EXHIBIT A

SCOPE OF SERVICES

It is expressly understood and agreed by the parties hereto that it is the intention of this Agreement to provide for furnishing engineering services for the subject project:

LANSING, KANSAS
2025 INFLOW AND INFILTRATION REDUCTION PROGRAM

The City of Lansing, Kansas (CITY) has identified the need to remove sources of Inflow and Infiltration (I&I) from the sanitary sewer system.

The project will: inventory, inspect, and evaluate existing sanitary sewer lines and structures for both structural condition and I&I defects in the project area; and provide rehabilitation recommendations for the studied assets. This project is focused on investigations in Basin 6. Basin 6 is generally bounded by Woodland Street on the north, Fairlane Street on the south and west, and Glen Court on the east.

Future projects will provide engineering plans for rehabilitation design and follow-up inspections and monitoring.

The Scope of Services for this Project is organized into FOUR (4) major Task Series:

Task Series 100 – Project Management and Administration
Task Series 200 – Field Investigations
Task Series 300 – GIS Database Preparation and Data Entry
Task Series 400 – Data Analysis and Recommendations

TASK SERIES 100 – PROJECT MANAGEMENT AND ADMINISTRATION

100. Project Management and Administration. Provide the management functions required to successfully complete the project, including:

- Project correspondence with the CITY
- A 1-hour kick-off meeting consultation with the CITY's staff to be held in-person at CITY office and will be attended by the Project Manager and Supervisor from the ENGINEER
- Supervision and coordination of services and quality control/assurance
- Scheduling and assignment of personnel resources
- Up to TWO (2) 1-hour project progress meetings with the CITY's staff and the ENGINEER. Project Manager and Supervisor to be held virtually via Microsoft Teams
- Monitoring of work progress
- Monthly invoicing for up to FOUR (4) months for the work performed

ENGINEER shall prepare and distribute minutes of the Kick-off and Progress meetings with the CITY and include action items.

This project is anticipated to take 120 days to complete. If the project is delayed due to conditions outside the control of the ENGINEER, Additional Services may be negotiated at the time.

TASK SERIES 200 – FIELD INVESTIGATIONS

200. Field Investigations. The ENGINEER shall collect, compile, and evaluate pertinent and available data from the CITY.

Field investigations will be completed which include:

- Surface-level simple manhole condition assessments of up to 48 sanitary sewer manholes
    - These inspections will not include manned entry into the structures, but will instead collect structural and I&I defect information visible from the surface
    - Each inspection will assign a defect score to each defect found, on a 0-4 rating with 0 being no defect present and 4 being severe defect present. A rating of 5 will be assigned to manholes that could not be accessed for various reasons (buried manholes, not able to be opened, not able to be reached)
    - Each inspection will include up to THREE (3) photos: General Location Photo, Topside Photo, and Channel Photo as well as close-up photos of significant defects (those rated 3 or 4)
    - Each inspection will include a 360-degree video that will be available for viewing by the CITY via GBA's on-line ArcGIS Portal
- Internal condition assessments of up to FIVE (5) sanitary sewer manholes, or approximately 10% of the manholes in the basin, as deemed necessary by the ENGINEER
    - Internal condition assessments will include manned entry into the structure to collect manhole dimensions, lamping photos, defect photos, and other pertinent information as deemed relevant by the ENGINEER.
- CCTV of up to 11,500 linear feet (LF) of sanitary sewers
    - CCTV will follow NASSCO PACP coding standards
    - Deliverables will include related media files (photos, videos, and GaniteNet fusion files), a GaniteNet database with the inspections, and an inspection summary pdf report
    - EIGHT (8) hours is allotted for heavy cleaning.
    - EIGHT (8) hours is allotted for root cutting.
- Smoke testing of up to 11,500 LF of sanitary sewers
    - Door hangers will be delivered 48-72 hours ahead of smoke testing to help the public understand the process and what to expect during the testing field activities. In the event that a significant rain event happens after door hangers have been delivered but before smoke testing could be completed, new door hangers will be distributed 48-72 hours ahead of smoke testing starting/restarting. If door hangers are needed to be re-distributed more than once, it will be considered Additional Services and time and expense will be negotiated at that time.
    - It is anticipated that field crews will be able to smoke test 5,000 LF of sewers per working day.
- Dyed water testing of up to TEN (10) suspect sources, as deemed necessary by the ENGINEER.
    - Door hangers will be delivered 48-72 hours ahead of dyed water testing, to the residents affected by dyed water testing, to help the public understand the process and what to expect

Manhole condition assessments, smoke testing, and dyed water testing (if needed) will be performed using ESRI Field Maps forms developed by the ENGINEER. Data will be stored electronically and provided to the CITY in the form of a GIS geodatabase.

Internal condition assessments, if needed, will be performed using Survey 123 forms developed by the ENGINEER. Data will be stored electronically and provided to the CITY in the form of a GIS geodatabase.

TASK SERIES 300 – GIS DATABASE PREPARATION AND DATA ENTRY

300. GIS Database Preparation and Data Entry. Based on the results of Task 200 ENGINEER shall develop, or modify the existing, GIS database structures and shapefiles for the purpose of mapping the data. Data to be mapped shall include:

- CCTV locations and data
- manhole inspection data
- smoke testing results and source locations
- dyed water testing results and source locations

ENGINEER shall meet virtually via Microsoft Teams with representatives of the CITY to review the completed mapping and databases.

ENGINEER shall provide electronic files in shapefile or file geodatabase formats for the CITY's use in updating their GIS.

TASK SERIES 400 – DATA ANALYSIS AND RECOMMENDATIONS

400. Data Analysis and Recommendations. Based on work completed in Tasks 200 and 300 ENGINEER shall perform analysis of the existing data to identify locations of inflow and infiltration; to quantify inflow and infiltration volumes and flows; and identify assets based on condition assessment information that are candidates for rehabilitation or replacement. A preliminary conceptual cost estimate for design and rehabilitation of the discovered defects will be included in the draft report. The results can be used to develop rehabilitation design plans that reduce I&I and align with the CITY's capital improvements budget in future phases.

ENGINEER shall deliver a draft report to the CITY in ONE (1) hardcopy and ONE (1) pdf formats summarizing the available data as provided to the CITY, the results of the data analysis, the recommendations for rehabilitation or replacement, identification of data gaps, and recommendations for additional data acquisition.

ENGINEER shall meet with representatives from the CITY in-person at CITY office to discuss the draft report and CITY comments. Meeting will be attended by Project Manager and Supervisor from the ENGINEER.

ENGINEER shall deliver a final report to the CITY in THREE (3) hardcopy and ONE (1) pdf formats. ENGINEER shall be available to present the project and recommendations at a Council meeting.

ASSUMPTIONS

1. The assets selected for inspection will be made accessible to the ENGINEER.
2. A Notice to Proceed will be received by the ENGINEER no later than February 1, 2025.

ADDITIONAL SERVICES

The following services can be provided by the ENGINEER at an additional cost to be negotiated if desired by the CITY.

1. Field investigations to resolve data discrepancies or acquire additional data beyond the hours provided for in Task 200.
2. Survey services for acquisition of location and elevation information.
3. Design services related to recommended improvements identified in Task 200 and/or Task 400.
4. Services related to the modification of existing databases and/or creation of new databases for the purpose of future data collection.