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Cahokia Heights, Illinois 62206
(618) 337-9500**

**City of Cahokia Heights
Code Enforcement
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(618) 337-9517**



**Curtis McCall Sr., Mayor
Richard Duncan, City Clerk**

**City of Cahokia Heights
Office of the City Engineer
4300 Bond Ave
Cahokia Heights, Illinois 62206
(618) 215-7225**

**City of Cahokia Heights
Water and Sewer Department
2525 Mousette Lane
Cahokia Heights, IL 62206
(618) 332-1222**

August 11, 2026

Via Electronic Mail

RE: Request for Proposal — Water System Modernization Phase II
GIS Integration, Asset Management Implementation, Analytical and Field Services Support for Ongoing Replacement of Water Meters and Fire Hydrants

The City of Cahokia Heights, Illinois, is pleased to provide you with the enclosed Request for Proposal for Water System Modernization – Phase II. The City is seeking support for software implementation, GIS data integration, asset management deployment, analytical services, field services, hosting, training, and operational support for the next phase of the City's Water System Modernization Program.

The City has completed the initial GIS design and mapping phase and has acquired equipment necessary for deployment of a Residential Automated Meter Reading system. Phase II is intended to move the City from planning and mapping into operational implementation, including verification of water system assets, integration of ESRI GIS data, deployment of an asset management and work order platform, mobile field operations, dashboards, reporting tools, and support for ongoing water meter and fire hydrant replacement activities.

A key objective of this project is to establish systems, workflows, databases, and operating procedures that can be maintained and administered by City personnel over the long term. Your proposal should therefore demonstrate technical capability, a clear implementation approach, training, documentation, knowledge transfer, data ownership, system transferability, and uninterrupted utility billing coordination during implementation.

The City also expects the selected supplier to support modernization efforts while preserving historical records associated with the former Village of Cahokia, former Village of Alorton, and former City of Centreville, which were merged into the City of Cahokia Heights in 2021. The City intends for this project to improve field operations, customer service, asset tracking, inventory management, work order documentation, grant reporting, and management decision-making.

Please review the enclosed RFP and submit a complete proposal in accordance with the requirements, scope of services, deliverables, and pricing options identified in the solicitation. Proposals are due no later than August 25, 2026. If you would like to request a copy of the RFP or have any questions regarding the solicitation, please contact me by email at sbutler@cahokiaillinois.org.

The City reserves all rights stated in the RFP, including the right to accept, reject, waive informalities, negotiate, or modify the procurement process in the best interest of the City.

Sincerely,

Sheldon Butler
City Engineer
City of Cahokia Heights
4300 Bond Avenue
Cahokia Heights, Illinois 62206
Phone: 618-215-7225
Email: sbutler@cahokiaillinois.org

REQUEST FOR PROPOSALS (RFP): WATER SYSTEM MODERNIZATION – PHASE II

GIS INTEGRATION, ASSET MANAGEMENT IMPLEMENTATION, ANALYTICAL AND FIELD SERVICES SUPPORT FOR ONGOING REPLACEMENT OF WATER METERS AND FIRE HYDRANTS

CITY OF CAHOKIA HEIGHTS, ILLINOIS

I. INTRODUCTION

The City of Cahokia Heights, Illinois ("City"), is soliciting proposals from qualified suppliers to provide, software implementation, data integration, analytical services, field services, hosting, training, and installation support necessary to complete the implementation phase of the City's Water System Modernization Program.

The City has completed the initial GIS design and mapping phase and has acquired equipment necessary for deployment of a Residential Automated Meter Reading (AMR) system. The City is now seeking qualified suppliers to implement, verify, deploy, maintain, and support the operational phase of the program.

The City of Cahokia Heights was formed through the merger of the Village of Cahokia, the Village of Alorton, and the City of Centreville in 2021. The successful proposer shall incorporate legacy jurisdictional boundaries, addresses, utility records, and asset inventories into a unified asset management system while preserving historical records and reporting requirements.

A primary objective of this procurement is to establish systems, workflows, databases, and operational procedures that can ultimately be operated, maintained, and administered by City personnel with minimal reliance on outside providers.

II. PROJECT OBJECTIVES

The objectives of this project are to:

- Deploy and implement a comprehensive AMR water meter management system.
- Integrate existing ESRI GIS data into an operational asset management platform with work order capabilities.
- Verify, update, and maintain utility asset records.
- Provide analytical and field services support for ongoing replacement, maintenance, inspection, and management of water meters and fire hydrants.
- Establish mobile field operations and real-time reporting capabilities.
- Create automated workflows between field operations, utility billing, customer service, finance, inventory management, and management reporting.
- Maintain uninterrupted utility billing operations throughout implementation.
- Provide dashboards, analytics, and performance monitoring tools for City staff and management.

- Establish systems that support long-term ownership, administration, and maintenance by City personnel.

III. PROJECT BACKGROUND

The City has completed the initial GIS design phase and maintains utility mapping and asset records within an ESRI environment. The next phase includes migration, verification, enhancement, and operational deployment of these datasets into an integrated asset management and work order environment.

The project will support utility operations, field inspections, meter replacement activities, hydrant inspections and replacements, maintenance management, inventory tracking, and customer service functions.

The City intends to maintain compatibility with existing utility billing and financial systems while enhancing field operations and reporting capabilities.

IV. SCOPE OF SERVICES

A. GIS DATA REVIEW, MIGRATION, AND INTEGRATION

The Consultant shall:

1. Review the City's existing ESRI geodatabase and supporting datasets.
2. Import GIS data into the proposed asset management and work order platform.
3. Verify data integrity and perform quality assurance and quality control reviews.
4. Reconcile and validate asset inventories.
5. Develop synchronization procedures between GIS, asset management, work order, and billing systems.
6. Configure user permissions, security protocols, backups, and audit trails.
7. Establish operational workflows supporting inspections, maintenance, replacements, and reporting.
8. Provide complete technical documentation.

B. GIS SCHEMA REVIEW AND ENHANCEMENT

The Consultant shall review and enhance the geodatabase schema to support utility asset management, inspections, maintenance, replacement tracking, inventory management, and lifecycle reporting.

The schema shall include, but not be limited to:

- Water meters, AMR devices, service lines, corporation stops, ball curb stops, service clamps, compression fittings, meter yokes, angle ball valves, check valves, meter pits, meter tiles, and meter lids.

- Fire hydrants, hydrant valves, hydrant laterals, and associated utility infrastructure and appurtenances.

The enhanced schema shall support:

- Asset condition ratings, inspection history, maintenance history, and installation history.
- GPS verification, photographic documentation, and warranty tracking.
- Work order linkage, billing account linkage, inventory tracking, lifecycle management, and performance analytics.

C. LEGACY COMMUNITY MAPPING

The Consultant shall develop and maintain GIS layers identifying:

- Former Village of Cahokia.
- Former Village of Alorton.
- Former City of Centreville.

The system shall preserve historical attribution while supporting current City operations, reporting, billing, and asset management.

Legacy addresses, installations, and service records shall remain identifiable and reportable within the system.

D. ASSET MANAGEMENT PLATFORM IMPLEMENTATION

The Consultant shall implement an integrated asset management platform supporting:

- Utility asset inventory and asset lifecycle management.
- Work order management, preventative maintenance scheduling, inspection management, and inventory management.
- Mobile field operations, reporting and analytics, GIS integration, and billing system integration.

The platform shall support real-time updates and field synchronization.

E. WORK ORDER MANAGEMENT SYSTEM

The Consultant shall implement a work order management platform capable of supporting:

- Meter replacement activities and meter inspections.
- Hydrant inspections, hydrant maintenance, and hydrant replacements.
- Customer service requests, utility maintenance activities, service requests, inventory management, preventative maintenance programs, and mobile workforce management.

The work order system shall integrate with utility billing processes and support automated workflows without disrupting billing operations or modifying financial records required for billing periods.

Operations and Maintenance Reporting

The system shall support identification, tracking, documentation, reporting, and lifecycle management of repairs, maintenance activities, inspections, and replacements associated with utility assets.

Operations and Maintenance reporting shall include, at a minimum:

- Service piping, compression fittings, ball curb stops, corporation stops, and service clamps.
- Meter yokes, angle ball valves, check valves, meter tiles, meter lids, meter pits, and associated components.
- Service line appurtenances, fire hydrant assemblies and appurtenances, and other components necessary to maintain operational service.

The system shall provide:

- Work order generation and assignment, inspection tracking, repair tracking, and labor tracking.
- Material tracking, equipment tracking, and before-and-after photographic documentation.
- GPS verification, installation history, service interruption tracking, and inventory usage reporting.
- Preventative maintenance scheduling and lifecycle and performance reporting.

All activities shall automatically update GIS and asset management records while maintaining compatibility with utility billing and financial systems.

F. DASHBOARDS, ANALYTICS, AND REPORTING

The Consultant shall develop dashboards and reporting tools displaying:

- Meter replacement progress, hydrant replacement progress, and geographic completion status.
- Daily production metrics, crew productivity, asset condition assessments, and work order status.
- Service request status, inventory utilization, financial tracking metrics, and grant reporting metrics.
- Operational performance indicators.

Dashboards shall include visual status indicators, map-based reporting, and executive-level summaries.

G. MOBILE FIELD OPERATIONS

The Consultant shall configure mobile applications supporting:

- Real-time data collection, GPS verification, asset inspections, and installation documentation.

- Work order completion, photograph capture, electronic forms, and inventory tracking.
- Offline operation with synchronization capability and quality assurance review.

H. WATER METER ASSET MANAGEMENT AND REPLACEMENT SUPPORT

The Consultant shall provide analytical, technical, and field services supporting the City's ongoing water meter replacement and asset management program.

Services may include:

- Field inventory verification, condition assessments, removal and replacement support, and AMR installation support.
- Testing and commissioning, GIS updates, asset management updates, and work order updates.
- GPS verification, photographic documentation, customer notification support, reporting and analytics, and quality assurance and quality control.

I. FIRE HYDRANT ASSET MANAGEMENT AND REPLACEMENT SUPPORT

The Consultant shall provide analytical, technical, and field services supporting the City's ongoing fire hydrant inspection, maintenance, repair, replacement, and asset management program. Services may include:

- Field inventory verification, GIS verification, condition assessments, and inspection and testing.
- Maintenance recommendations, removal and replacement support, and installation support.
- Operational testing, GPS verification, documentation and reporting, work order integration, and asset management updates.

Hydrants and appurtenances shall conform to applicable AWWA standards and local utility requirements.

V. FIELD INSTALLATION CREW SERVICES

The City intends to utilize City personnel for installation activities and may supplement operations with contractor personnel as necessary.

Proposers shall provide separate pricing schedules for:

Option 1 – Water Meter Installation Crews

- Daily rate per crew and hourly rate per crew.
- Crew composition and equipment included.
- Mobilization costs and production assumptions.

Option 2 – Fire Hydrant Installation Crews

- Daily rate per crew and hourly rate per crew.
- Crew composition and equipment included.
- Mobilization costs and production assumptions.

The City reserves the right to issue work assignments on an as-needed basis.

VI. DATA HOSTING, OWNERSHIP, AND TRANSFERABILITY

The Consultant may provide cloud hosting, software hosting, data storage, backup, disaster recovery, licensing, maintenance, and support services.

The City shall retain sole ownership of all data, databases, GIS records, asset inventories, work orders, reports, photographs, documentation, configurations, and information generated under this contract.

All systems shall be designed and configured to allow complete transfer of operations, administration, maintenance, and management to City personnel.

The Consultant shall ensure:

- Continuous City access to all data and administrative access for authorized City personnel.
- Export capability in industry-standard formats.
- Full documentation of configurations, workflows, dashboards, and integrations.
- No proprietary restrictions that would prevent future migration.
- Complete data export upon request.
- Transition assistance as requested by the City.
- Training sufficient to allow independent City operation.

Hosting services shall be proposed as a separate annual line item.

VII. DELIVERABLES

The successful proposer shall provide:

- Updated GIS database and enhanced geodatabase schema.
- Asset management platform, work order management system, and mobile field applications.
- Dashboards and reporting tools.
- Data migration reports and validation reports.
- Training materials, standard operating procedures, administrative manuals, system documentation, and knowledge transfer documentation.
- Final project report.