arising out of claims by consultant’s employees.

Notwithstanding any other provision of the contract to the contrary, the City agrees to limit the Consultant’s liability to the city and to all persons having contractual relationships with the City to three (3x) times the total compensation set forth under the applicable purchase order, except to the extent finally determined to have resulted from the willful misconduct or fraudulent behavior of Consultant and Consultant’s employees relating to such Services. Neither the City nor the Consultant nor either party’s suppliers, agents, officers, and directors shall have any liability regardless of the theory of recovery, including breach of contract or negligence, to the other party or any other person or entity for any indirect, incidental, special, or consequential damages, cost or expense whatsoever, including but not limited to loss of revenue or profit, whether actual or anticipated, loss of use, failure to realize anticipated savings, loss of or damage to data or other commercial or economic loss, except to the extent finally determined to have resulted from the willful misconduct or fraudulent behavior of Consultant and Consultant’s employees relating to such Services. This waiver of consequential damages is made regardless that (i) either party has been advised of the possibility of such damages and (ii) that such damages may be foreseeable.

ARTICLE 10 – INSURANCE

Architect, Engineering, and Survey Services

The Consultant shall procure and maintain insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the materials, equipment or supplies provided to

the City. The insurer(s) must be licensed for business in the State of Missouri and maintain an A.M. Best rating of no less than A: VII; or an insurer approved by the City. Each policy requires a minimum cancellation notification of at least thirty (30) days' advance written notice to the City.

(1) General Liability Insurance, with bodily injury and property damage limits of \$1,000,000 for each occurrence with a \$2,000,000 general aggregate and \$2,000,000 products and completed operations aggregate.

(2) Professional Liability or Errors and Omissions Insurance, with a limit of \$1,000,000 annual aggregate.

(3) Automobile Liability Insurance, with bodily injury limits of \$1,000,000 for each person and \$1,000,000 for each accident, and with property damage limits of \$1,000,000 for each accident.

The above limits are the minimum acceptable and do not infer or place a limit on the liability of the Consultant. The City is to be named as an additional insured as the City's interest may appear for the General Liability and the Automobile Liability Insurance. The Consultant's insurance shall be primary and any insurance or self-insurance maintained by the City shall be excess for the City and not contribute with the coverage maintained by the Consultant.

The City shall not obtain worker's compensation insurance on behalf of the Consultant or the employees of the Consultant. The Consultant shall comply with the worker's compensation law concerning its business and its employees.

WORKER'S COMPENSATION

The City shall not obtain worker's compensation insurance on behalf of the contractor or the employees of the contractor. The contractor shall comply with the worker's compensation law concerning its business and its employees.

ARTICLE 11 – SHIPPING, TITLE AND RISK OF LOSS

All sales and deliveries are F.O.B. City.

ARTICLE 12 – DELAY IN PERFORMANCE

Neither City nor consultant shall be considered in default of this contract for delays in performance caused by circumstances beyond the reasonable control of the nonperforming party. For purposes of this contract, such circumstances include, but are not limited to, abnormal weather conditions; floods; earthquakes; fire; epidemics; war, riots, and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage; judicial restrains; and inability to procure permits, licenses, or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or services required to be provided by either City or consultant under this contract. If such circumstances occur, the non-performing party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this contract.

ARTICLE 13 – TERMINATION

City may terminate or suspend performance of this contract for City's convenience upon written notice to consultant. Consultant shall terminate or suspend performance of the services on a schedule acceptable to City. If termination or suspension is for City's convenience, City shall pay consultant for all

the services performed till the date of the termination by the City or suspension expenses. If contract is restarted, an equitable adjustment shall be made to consultant's compensation.

This contract may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this contract. The nonperforming party shall have 15 calendar days from the date of the termination notice to cure or to submit a plan for cure acceptable to the other party. In the event that funding for the contract is discontinued, City shall have the right to terminate this contract immediately upon written notice to consultant.

ARTICLE 14 – WAIVER

A waiver by either City or consultant of any breach of this contract shall be in writing. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

ARTICLE 15 – SEVERABILITY

The invalidity, illegality, or unenforceability of any provision of this contract or the occurrence of any event rendering any portion or provision of this contract void shall in no way affect the validity or enforceability of any other portion or provision of this contract. Any void provision shall be deemed severed from this contract, and the balance of this contract shall be construed and enforced as if this contract did not contain the particular portion or provision held to be void. The parties further agree to amend this contract to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision. The provisions of this article shall not prevent this entire contract from being void if a provision which is of the essence of this contract be determined void.

ARTICLE 16 – SUCCESSORS AND ASSIGNS

City and consultant each binds itself and its directors, officers, partners, successors, executors, administrators, assigns, and legal representatives to the other party to the contract and to the directors, officers, partners, successors, executors, administrators, assigns, and legal representatives of such other party in respect to all provisions of this contract.

ARTICLE 17 – ASSIGNMENT

Neither City nor consultant shall assign any rights or duties under this contract without the prior written consent of the other party. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this contract.

ARTICLE 18 – THIRD PARTY RIGHTS

Nothing in this contract shall be construed to give any rights or benefits to anyone other than City and consultant.

ARTICLE 19 – INDEPENDENT CONSULTANTS

Each party shall perform its activities and duties hereunder only as an independent consultant. The parties and their personnel shall not be considered to be employees or agents of the other party. Nothing in this contract shall be interpreted as granting either party the right or authority to make commitments of any kind for the other. This contract shall not constitute, create, or in any way be interpreted as a joint venture, partnership or formal business organization of any kind.

ARTICLE 20 – AUDIT

Consultant agrees that the City, or a duly authorized representative, shall, until the expiration of three (3) years after final payment under this contract have access to and the right to examine and copy any

pertinent books, documents, papers, records, or electronic records of the consultant involving transactions related to this contract.

ARTICLE 21 – EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this contract or purchase order, the consultant agrees as follows:

The consultant will not discriminate against any employee or applicant for employment because of race, age, color, religion, sex, national origin or any other legally protected category. The consultant will take affirmative action to ensure that applicants are employed, and that employees are treated fairly during employment, without regard to their race, age, color, religion, sex, or national origin. 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. The consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

The consultant will, in all solicitations or advertisements for employees placed by or on behalf of the consultant, state that all qualified applicants will receive consideration for employment without regard to race, age, color, religion, sex, or national origin.

The consultant will send to each labor union or representative of workers with which consultant has a collective bargaining agreement or other contract or understanding, a notice to be provided by a contract compliance officer advising the said labor union or workers' representatives of the consultant's commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The consultant will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

The consultant will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his or her books, records, and accounts by the Department and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

In the event of the consultant's noncompliance with the non-discrimination clauses of this contract or purchase order with any of the said rules, regulations, or orders, this contract or purchase order may be canceled, terminated, or suspended in whole or in part, and the organization may be declared ineligible for any further government contracts or purchase order or federally assisted contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, or by rules, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

The consultant will include the entire text of this Equal Employment Opportunity section and its subsections in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each sub-consultant or vendor. The consultant will take such action with respect to any sub-consultant or purchase order as the City may direct as a means of enforcing such provisions, including sanctions of noncompliance; provided, however, that in the event a consultant becomes involved in, or is threatened with litigation with a sub-consultant or vendor as a

result of such direction by the City, the consultant may request the United States to enter into such litigation to protect the interest of the United States.

ARTICLE 22 – ANTI-DISCRIMINATION AGAINST ISRAEL ACT

Contractors working on behalf of the City of Independence are to abide by Missouri Revised Statute 34.600, otherwise known as the Anti-Discrimination against Israel Act.

ARTICLE 23 – GOVERNING LAW

This contract shall be governed by the laws of the State of Missouri. The City and the consultant agree that the performance of this contract will be deemed to have occurred in the State of Missouri and that consultant’s performance under this contract will be deemed the transaction of business in Missouri. Jurisdiction and venue for any claim or cause of action arising under this contract shall be exclusively in the Sixteenth Judicial Circuit of Missouri and the consultant submits to personal jurisdiction of and waives any personal jurisdiction or inconvenient forum objection to, that court.

ARTICLE 24 – COMMUNICATIONS

Any communication required by this contract to the consultant shall be made in writing to the authorized representative named on the completed front page or response page of the solicitation. Any communication required by this contract with the City shall be to:

Attn: Brian Fairchild, P.E. (913) 381-1170 - 7301 W. 133rd Street, Suite 200, Overland Park, KS 66213

Nothing contained in this article shall be construed to restrict the transmission of routine communications between representatives of consultant and City.

ARTICLE 25 – SEPARATE CONTRACTS

City and consultant each reserve the right to, from time to time, enter into other contracts for specific projects. If such contracts are separately approved in writing by the parties, the terms and conditions of those contracts shall prevail for the specific projects set forth therein.

ARTICLE 26 – ENTIRE CONTRACT

This contract represents the entire agreement between the City and consultant. All previous or contemporaneous agreements, representations, promises and conditions relating the consultant’s services described herein are superseded. The RFP including the terms and conditions, the consultant’s response and written proposal, and purchase order (where applicable) shall constitute the entire contract. If these General Terms & Conditions be in conflict with any attached Special Conditions, the Special Conditions will supersede the General Terms & Conditions. In case of a discrepancy, the purchase order shall take precedence over the RFP and the RFP shall take precedence over the consultant’s response and written proposal.

ARTICLE 27 – SURVIVAL OF TERMS

The following provisions shall survive the expiration or termination of this contract for any reason: if any payment obligations exist, Article 4 – Compensation; Article 5 – Permits and Licenses; Article 10 – Liability and Indemnification; Article 15 – Waiver; Article 16 – Severability; Article 18 – Assignment; Article 20 – Independent Consultants; Article 23 – Governing Law; Article 26 – Entire Contract; and this Article 27 – Survival of Terms.

IN WITNESS WHEREOF, City and consultant, by and through their authorized officers, have made and executed this contract.

City

By _____

Date _____

Consultant

By *Sarah K Foster*

Sarah Foster

Title Senior Vice President

Date 06/28/2023

Consultant

By *Brian Fairchild*

Brian Fairchild, PE, CFM

Title Project Engineer

Date 6/28/23

SCOPE OF SERVICES

Project Description and Scope Overview

This scope of services (“scope”) covers the tasks to complete pipe and structure inspections, surveying, and engineering design services for the Rock Creek Watershed Metal Pipe Repair and Replacement Project (“project”). The project area includes the entire Rock Creek watershed that is generally bounded by Interstate 70, Noland Road, Truman Road, and Blue Ridge Boulevard. The project includes the following general tasks:

- Initial data collection, database updates, field system characterization, pipe and structure inspections, condition ratings, and system prioritization.
- Full topographic survey in select areas.
- Flooding evaluation in areas identified by the city.
- Produce plans for storm sewer system improvements within the prioritized project areas. For pipe repair locations, a less detailed design approach will be performed using Geographic Information System (GIS) maps to show repair improvements. For pipe replacement locations a more detailed design approach including topographic survey, pipe profiles, and pipe size/alignment considerations will be performed.

The work tasks will be performed by Olsson Inc (“Olsson”) for the City of Independence, Missouri (“city”). Olsson is subcontracting the field work associated with the pipe and structure inspections to TREKK Design Group LLC (“TREKK”).

Olsson shall be fully responsible for the professional quality, technical accuracy, readability, and completeness including coordination of designs, drawings, and specifications as is ordinary possessed and exercised by a professional consultant in the same community under similar circumstances. If Olsson fails to meet the foregoing standard, Olsson will perform at its own cost, and without reimbursement from the city, the professional services necessary to correct errors and omissions which are caused by Olsson’s failure to comply with the above standard. Prior to each submittal of plans to the city for review, Olsson shall provide quality control on the plans by the project manager. A letter is required from Olsson’s project manager to the city, stating that the final plan quantities have been calculated and checked for accuracy to the best of the firm’s ability. The professional services, necessary to correct errors and omissions during construction, shall include any data, property descriptions, surveying, plans, designs, and specifications. Olsson shall provide such services as expeditiously as is consistent with professional performance.

General Design Requirements

Olsson shall furnish and perform the various professional duties and services required for the construction of the project as outlined in this scope. All plan development stages shall be completed no later than the current project’s schedule, exclusive of delays beyond Olsson’s control.

Project solutions will be completed in conformity with the most current version of the following criteria:

- City’s Public Works Design Standards (Updated: May, 2021)
- APWA 5600 design criteria.
- The current version of the Manual on Uniform Traffic Control Devices (MUTCD) as adopted by the city.

The project plans shall be signed and sealed by the licensed professional engineer responsible for

the preparation of the project plans. Right-of-way and easement descriptions shall be signed and sealed by a Missouri Registered Professional Land Surveyor responsible for the preparation of these descriptions.

General Survey Requirements

Vertical Control: All vertical datum must be NAVD 88 and tied to the city controls. Benchmark and elevation data will be included on the plans.

Horizontal Control: Section corner and quarter section corner locations must be referenced to the Missouri State Plane Coordinate System NAD 1983 (HARN Adjustment), West Zone. The coordinates and referenced ties shall be shown on the plans.

Plan Notes - Any benchmarks, horizontal control monuments and any section corner and quarter section corners within the area surveyed for the project must be conspicuously indicated on the plans. All benchmarks and section and quarter section corners and property pins within the construction limits shall include a note for the re-establishment of the monuments.

DETAILED SCOPE OF SERVICES

Phase 100 – Project Management and Coordination

Task 101 – Project Kickoff Meeting

Attend a kick-off meeting with city staff to introduce the project team (two Olsson staff and two TREKK staff will attend), confirm the project extents, and review the design criteria and overall project schedule.

Task 102 – Design Schedule

Develop detailed design schedule for the entire project and discuss at the project kickoff meeting. Provide schedule updates at project progress communications. Include at least the following major project milestones in the schedule:

- Stormwater network field data collection complete.
- GIS field data production complete.
- Survey complete.
- Field Check.
- Preliminary plans submitted for review.
- Utility coordination meetings.
- Public involvement meetings.
- Easement/Right-of-way documents to city.
- Final plans submitted for review.
- Project ready for bid.

Task 103 – Project Update Meetings

Monthly virtual project update meetings through the length of the project are assumed for the Olsson team to keep city staff informed on project progress and discuss any issues being encountered during the project. Up to 2 Olsson staff and 2 TREKK staff will attend these meetings.

Task 104 – Internal Coordination Meetings

Biweekly virtual project meetings with Olsson staff and TREKK staff will occur while the pipe and structure inspections are being performed. Following the inspections, Olsson staff will hold biweekly project meetings.

Task 105 – Review Known Flood Areas with City

Based on city service records and knowledge of flooding locations, the city will identify up to five (5) flood locations for Olsson to evaluate. Olsson shall meet with the city to discuss known flood areas within the project area to pass along any historic flooding information that can help Olsson evaluate known flooding areas. Up to five locations will be agreed upon to move forward with hydrologic and hydraulic analysis/system re-design, discussed in Task 502.

Phase 200 – Data Management, Field Planning, Field Data Collection

Task 201 Establish Data Management Standards and Workflows

Coordination between Olsson, TREKK, and the city to define data delivery standards, formats, and processes. Data deliverables will need to be compatible with GIS platforms utilized by the city. Methods for CCTV video data delivery will also be defined. Data delivery portals will be created as needed to support the delivery of data. The following data standards will be defined:

1. Identify minimum GIS attribute data/data field requirements based on the project goals.
2. Confirm standard nomenclature for stormwater asset IDs including blind connection points.
3. Define the process for registering new structures and/or pipes found in the field within the stormwater asset inventory.
4. Identify common structure groups, inlet types, etc. preferred by the city and confirm nomenclature for asset types.
5. Define the condition inspection data fields for storm structures and create inspection form (modified NASSCO MACP).
6. Define condition inspection data fields for storm pipes (i.e. NASSCO PACP).

Deliverables:

- Meeting with Olsson, TREKK, and the city to define standards and data delivery methods

Task 202 Develop Condition Assessment Database and Stage Inspection Maps

Following finalization of the definitions and framework outlined above, TREKK will create the field inspection databases for the project. The database will include programmed scripts that will identify potential outliers in the inspection process, including duplicate asset numbers, mismatched materials/diameters between upstream and downstream inspections, visual indication of pipe routing anomalies (incorrect asset numbers most typically), steep or reversed slopes (numeric typos or bad GPS elevations typically), and additional queries as error trends are noticed. Throughout the field inspection phase of the project, this data will be reviewed by a dedicated office data technician and either corrected or re-appointed to a field team for follow-up field verifications.

Prior to commencing field inspections, an inspection plan will be created. TREKK shall coordinate with Olsson and the city in developing an inspection plan. The city will provide a final listing of pipes and structures (excel or GIS) required for inspection. TREKK will take this listing and establish an ArcGIS Online map for the project. The ArcGIS online map will be used to assign crew work areas, document known information and conditions of the stormwater system, as well as track progress and quantities of assets inspected. The inspection map will provide clear direction on storm sewer inspections that are to be completed.

Deliverables:

- Field Inspection Databases, Inspection plan
- ArcGIS Online Inspection Map

Phase 300 – Field Data Collection

TREKK shall provide all equipment, labor, software, supplies, and other resources to fully complete field inspections. All structures and pipes must be accessible or have right of entry to property secured and provided by city staff. TREKK assumes that no heavy equipment will be required to open and/or access a majority of the structures. TREKK will coordinate access with city staff or utilize a heavy equipment subcontractor where heavy equipment may be needed. An allowance for use of a heavy equipment contractor on an as needed basis is included in the project budget.

Traffic safety precautions will be followed in accordance with city expectations and all field technicians will wear safety vests or work shirts that are designed for high visibility to allow for greater protection for themselves and the public.

Light traffic control will be conducted and included within the rates shown. This includes Utility Work Ahead Signs and cones. Any heavy traffic control required that includes barricades, sign boards, arrow boards, lane closures, or trail closures will be coordinated with a subcontracted traffic control specialist. The project budget includes an allowance to cover expenses related to the heavy traffic control efforts.

Task 301 System Characterization and Structure Inspections (Reconnaissance Visit)

The initial field visit will include a system characterization and structure condition inspection. The GIS network will be field confirmed and the GIS database will be updated as needed to reflect the correct routing and connectivity of the existing stormwater network. New structures and/or pipes found in the field will be added to the GIS network.

The condition assessment inspections will be completed by capturing 360 camera imaging data. Structures will be field inspected from the topside using the TREKK360 camera to collect panoramic photos, as well as mirrors and/or high-powered spotlights if necessary. TREKK will digitally process field 360 imagery to create a 360-degree perspective view and model of the storm structure which allows for the inspection of the structure from any angle and any elevation. The 360-degree imaging data will be reviewed to complete the structure condition assessment inspection. Each structural component of the structure will be documented and assigned a rating in accordance with the established inspection criteria.

As part of the QA/QC process, specialized data reviews and data queries will be performed to help ensure data completeness. Logical data checks will also be performed to assure that the values recorded follow and comply with the established rating system. A total of 855 structures are assumed for this task.

Deliverables:

- Updated GIS network and asset inventory
- Condition Assessment Inspection records
- 360-degree Imaging Data

Task 302 Structure Field GPS Survey

The survey inspection crew will attempt a RTK GPS survey of locations and rim elevations for a small number of structures inspected during field reconnaissance, as needed. GPS survey will be limited to only those structures where a sufficient satellite signal can be obtained. Follow-up GPS survey of rim elevations will also be conducted on structures that were unburied during the field investigations. Survey data will be used to update the GIS network with the correct coordinates. The level of effort for this task is capped at a total of 40 hours.

Deliverables:

- Updated GIS network

Task 303 CCTV Pipe Inspection

TREKK will approach this project by attempting CCTV inspection without cleaning of the assigned line segments. Pipe segments with debris or anticipated to have debris that will impede the CCTV camera from traversing the pipe will be cleaned on an as needed basis. TREKK will have crews available to clean pipes or structures as necessary.

The CCTV inspection efforts will be conducted with industry standard equipment. The camera shall be moved through the system in either direction at a uniform rate, stopping when necessary, to ensure proper documentation of the pipe conditions, but in no case will the television camera be moved at a speed greater than 30 feet per minute. If during the inspection, the camera will not pass through the pipe, equipment shall be reset in a manner so the inspection can be performed from the opposite direction. If the camera fails to pass through the entire pipe, the location and cause of the camera blockage will be documented, and information will be provided to Olsson and city staff. The inspection shall be considered complete, and no additional inspection work will be required. The camera will be capable of stopping and panning the head of the camera 180 degrees to view any defects, observations, and connections. It shall also be capable of taking still photographs of any defects observed. All informational data on the sewer system pipes will be collected in NASSCO PACP format.

As part of the QA/QC process, specialized data reviews and data queries will be performed to help ensure data completeness. Logical data checks will also be performed to assure that the values recorded follow and comply with the established rating system.

No inspection will be performed for any pipe that are 36-inches in diameter or less that daylight on both ends (i.e. cross road or driveway culverts). This task assumes CCTV pipe inspection of 49,561 linear feet of storm sewer, within the following pipe material fields: CMP, VCP, Brick, Other, ZZZ, and Null). This inspection length does not include abandoned lines and only includes pipes owned by the city. The following items reduced the total length of CCTV pipe inspection:

- Assumes 7% of the CMP pipe will not be able to be CCTV inspected due to corroded/missing invert. (reduces quantities by 2,790 linear feet)
- The following storm sewer improvement projects have been removed from the inspection quantities:
 - 30th Forest (8 Structures, 615 linear feet of pipe)
 - Cedar to Hardy (24 structures, 2,030 linear feet of pipe)
 - Nace Meadows (6 structures, 940 linear feet of pipe)
 - Scott to Norwood (8 structures, 970 linear feet of pipe)

Deliverables:

- Updated GIS Network/Asset Inventory
- PACP NASSCO 7 inspection database (ACCESS format)
- CCTV Video files

Task 304 Storm Sewer Cleaning

TREKK will approach this project by attempting CCTV inspection without cleaning of the assigned line segments. If needed, TREKK will conduct cleaning activities with industry standard cleaning equipment. This equipment will be capable of jetting the sewer at 80 GPM and 2500 PSI. This equipment will also be capable of removing debris from the system with a vacuum system. The city will provide a dump site for debris within a reasonable distance from the project area and

reimburse TREKK for any fees associated with debris dumping. City will provide access to water via fire hydrants in the project area. Project budget allows up to 165 hours of cleaning.

Task 305 Allowance for On-Call Contractor

TREKK will have a contractor available as needed to conduct minor excavation or pavement removal necessary to uncover buried storm sewer structures or end sections, or provide other demolition and excavation services necessary for TREKK to conduct Tasks 303 and 304.

Task 306 Topographic Survey

The determination of the topographic survey locations will be decided following Task 503. For purposes of this scope of work, the following assumptions are made to generate the topographic survey effort:

- Assume full topographic survey at 15 separate sites, broken into small and large sites.
 - Small sites would replace 2-3 pipe segments and up to 3 structures and assume that all of this work is in the ROW and nothing goes into backyards, no fences are surveyed, etc. No more than 300 feet of pipe for a single site would be surveyed. 10 small sites are assumed.
 - Large sites would replace 5-8 pipe segments and up to 8 structures and would impact 8-10 properties. No more than 1,200 feet of pipe would be surveyed and it is assumed that no more than 600 feet of pipe is running between homes and into backyards. 5 large sites are assumed.

It is assumed that survey will be required for the 5 the flooding locations identified in Task 105 and discussed Task 502. These locations are included as part of the small site or large site count listed above and are not in addition to these.

Olsson shall survey 15 locations (per the sizes assumed above) with the city supplying Olsson with benchmark records as near to the project location as possible. Olsson shall set any other needed permanent benchmarks for the project. All vertical datum must be NAVD 88 and tied to the city controls. It is assumed that private property access will be granted so that field survey data can be collected. Olsson will be responsible for notifying private property owners about field survey activities. Specific survey work items included in this scope is as follows:

1. Establish land corners, and horizontal and vertical control.
2. Survey size, type, location, and elevation of all storm sewer and sanitary sewer including pipes, structures, inlets, headwalls, channels, and culverts.
3. Perform topographic survey of entire project area needed for design of the project, including dwellings/structures, sheds, fences, walls, streets, curbs, ditches, sidewalks, decks and patios, size and species of trees 2 inches and larger, shrubs, bushes, landscaping, and property pins.
4. Survey low home opening elevations in the known flood area locations.
5. Where there is a group of trees, show the outside limits and label accordingly.
6. Contact Missouri One Call and obtain available mapping from all pertinent utilities for locates of existing utilities and tie them into the topographic survey. Include sizes of utility lines.

Task 307 Survey Basemap

Olsson will obtain plat information from Jackson County's records and incorporate into the survey basemap. Olsson will prepare survey base map depicting the Task 305 information, including property lines, ownership and easement dimensions and information.

PHASE 400 – RISK ASSESSMENT AND PRIORITIZATION

Task 401 Develop Risk Assessment Framework

Prioritization of linear stormwater asset renewal and replacement will be made from a risk perspective, derived from the likelihood of an asset's failure and the consequence of an asset's failure. TREKK will define the framework and the formulation of the likelihood and consequence of failure scores for all linear stormwater assets. The likelihood of failure score defines the condition of the asset and the physical risk of failure. If desired by city, an O&M and performance component may be integrated into the score if sufficient data exists.

The consequence of failure score defines how the failure of an asset would affect the quality of life, economy, and safety of the community. The consequence of failure score will be generated by evaluating the physical location of each asset and the significant impacts that can be measured using spatial data that is available. This may include proximity to critical facilities, streets, other utilities, and flood control features. TREKK shall describe how attribute, spatial, and utility network data should be utilized to score each consequence of failure factor.

The likelihood and consequence of failure scores will be combined to produce an overall risk score for each asset. TREKK will provide a draft technical memorandum summarizing the score methodology and risk assessment framework for city review.

Task 402 Technical Memorandum and Prioritized Listing of Assets

Olsson, TREKK, and the city will meet following review of the draft technical memorandum and make necessary revisions to finalize the risk assessment framework. The risk assessment framework will then be applied to the inspected stormwater structures and pipes to create a prioritized listing of assets for rehabilitation and/or replacement.

Deliverables:

- Final technical memorandum summarizing the score methodology and risk assessment framework.
- Prioritized listing of stormwater structures.
- Prioritized listing of stormwater pipes.
- 5 prioritized known flooding sites determined from Task 105.

Phase 500 – Preliminary Design

Task 501 Pipe Repair Selection

Using the information provided by TREKK in Task 402, and available city database information, Olsson will perform a desktop exercise to identify an assumed 60 pipe repair locations. The selected locations will be based on the prioritization information provided by TREKK, estimated project solution type, and the overall project construction budget. Olsson assumes detailed video review of 150 pipe segments with the highest structural ratings. In addition to the information provided in Task 402, Olsson will discuss with the city additional considerations, such as street maintenance schedules or other upcoming capital improvement projects that may be affected by stormwater in the watershed.

Deliverables:

- Map of selected pipe repair locations.

Task 502 Flood Area Evaluation

From the discussion with city staff regarding known flood areas in the project area (Task 105), Olsson will analyze up to 5 flood areas. The drainage areas to each site will be delineated and watershed characteristics defined. Using a 1-dimensional hydrologic and hydraulic modeling method, Olsson will analyze these flood areas to confirm existing street and/or building flooding and develop one (1) proposed solution per flood area to address the flooding issue. This task assumes no more than 8 pipes and 8 structures will be analyzed for a single location.

Deliverables:

- Memo outlining the design assumptions, tabular hydrologic & hydraulic calculations, drainage area maps for each location, and an exhibit identifying proposed pipe sizes for the re-designed system.

Task 503 Plan Production Strategy Meetings

At the completion of Tasks 501 and 502, Olsson will meet with the city in person to talk through the findings of these two previous tasks, confirm the 60 locations, and confirm approach to splitting the locations into pipe repair, spot repair, or replacement locations, which will determine the plan production approach between AutoCAD and GIS-style sheets. Olsson and the city will also agree upon the sites to be surveyed both based on the repair strategy and needs derived Task 502.

Generally, it is assumed the GIS-style plans will be reserved for trenchless solutions, spot repairs with trenchless solutions, or for replacement solutions completely within right-of-way with the same size & alignment. Locations that involve a variety of repair types will be discussed during this meeting to choose a plan production strategy.

Task 504 Field Reconnaissance for Repair Strategies

A field visit to each of the assumed 60 locations will be performed by two (2) Olsson staff to confirm the preliminary pipe and structure repair strategy. The strategy or strategies will be what is reflected in the storm sewer layouts. This will determine the viability of the proposed repair/replacement strategy. For GIS-style plans, Olsson will take measurements for potential incidental and restoration items.

Task 505 Preliminary Storm Sewer Layouts

Olsson will prepare and provide to the city plan view layouts of the assumed 60 pipe rehabilitation locations, as follows:

- 45 of these layouts will be prepared as GIS figures, with an aerial image background and available GIS data.
- 15 of these layouts will be prepared in AutoCAD and will include the topographic survey information collected in Task 305.

A single layout sheet for each of the 60 pipe repair locations will be prepared. These preliminary layout sheets will show the proposed strategy for each pipe and structure in the area (repair, spot repair, replace, etc.) and will note any major construction considerations, such as access issues, the need for added structures, etc. Restoration items will not be listed on these preliminary storm sewer layouts.

Task 506 Structure Staking and Field Check

Olsson will attend a field check review meeting with city staff to review these alignments. Two (2) Olsson staff will attend the field check. The field check is to assess the accuracy of the survey, proposed structure locations, ensure the city agrees with the rehabilitation approach, and determine conflicts with topographic conditions and utilities.

Immediately prior to the field check, Olsson surveyors will stake the center of the proposed drainage structures (new structures or structures off the existing alignment only) with elevations noted for each top of structure. This assumes structures will be staked at up to 15 locations.

Task 507 Utility Coordination and Coordination Meeting

Olsson shall contact and work closely with utilities to determine the locations of existing and planned facilities to be shown on the AutoCAD plans. Olsson shall prepare correspondence to all utility companies at the proper times during the design phase and will provide plans to utilities prior to the utility coordination meeting. This initial utility coordination meeting will occur around the time of the field check meeting.

Olsson will prepare a utility tracking spreadsheet, noting the location, the utilities present, whether or not a response has been received from each utility, anticipated conflicts, and timeline for relocation if applicable. This tracking spreadsheet will be updated throughout the project and provided to the contractor prior to construction start. Location of existing and planned utilities will be shown on the AutoCAD plans only. No utility locations will be shown on the GIS plans.

Task 508 Preliminary Plans

Following the same split of 45 locations with GIS plans and 15 locations with AutoCAD plans, it is assumed that for the GIS plans, 45 locations will fit on 45 separate GIS plan sheets, and for the AutoCAD plans, 15 locations will fit on 30 separate AutoCAD plan sheets. The preliminary plans for the 60 locations will be gathered into a single PDF of 11x17-inch sheets.

Preliminary plans shall be clearly stamped “preliminary”, or otherwise indicated. All plans shall be prepared in accordance with the latest editions, supplements, and revisions of the city’s storm drainage design criteria and APWA Section 5600, as adopted. A transmittal letter shall accompany this submittal. The city project number shall be included upon all correspondence.

The preliminary GIS plans for 45 locations will include the following information:

- Overall locations map (showing where each location is within the city)
- Location number
- Address labels for adjacent properties
- Approximate location of right-of-way and property boundaries from database information
- Strategy for repair with pipe ID’s and structure ID’s clearly defined, as well as associated quantities.
- Approximate restoration quantities
- Quantities for both restoration
- A legend identifying the symbology, scale, and a north arrow.

The preliminary AutoCAD plans for 15 locations will include the following information:

- Title sheet.
- Legend and abbreviations.
- General notes.
- Storm sewer plan & profile (1" = 20' scale plans) (1" = 10' vertical scale profiles) (North Arrow to the right or up on the sheet). Including property lines and owner information, existing utilities, landmark items to be protected or removed (fences, monuments, trees, landscaping, etc.).

- Driveway replacement layouts that reflect existing driveway joints.
- Standard details.
- Quality control review.

All proposed structures or improvements shall be located by station and offset or their coordinate values on the plans. There shall be a note as to the exact point(s) being located for each type of structure or improvement on the final plans. The location of property lines, utilities, and other conflicts that will impact the design will be included in the plans.

Task 509 Opinion of Probable Construction Cost (OPCC)

Olsson will prepare an OPCC based on the information provided in the preliminary plans. The OPCC shall include construction quantities, unit costs, and a 15% construction contingency.

Task 510 Preliminary Submittal and Progress Meeting

Olsson shall submit the preliminary plans and OPCC in a digital PDF format for formal city review. Upon request, Olsson can submit two (2) physical copies of half-size (11x17-inch) preliminary plans. Following the city review, Olsson will attend a project progress meeting to discuss the review comments.

Task 511 Temporary Access Exhibits

Olsson shall prepare temporary access exhibits for up to an assumed 50 locations. For the GIS locations, these exhibits will show the same information as the preliminary plans, with a red-outlined anticipated access area shown in plan view, along with approximate dimensions. For AutoCAD plans, the temporary access area will be shown using a distinct linework identified on the sheet in plan view or in the legend. The exhibits will be printed to 11 x 17-inch in PDF format and provided to the city to acquire the temporary access agreements. Temporary access exhibits will not be made for the known flood locations, as it is assumed formal easements will be obtained for these.

Task 512 Ownership and Abutting Property Information

Olsson will work through the city contracted title company for ownership information investigations and obtain full title reports for properties in the assumed 5 flood area locations where easements are required by this project (title reports for 30 properties are assumed). The costs associated with ownership information investigations shall be included in the total compensation fee for this project.

- Provide spreadsheet related to ownership including:
 - Owner Name.
 - Address.
 - Site Address.
 - Easements.
 - Square Footage.
- Title information will be provided in electronic format.

Task 513 Easement Documents and Staking

Describe easements in 5 different locations where they are necessary to complete the project. It is assumed that 3 permanent drainage easements and 6 temporary drainage easements are required for each location, for a total of 45 easement descriptions and 30 tract maps.

- Furnish legal descriptions sealed by an RLS licensed in the state of Missouri. Legal descriptions are also to be provided in a digital format compatible with Microsoft Word (45

legal descriptions are assumed).

- Prepare permanent and temporary construction easement descriptions and figures in accordance with the city's acquisition requirements.
- Prepare tract maps (30 tract maps assumed), including.
 - Title block, including a graphical scale and north arrow.
 - Ownership boundaries and information.
 - Existing rights-of-way and easements.
 - Proposed takings identified with text and graphically.
- Submit 8 1/2 x 11-inch exhibits and legal descriptions of each property required for easement acquisition to the city.
- Stake the proposed easement limits on each property (45 total easements will be staked) prior to easement acquisition.

Phase 600 – Final Design

Task 601 Final Plans

With the same split from the preliminary plans of 45 locations with GIS plans and 15 locations with AutoCAD plans, it is assumed that for the GIS plans, 45 locations will fit on 45 separate GIS plan sheets, and for the AutoCAD plans, 15 locations will fit on 30 separate AutoCAD plan sheets. The final plans for the 60 locations will be gathered into a single PDF of 11x17-inch sheets.

Final design plans and specifications shall be clearly stamped "Final" or otherwise indicated. A transmittal letter shall accompany this submittal addressing city staff's comments on the preliminary design. The city's project number shall be included upon all plans and correspondence.

Olsson will prepare correspondence indicating significant changes in scope or design from information submitted as part of the preliminary plans. If such changes occur, all information required as part of the preliminary plans shall be resubmitted for items which have changed and all portions of the project which have been affected by the change(s).

Olsson will prepare a written narrative which outlines how city review comments were addressed in the final plan submittal.

Prepare final plans incorporating all preliminary plan review and field check comments from city staff. At a minimum, the final plans shall include all information from the preliminary plans plus the following detailed design additions:

For GIS final plans:

- More thorough repair and restoration quantities
- Special considerations for the contractor, if applicable
- Temporary access areas for the contractor's reference
- Special utility notes, if applicable (utility locations are not shown on GIS plans)

For AutoCAD final plans:

- Update cover sheet, legend, general notes, and survey references.
- Project quantities schedule.
- Easement and ownership information shown on plan & profile sheet that illustrates property

lines, right of ways, existing and proposed easements, and a table listing in square feet all the required temporary construction easements and permanent easements. All easement dimensions shall coincide with the legal descriptions.

- Plan and profile sheet updates.
- Overflow channels and swales used to accommodate the maximum design storm shall be defined and the effects of velocity/shear determined for cover selection (for flood locations; only if applicable).
- Driveway replacement dimension table.
- Standard details for road closures during construction.
- Landscape/Restoration (if necessary).
- Additional standard details as needed.
- Quality control review and submittal of final plans, project manual, and final OPC.

Task 602 Project Specifications

Prepare a complete set of contract special provisions and technical specifications to address specific elements of this project. Incorporate the front-end documents provided by the city into a single and complete specifications PDF.

Task 603 Final OPCC

Prepare a final OPCC for the project to reflect the final plans.

Task 604 Final Submittal

Consultant shall submit final plans, specifications, and OPCC as described herein in a digital PDF format for formal city review, attend one (1) review meeting with city staff, and revise per city criteria and review comments (see Task 508). Upon request, Olsson can submit physical two (2) copies of half-size (11x17-inch) plans.

Task 605 Public Meeting

During the final design phase, three (3) Olsson staff will attend a public meeting to discuss the project. Olsson shall prepare and bring overall project location boards (up to 3 board panels assumed) and copies of the project plans for a public meeting.

Task 606 Utility Coordination and Coordination Meeting

With the preparation of final plans, Olsson will schedule a final utility coordination. We will update our utility coordination spreadsheet and obtain necessary utility relocation strategies and timelines from each company at this meeting.

Task 607 Project Bid Plans

Upon completion of the easement acquisition phase, Olsson shall incorporate into the drawings the easement acquisition related notes; and then submit construction bid documents in an electronic PDF format to the city. Upon request, Olsson can submit two (2) hard copies of half size bid plans, final specifications, and the final OPC upon request. The project bid plans, specifications, and OPC will be updated to address all remaining outstanding review comments. All documents must be signed and sealed by a Missouri Registered Professional Engineer.

Task 608 Construction Related Services

Olsson shall provide up to 32 hours of effort that includes the following tasks once project construction begins: assisting the city with change orders, field visits, and interpretation of field documents.

City Responsibilities

The city will be responsible for the following:

- Provide Olsson with pertinent existing studies, record drawings from previous projects (storm sewer, street improvements, sanitary sewer, etc.), GIS shape files - specifically storm sewer, sanitary sewer, streets, parcels, building planimetrics, and project contours, and other available information in the project area.
- Provide Olsson with benchmark records as near to the project location as possible.
- Provide Olsson with service records in a searchable format for the identification of known flood locations.
- Prepare a GIS shapefile of the locations to help inform the flood areas task and improvement prioritization.
- Easement acquisitions and temporary access agreement acquisition from property owners.
- Administration of the bidding and construction contract.
- Locate the city's water main horizontally and pothole where appropriate to determine depths of the system.
- Permit fees

Additional Services

Should the city request work in addition to the Scope of Services, Olsson shall invoice city for such additional services (Additional Services) at the standard hourly billing labor rate charged for those employees actually performing the work, plus reimbursable expenses if any. Olsson shall not commence work on Additional Services without prior written approval from the city. The following services are excluded from this scope of services and would be considered Additional Services for this project:

- Meeting to discuss the impacts during construction with individual property owners.
- Meeting to identify easement and right-of-way locations beyond what is discussed at the field check.
- Additional public meetings.
- Geotechnical borings
- Surveying potholed utilities.
- Temporary access agreement acquisition, mailing, or correspondence with property owners.
- Easement acquisition, mailing, or correspondence with property owners.
- Revise legal descriptions, tract maps and/or easement descriptions prior to acquisition and construction as requested by the city.
- Updated title reports.
- Home and street flooding assessment.
- Floodplain modeling for no-rise analysis
- Open channel hydraulic modeling using the standard step or 2D modeling methods (e.g., HEC-RAS modeling).
- Pipe capacity calculations to generate hydraulic gradelines for pipe repair or in-kind pipe replacements.
- Curb inlet capacity and spread calculations.

- Storm system re-design (changes in alignment, pipe sizes, configuration, etc) for any of the sites, except the 5 flood locations outlined in Task 502.
- Intersection and ADA ramp design and details.
- Street lighting and signal design and details
- Typical sections, miscellaneous details, and non-standard details.
- Pavement marking and permanent signage plans.
- Structural design and details.
- Traffic control plans for construction.
- Project cross-sections or detailed grading plans.
- Water main relocation plans.
- Sanitary sewer relocation plans.
- Construction staking
- Bidding and construction services
- Federal, state, or local permits
- Construction administration, engineering, or observation.
- Responding to field construction questions.
- Shop drawing review. No pipes with a diameter of 36" or less which 'daylight' on each end (e.g., crossroad culverts or driveway culverts) will be considered for either CCTV inspection, repair, or replacement. Consideration of these pipes may be added as an optional additional service.

Additional Contract Terms

The following additional contract terms are added to this agreement:

- [Olsson] agrees to take steps to ensure that disadvantaged business enterprises (DBEs) are utilized when possible as sources of supplies, equipment, construction, and services as required by 2 CFR 200.321.
- The [city] shall make payment to [Olsson] in accordance with section 8.960, RSMo.
- [One] stamped hardcopy and one stamped digital copy of plans and specifications and all change orders will be submitted to the department for approval.

