SCOPE OF WORK & SPECIFICATIONS

1. Project Description and Objectives

The Cherokee Nation OEH&E is requesting proposals from qualified contractors to provide a turnkey lead service line verification for approximately **6,500** locations. This includes planning, coordination, utility locating, excavation, inspection, documentation, restoration, reporting, and data delivery for participating public water systems within the Cherokee Nation Reservation.

Project objectives:

1. **Verify** the material composition of service lines at a targeted number of locations across multiple participating public water systems. Establish material on both the **public** and **private** side of the service, and identify any lead connector, gooseneck, or pigtail.
2. **Document** each verification with photographic evidence, positional data, and standardized field attributes. These must be sufficient to satisfy Lead and Copper Rule Improvements (LCRI) recordkeeping requirements and Oklahoma Department of Environmental Quality (ODEQ) review.
3. **Restore** each excavation site to a condition equal to or better than its pre-existing condition, with minimal disruption to customers and property owners.
4. **Integrate** all field data into the designated service line inventory software platform. The format must be one each participating system can maintain and report from after project close-out.
5. **Minimize burden** on participating systems, which have limited staff. The Contractor is expected to operate with a high degree of self-sufficiency.

2. Project Area and Quantities

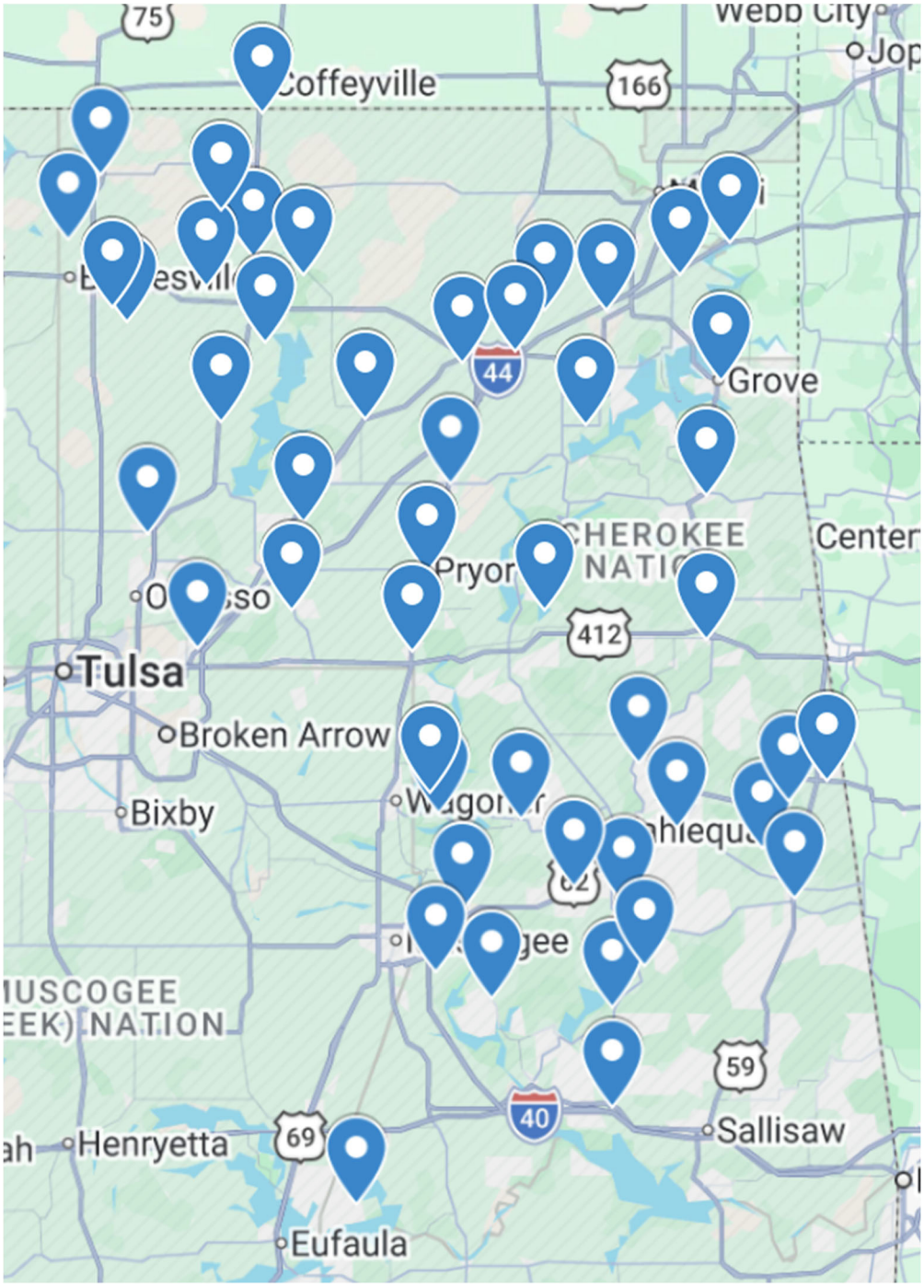
2.1 Geographic Area

All work will be performed within the boundaries of the Cherokee Nation Reservation in northeastern Oklahoma. This includes portions of Adair, Cherokee, Craig, Delaware, Mayes, McIntosh, Muskogee, Nowata, Ottawa, Rogers, Sequoyah, Tulsa, Wagoner, and Washington counties. The work locations are predominantly rural. Expect long service laterals, gravel and county roads, unrecorded easements, and variable meter setting configurations.

2.2 Participating Systems

The Cherokee Nation anticipates that approximately **50** public water systems will participate. These include rural water districts organized under Title 82 of the Oklahoma Statutes and municipal systems. A preliminary map of participating systems is provided in **Figure 01**, and a list of systems with their PWSIDs, service connection counts, and reported unknown counts will be provided upon contract.

Figure 01



These locations are estimates only and do not constitute a guarantee of work. The resulting contract will be an indefinite-quantity, unit-price agreement. Work will be authorized by individual task orders issued per participating system.

Scope of Services

3.1 Task 1 — Project Planning and Mobilization

The Contractor shall:

1. Attend a project kickoff meeting with OEHE and, as directed, individual system orientation meetings.
2. Prepare a Project Management Plan within 30 calendar days of Notice to Proceed. It shall address:
    a. organization and staffing, crew composition and quantity, and equipment
    b. per-system sequencing and production rate assumptions
    c. quality control and safety
    d. contingency for weather and access refusals
3. Prepare a Verification Work Plan for each participating system. Each plan shall include the target location list, verification method decision tree, field data dictionary, photo protocol, restoration standards by surface type, and customer contact approach. OEHE and the system must review and accept each plan before field work begins in that system.
4. Prepare a Health and Safety Plan meeting OSHA 29 CFR 1926 requirements. It shall cover excavation and trenching (Subpart P), traffic control, and heat and cold illness prevention.
5. Prepare a Public Communication and Customer Access Plan in accordance with the OEHE's protocol and Task 2.
6. Verify and document the location and configuration of each system's typical meter setting, curb stop, and ownership demarcation point. Ownership boundaries vary among participating systems and are not uniformly documented.

3.2 Task 2 — Communication and Coordination

The Contractor shall designate a single Project Manager as the primary point of contact and shall coordinate with the following parties.

1. **Cherokee Nation.**
    a. Provide a written weekly progress report and participate in a monthly recurring progress call with OEHE.
    b. Notify OEHE within 12 hours (or within reason) of any incident, damage claim, customer complaint, encounter with lead pipe, or condition requiring immediate response.

2. **Participating systems.** Coordinate the following with each system's designated contact: scheduling, easement and access questions, valve and curb stop operation, service interruptions, and post-work notifications. <u>Only system personnel shall operate system valves and curb stops unless the system provides written authorization otherwise.</u>

3. **Customers and property owners.**
    a. Provide advance notice of scheduled work by mail, door hanger, and, where phone numbers are available, direct contact.
    b. The Contractor shall prepare the notification materials, subject to OEHE and system approval. Materials shall be branded to identify the Cherokee Nation and participating system as the sponsoring utility.
    c. Materials shall be available in English. OEHE may require Cherokee-language and Cherokee syllabary elements on customer-facing materials.

4. **Right of entry.**
    a. Obtain written right-of-entry or consent for any work on private property beyond the system's easement
    b. Document and report all refusals, non-responses, and inaccessible locations in the platform. A non-response requires a minimum of three documented contact attempts by at least two methods.
    c. Log refusals and non-responses in enough detail to support the system's LCRI documentation of good-faith effort.

5. **Third-party contractors and utilities.** Coordinate with other utilities, locating services (811), ODOT, county road departments, and any concurrent construction contractors working in the same areas.

6. **Complaints.** Maintain a customer complaint log and resolve complaints within five business days. Escalate unresolved matters to OEHE.

3.3 Task 3 — Utility Locating, Permitting, and Regulatory Compliance

The Contractor shall:

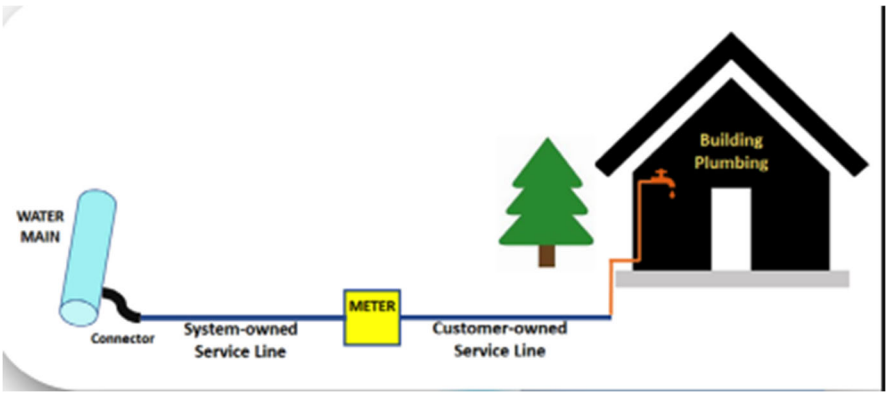
1. Submit locate requests to Oklahoma One-Call (Okie811) in compliance with the Oklahoma Underground Facility Damage Prevention Act, 63 O.S. § 142.1 et seq. Allow the statutory notice period and confirm positive response from all facility operators before any excavation. Perform white-lining where required.
2. Arrange and pay for private utility locating for facilities not covered by Okie811 membership. This includes facilities of non-member operators and customer-owned facilities on private property, such as:
    a. irrigation, propane, and septic;
    b. invisible fence;
    c. electrical service to outbuildings;
    d. private wells.
3. Obtain and pay for all applicable permits, including ODOT right-of-way permits, county road crossing permits, municipal excavation and street cut permits, and railroad or other crossing permits.
4. Provide traffic control conforming to the current MUTCD and to the requirements of the roadway authority having jurisdiction, including certified flaggers where required.

5. Comply with all applicable federal, state, tribal, and local regulations, including OSHA, ODEQ, and Cherokee Nation environmental and cultural resource requirements. The Contractor shall immediately stop work and notify OEHE upon encountering any archaeological material, human remains, or item of cultural significance. Work at that location shall not resume until the Cherokee Nation Historic Preservation Office authorizes it.
6. Maintain sanitary practices consistent with AWWA C651 whenever a service line, meter setting, or distribution appurtenance is opened to the atmosphere. This includes disinfection and flushing as directed by the system.

3.4 Task 4 — Physical Verification

3.4.1 Verification Methods

The Contractor shall determine service line material visually on **both sides** of the ownership demarcation at each assigned location. The Contractor shall use the least intrusive method capable of producing a defensible determination. This image is from the ODEQ definition of service line material.



- Non-destructive interior/exterior inspection. Visual inspection, scratch test, and magnet test at the point of entry, meter pit, basement, crawlspace, or other exposed run, where a continuous and representative segment can be observed.
- Curb box / meter pit inspection. Includes borescope or camera inspection where the configuration permits observation of pipe material without excavation.
- Vacuum excavation (hydrovac or air vacuum) is the preferred excavation method, particularly in congested, hard-surfaced, or landscaped areas.
- Hand excavation. Where vacuum excavation is impractical or where required to protect adjacent facilities.
- Mechanical excavation. Permitted only with prior written approval from OEHE and the participating system.

Determinations based solely on records, customer report, or predictive modeling are **not** acceptable as physical verification under this contract.

3.4.2 Verification Requirements

At each location, the Contractor shall:

1. Expose and positively identify the material of the **system-owned portion** of the service line.
2. Expose and positively identify the material of the **customer-owned portion** of the service line.
3. Identify the presence, material, and location of any **connector, gooseneck, or pigtail**.
4. Where a galvanized pipe is found, determine and document whether it is or ever was **downstream of a lead service line or lead connector** (GRR determination), to the extent determinable in the field. Where field evidence is inconclusive, flag the location for the system's records-based determination.
5. Classify each service line consistent with the LCRI categories: **lead, galvanized requiring replacement, non-lead, or lead status unknown**. Record the basis for each classification.
6. Where a verification is inconclusive, document the reason and recommend a follow-up method rather than assigning a material classification.
7. Excavate to a depth sufficient to observe a clean, representative length of pipe. The minimum exposed length is 36 inches on each side. If an obstruction prevents this, document it photographically.
8. Perform scratch and magnet testing on all exposed metallic pipe and photograph the result.
9. Not disturb, cut, tap, or replace any service line without prior authorization. This is a verification contract, not a replacement contract. If a leak, break, or unsafe condition is created or discovered, immediately notify the participating system and OEHE, and cooperate with the system's repair.
10. Perform work in a manner that avoids interruption of service. Where a brief interruption is unavoidable, coordinate in advance with the system and provide customer notice.

3.5 Task 5 — Data and Photographic Documentation

3.5.1 Field Data

The Contractor shall collect field data electronically, with the preferred OEHE method; paper forms are for backup only. At a minimum, the Contractor shall collect the following at each location:

- System name and PWSID; service address; parcel identifier; customer account and/or meter number
- Date, time, crew, and technician identification
- Verification method used

- GPS coordinates of the verification point, at sub-meter accuracy, in a stated coordinate system
- Public-side material, size, and depth
- Private-side material, size, and depth
- Connector/gooseneck presence and material
- Galvanized-downstream-of-lead determination
- LCRI classification and basis
- Meter setting type, curb stop presence and condition, and ownership demarcation observed
- Evidence of previous repair, partial replacement, splice, or coupling
- Surface type and restoration performed
- Access outcome: completed, refused, no-contact, inaccessible, or abandoned service
- Field notes and anomalies

OEHE and each participating system shall review and approve the final field data dictionary before field work begins. The dictionary must align with the target software platform's import schema and with ODEQ's inventory reporting format.

3.5.2 Photographic Documentation

Each excavated location requires, at a minimum, the following photographs, each geotagged and timestamped:

1. Pre-work site condition, showing the structure and address
2. Locate marks prior to excavation
3. Open excavation with a legible identification board showing address, date, system, and location ID
4. Public-side pipe, clean and in focus, with scale reference
5. Private-side pipe, clean and in focus, with scale reference
6. Connector or gooseneck, if present
7. Scratch test and magnet test results
8. Completed backfill prior to surface restoration
9. Final restored condition

Photographs shall be of sufficient resolution to allow independent material determination on review. Photographs shall be named and indexed to the location identifier and delivered in an organized structure.

3.6 Task 6 — Site Restoration

The Contractor shall:

1. Backfill all excavations with suitable material in lifts, compacted to prevent settlement. Restore all disturbed surfaces to a condition equal to or better than pre-existing.
2. Restore surfaces in kind, including:
    a. turf (topsoil, seed or sod as specified, with establishment);

    b. gravel drives, asphalt, and concrete;
    c. decorative rock, mulch beds, and landscaping.
3. Repair or replace any damaged irrigation, landscaping, fencing, mailbox, structure, or utility at the Contractor's expense.
4. Remove all spoil, water, debris, and equipment from each site at the end of each work day. No site shall be left open overnight unless it is secured and OEHE and the participating system have approved in advance.
5. Warrant all restoration for 60 days from acceptance, including settlement and failure of vegetation establishment. Return to correct deficiencies within fifteen calendar days of notice.
6. Manage and dispose of all excavated spoil, vacuum slurry, and water in accordance with applicable regulations. Disposal locations require prior OEHE approval.

3.7 Task 7 — Reporting

The Contractor shall provide:

1. Weekly progress reports covering:
    a. locations completed by system and cumulative progress against target
    b. material findings summary
    c. access refusals and non-responses
    d. issues and safety incidents
    e. next week's schedule.
2. Monthly reports covering the weekly content plus schedule and budget status, quantities completed by pay item, quality control summary, and a photographic sample.
3. Per-system verification report, upon completion of each participating system. The report shall be in a form the system can submit to ODEQ and shall include:
    a. methodology and locations verified
    b. results summary by classification, before and after verification
    c. remaining unknowns, with the reason each remains unknown
    d. GRR determinations
    e. documented access refusals and the good-faith-effort record
    f. restoration summary
    g. full data and photo appendices.
4. Final project report covering aggregate results across all participating systems, lessons learned, recommendations for remaining unknowns, and recommendations for LCRI replacement planning.
5. Immediate notification to OEHE and the participating system upon any confirmed lead service line or lead connector, so that the system can meet its LCRI customer notification obligations. The Contractor is not responsible for issuing regulatory notifications but is responsible for timely transmittal of findings.

3.8 Task 8 — Data Integration

The Contractor shall:

1. Upload, integrate, and quality-check all verification data and photographs in The OEHE's preferred software or the platform.
2. Anticipated platforms include GIS-based inventory systems and dedicated lead service line inventory management software.
3. Reconcile field results against each system's existing inventory record and flag conflicts for system resolution.
4. Deliver data in an open, non-proprietary format in addition to platform integration: geodatabase, shapefile, CSV, and geotagged image files. This ensures participating systems retain usable records independent of any subscription.
5. Provide up to ten hours of training per participating system on accessing and maintaining the delivered data.
6. Perform documented QA/QC on a minimum of fifteen percent of records, including field re-verification of a random sample. Correct systematic errors at no cost to the Nation.

All data collected under this contract is the property of the Cherokee Nation and the applicable participating system.

4. Deliverables

1	Project Management Plan
2	Health and Safety Plan
3	Public Communication and Customer Access Plan
4	System-specific Verification Work Plan
5	Weekly progress reports
6	Monthly reports
7	Per-system verification report and data package
8	Platform data integration and QA/QC certification
9	Training
10	Final project report

5. Contractor Qualifications and Minimum Requirements

5.1 Minimum Qualifications

Offerors must demonstrate all of the following. Proposals that do not are subject to rejection as non-responsive.

1. **Experience.** A proven history of performing water utility field services, and completion of at least two projects involving service line material verification, potholing, or comparable subsurface utility investigation. At least one reference project shall involve LCRR or LCRI service line inventory work.
2. **Licensing.** Properly licensed to perform the work in the State of Oklahoma and registered to do business in Oklahoma (if applicable).
3. **Equipment.** Owned or committed access to vacuum excavation and mechanical excavation equipment adequate for the proposed production rate.
4. **Safety.** A documented safety program.
5. **Personnel screening.** All personnel performing work on private property may be asked to pass a background check meeting Cherokee Nation requirements. Personnel shall be uniformed, wear company identification, and operate marked vehicles.
6. **Bonding and insurance capacity.** Meet the insurance requirements stated in the Terms and Conditions of this RFP.
7. **Financial standing.** Not currently debarred, suspended, or otherwise excluded from federal or tribal procurement. Offerors shall certify this.

5.2 Key Personnel

Identify and provide résumés for, at a minimum, the Project Manager, Field Superintendent, Data/GIS Manager, and Safety Officer. Key personnel shall not be substituted without prior written approval of OEHE.

5.3 Subcontractors

Identify all proposed subcontractors, the scope each will perform, and their qualifications. Subcontracting of utility locating, restoration, and traffic control is expected and permitted. The Contractor shall self-perform not less than [30] percent of the contract value.