

REQUEST FOR SEALED BID AUTOMATED METER READING/ADVANCED METERING INFRASTRUCTURE SYSTEM

Questions Deadline: MAY 20, 2021, 3:00 PM, CST Bids Due: MAY 27, 2021, 2:00 PM, CST

Bids for the services specified will be received by the City of Blue Ridge until the date and time as indicated above. Please submit one (1) original sealed bid, seven (7) copies of the bid in hard copy only. The bid package can be found on the City's Website: www.blueridgecity.com

Delivery and Mailing Address: City of Blue Ridge

City Secretary's Office 200 S Main Street Blue Ridge, TX 75424

Late submissions will not be considered. Sealed bids must be submitted with the Bidder's name and address clearly indicated on the front of the envelope. Additional instructions for preparing a bid are provided within.

BIDDERS ARE STRONGLY ENCOURAGED TO CAREFULLY READ THE ENTIRE DOCUMENT PRIOR TO SUBMITTING A RESPONSE.

For questions regarding this REQUEST FOR SEALED BID contact:

Edie Sims City Secretary 972-752-5791

esims@blueridgecity.com

Please note that all submissions must be received at the designated location by the deadline shown. Bids received after the deadline will not be considered for the award of the contract and will be returned unopened. The City of Blue Ridge reserves the right to consider the most advantageous bid thereof, or to reject the bid. Unreasonable (or "unbalanced") unit prices will authorize the City of Blue Ridge to reject any bid.

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INTRODUCTION

General Information

The City of Blue Ridge (City) is soliciting Sealed Bid(s) from vendors who are interested and qualified to provide a turn-key installed Automated Meter Reading system (AMR). Scope of work includes, but is not limited to, automated meters procurement, hardware, software, and integration with existing systems, testing, and training.

AMR technology should provide the City with a more efficient method of collecting meter reads at regular intervals. The AMR system should collect consumption data using a drive- by system, a mobile protocol, repeaters located on stationary towers, or some other collection system(s) that will reduce the need for monthly physical reading of each meter.

The bids should include schedule, and information related to pricing for all meters, hardware, software, installation (of software), and training.

The City strongly desires to contract with a single vendor to procure meters, software, and hardware necessary to accomplish all work and/or services outlined in this Request for Sealed Bid.

Interested parties should submit one (1) original, seven (7) copies of the bid which should be returned in a sealed envelope bearing the name and address of the respondent and CITY OF BLUE RIDGE SEALED BID FOR WATER METERS. Response packages will be accepted until 2:00 pm on MAY 27, 2021.

SCHEDULE OF IMPORTANT DATES

The tentative schedule for this REQUEST FOR SEALED BID is as follows. The City reserves the right to change the schedule of dates as it deems necessary.

Release REQUEST FOR SEALED BID to Vendors and begin advertisement
Deadline for Questions & Inquiries

MAY 20, 2021 3:00 p.m.
Bid Submission Deadline

MAY 27, 2021 2:00 p.m.
Earliest Award by City

JUNE 1, 2021 7:00 p.m.

BACKGROUND INFORMATION

Current Environment

Meter reading is currently conducted by Public Works staff. Currently, the meter system is divided into four meter books with one monthly billing cycle. Meters are read around the 17th of the month and continued until completed. The typical timeframe to read all four books is 2 days, however if inclement weather or excessive rain, the timeframe could extend to 3 days. All meters are located inside the City Limits or within the City's ETJ. The City currently manually reads its meters on a monthly basis. The data is then manually keyed into to the ASYST utility billing software system.

The City currently has 506 conventional water meters with sizes ranging from 5/8" to 2". The conventional system consists of a mixture of meters but primarily Master Meter. The breakdown of existing conventional meters is as follows:

5/8-inch meters – 499

2-inch meters -10

All existing meter counts included in this REQUEST FOR SEALED BID are approximate and are subject to deviation. The bid shall include unit costs for each meter size and compensation will only be provided for actual meters installed.

SCOPE OF WORK

Objectives

The City seeks to replace the existing meter system including meters with an AMR system.

The City seeks to acquire these systems that meet the following objectives:

- 1) Meter reading in the most cost-effective manner possible
- 2) Ability to perform advanced data analysis of incremental meter readings
- 3) Support conservation monitoring and enforcement
- 4) Provide accurate meter readings

Vendors should be prepared to review the existing system configuration and set up and to make specific recommendations for improvement. To facilitate this review, the City will host a pre-bid conference to answer any questions prior to the due date. This meeting will be held at Blue Ridge City Hall, 200 S. Main Street, Blue Ridge, Texas 75424 on MAY 20, 2021 at 3:00 PM. Interested responders are highly encouraged to attend this session.

Any addenda issued for the project will be posted to <u>www.blueridgecity.com</u> MAY 20, 2021, by 5:00pm. Vendors must acknowledge any addenda issued on the outside of the sealed bid package.

System Requirements

The City requires a turn-key system compatible with the ASYST billing software. The intent of this REQUEST FOR SEALED BID is to allow vendors to provide the City with the best solution given the City's current metering configuration and requirements.

The following system components are desired by the City and should be considered minimum system components. If the bid does not meet all of the listed desired components, an exclusion statement must explicitly be included in Tab H of the bid. Failure to exclude any of the requirements will be considered an affirmative response to the requirements being included in the bid price.

1) System and Meters Functionality

- a) All meters shall be potable cold water meters conforming to one of the following specifications:
 - i) AWWA C-708 Multi-Jet
 - ii) AWWA C-700 Positive Displacement iii) AWWA C-712 Single-Jet
- b) The meter reading system shall deliver tamper status information for all water customers.
- c) The end-point technology shall measure the possibility of downstream leaks by using consumption thresholds. It shall also set alerts for backflow / cross connection, high consumption, irrigation violations, and zero consumption.
- d) Meters shall be guaranteed to be free from defects in materials and workmanship for a minimum of 10 years from the date of installation. The vendor shall provide a 10 year AWWA New Meter Accuracy Guarantee.

2) Network and Data Collection Functionality

- a) The network technology shall represent each meter's and network component's functional status in the form of a mapping display.
- b) The register shall store at least 60 days of consumption points in 60 seconds to 1 hour intervals.
- c) The system shall be compatible with Windows 10 and upgradable to future versions of Windows operating systems.
- d) The system shall support migration of 12 months of historical meter data for the purpose of analyzing usage patterns.
- e) The City desires that the AMR system functions, reports, and data on the control computer be securely accessible remotely by properly authorized persons.

3) Miscellaneous Requirements

- a) Existing meters shall be photographed with its consumption displayed prior to removal. Photographs and a spreadsheet detailing the address, consumption level, serial number of the meter, and new serial number shall be delivered to the City on a periodic basis throughout the installation phase.
- b) Existing meters shall be delivered to the City of Blue Ridge Public Works Shop after removal. The City will dispose of meters at the end of the project. If the vendor chooses to retain the meters, the bid shall include a specific cost adjustment accordingly.

Overall Bid Requirements

- 1) The bids must include:
 - a) pricing for data collection hardware and software;
 - b) pricing for meters in standard sizes ranging from 5/8" to 2";
 - c) installation and training costs for data collection hardware and software;

d) estimated life span of the meters and warranty information.

Deliverables

The deliverables shall be accepted by the City when (1) the deliverables have been delivered, installed and made ready for the use of the City's site in accordance with the installation and operating specifications; (2) City has tested the deliverables and the deliverables have passed testing; (3) City agrees that deliverables meet or exceed the specifications and those contained in the scope of work and order concerning performance and capabilities of the deliverables, and (4) training has been completed satisfactorily according to the Director of Public Works and the City Secretary.

Acceptance Testing

Once the deliverables are installed in City's premises as specified herein with regard to the Final Installation Date, the vendor shall notify the City in writing that the deliverables as specified have been installed, are in good working order, and are ready for use; that the modifications or enhancements are completed as defined and specified herein, are in good working order, ready for use, and to the best of the vendor's knowledge is one hundred percent (100%) operational and that the deliverables as installed are ready for testing. At that point, the City shall have thirty (30) working days to perform and complete acceptance testing on-site. If the deliverables pass such testing, the City shall so notify the vendor in writing termed the Certificate of Acceptance.

If the deliverables as installed fail to pass such testing, City shall notify the vendor in writing and the vendor shall then have ten (10) working days to correct any failure. The vendor shall then certify to the City that the failure has been corrected and the City shall have ten (10) working days for additional testing, at which time the City shall supply the Certificate of Acceptance if the deliverables pass testing. If the deliverables fail testing twice, at the City's option: (1) the correction period may be extended as agreed by the parties; or (2) City may terminate the Agreement, return the specifications, product and documentation to the vendor and the vendor will refund to the City any payments previously given to the vendor for the deliverables and modifications or enhancement pursuant to the Agreement.

TERMS AND CONDITIONS

Receipt of Bids

The submitted bid(s) must be received by the City Secretary prior to the time and date specified. The mere fact that the bid was dispatched will not be considered; the vendor must ensure that the bid is actually delivered. Bids submitted via facsimile will not be accepted for any reason.

Ouestions and Inquiries

Questions and inquiries about this REQUEST FOR SEALED BID should be directed to Edie Sims, City Secretary at (972) 752-5791 or esims@blueridgecity.com. Questions should be submitted in writing on or before 3:00 pm on the date specified herein.

<u>Cartage</u>. Freight & Transportation Charges: No charge will be allowed for cartage or packing unless by special agreement. Unit prices shall include freight and delivery charges to locations as specified by the City.

Reservations

The City reserves the right to accept or reject any or all bids as a result of this request, to negotiate with all qualified sources, or to cancel, in part or in its entirety, this REQUEST FOR SEALED BID if found to be in the best interest of the City. Additionally, although the City desires to contract with a single vendor for all work/services to be provided, the City reserves the right to split the work/services and deal with multiple vendors if it is deemed to be in the City's best interest. All bids become the property of the City of Blue Ridge.

Reimbursements

There is no express or implied obligation for the City of Blue Ridge to reimburse responding vendors for any expenses incurred in preparing bids in response to this REQUEST FOR SEALED BID and the City will not reimburse responding vendors for these expenses, nor will the City pay any subsequent costs associated with the provision of any additional information or presentation, or to procure a contract for these services.

Communication

The City shall not be responsible for any verbal communication between any employee of the City and any potential vendor. Only written requirements and qualifications will be considered.

Management

Should there be a change in ownership or management; the contract shall be canceled unless a mutual agreement is reached with the new owner or manager to continue the contract with its present provisions and prices. This contract is nontransferable by either party.

Insurance

The vendor shall procure and maintain throughout the duration of the project at its sole expense insurance against claims for injuries to persons or damage to property which may arise from or in connection with performance of the work. Policies shall include Minimum Bodily Injury Limits of \$300,000 per occurrence and Property Damage Insurance with minimum limits of \$50,000 per occurrence. Automobile Liability Insurance for all owned, non-owned, leased, and hired vehicles with minimum limits for Bodily Injury of \$100,000 each person, \$300,000 each occurrence and Property Damage minimum limits of \$50,000 for each occurrence. Coverage shall be maintained for two years after the termination of the contract. The City, its officers, employees, and elected officials shall be named as additional insured to all applicable coverage.

Payment Terms

Invoices must be submitted by the vendor in duplicate to the City of Blue Ridge, 200 S Main Street, Blue Ridge, Texas 75424. All invoices to be paid in full within 30 days after satisfactory delivery and billing of goods or services.

Security

Each bid must be accompanied by a bid bond of the Service Provider in an amount equal to \$25,000 as a guarantee on the part of the Service Provider that will, if called upon to do so, accept and enter into a contract on such form as mutually agreed upon by the City and the selected Service Provider. The bid shall address all the material provisions of the bid and response thereto, the work to be performed by such Bid, the rates stated therein and to furnish a corporate surety for its faithful and entire fulfillment. Bid bonds will be returned promptly after the City and the selected Service Provider have executed the Contract, or, if no Service Provider's Bid has been selected within ninety

(90) days after the date of the opening of the Bids, upon demand of the Service Provider at any time thereafter, so long as he has not been notified of the acceptance of his Bid.

A letter shall accompany the Bid from a corporate surety satisfactory to the City stating that the Performance Bond will be furnished by it to the person submitting the Bid in the event they have been selected as the successful Service Provider. Such letter is to be signed by an authorized representative of the surety together with a certified and effectively dated copy of his power of attorney attached thereto.

The successful Service Provider will be required to furnish a Performance Bond as security for the faithful performance of this Contract (see Section 6. SECURITY FOR FAITHFUL PERFORMANCE).

The Service Provider shall pay premium for the bonds described above. A certificate from the surety showing that the bond premiums are paid in full shall accompany the bond. Such certificate shall be submitted to the City with the bond on an annual basis.

Pricing

All pricing submitted with the bid must be guaranteed for a minimum of ninety (90) days.

Negotiations

Negotiations may be conducted with as many as three of the responsible vendor(s) that submit bids that are reasonably suitable for selection. All vendor(s) reasonably suitable for selection based on criteria set forth in this REQUEST FOR SEALED BID may be given an opportunity to make a presentation and/or interview with the Project Team. Following any presentations and/or interviews, vendors will be ranked in order of preference and contract negotiations will begin with the top ranked vendor. Should negotiations with the highest ranked vendor fail to yield a contract or if the vendor is unable to execute said contract, negotiations will be formally ended and then commence with the second highest ranked vendor, etc.

Award of Contract

Award of the contract shall be made to the responsible vendor(s) whose bid is determined to be the best evaluated offer resulting from the bid and negotiation process, taking into consideration the relative importance of price and other factors set forth in this REQUEST FOR SEALED BID. Awarding will not be based on availability of product.

EVALUATION FACTORS

After receipt of bids, the City of Blue Ridge will use the following criteria in the selection process. These evaluation factors will assist in determining which vendors, up to three, will be selected for follow-up presentations. The City may, at its sole discretion, elect not to conduct presentations and begin contract negotiations with the top-ranked vendors as described in this REQUEST FOR SEALED BID.

- 30% Rates and expenses
- 25% Qualifications and experience
- 15% Project timeline
- Project design and methodology including technical approach and understanding of the scope of the project.
- 10% Single vendor overseeing entire project.
- 5% References

FORMAT REQUIREMENTS

You may respond in writing by sending, one (1) original, seven (7) copies of the bid in a sealed envelope bearing the name and address of the respondent.

The City of Blue Ridge requires comprehensive responses to every section within this REQUEST FOR SEALED BID.

To facilitate the review of the responses, vendors shall follow the described bid format. The intent of the bid format requirements is to expedite review and evaluation. It is not the intent to constrain vendors with regard to content, but to assure that the specific requirements set forth in this REQUEST FOR SEALED BID are addressed in a uniform manner amenable to review and evaluation.

TAB A Qualifications and Experience

- 1) Describe the qualifications and experience of the vendor in the last thirty-six (36) months in performing services in similar size and scope. Particular emphasis will be placed on vendors that have provided similar services in municipalities.
- 2) Identify the project manager and each individual who will work on this project.

TAB B Rates and Expenses (System)

- 1) Provide a proposed fee schedule for the system installation. Such as hardware, software, meter reading equipment, and other appurtenance to facilitate automated meter reading.
- 2) Expenses not specifically listed will not be considered reimbursable.

TAB C Rates and Expenses (Meters)

- 1) Provide a proposed fee schedule. Please discuss the rationale for this proposed schedule.
- 2) Expenses not specifically listed will not be considered reimbursable.

TAB D Project Timeline

1) Bids must provide chronological timeline of each task or event and the estimated time required to complete the engagement.

TAB E Project Design and Methodology

- 1) Bids must indicate the technical approach used and a clear understanding of the scope of the work, including a detailed project plan for this project outlying major tasks and responsibilities, time frames, and staff assigned for each category of the scope of work identified above.
- 2) Bids shall clearly distinguish the vendor's duties and responsibilities and those of the City.

- Absence of this distinction shall mean the vendor is assuming full responsibility of all tasks.
- 3) Describe the process of City staff adding additional meters to the system as new subdivisions are constructed.

TAB F Oversight from Single Vendor

- 1) The City strongly desires to contract with a single vendor to accomplish all work and/or services outlined in this Request for Bid.
- 2) Any proposed subcontractor must be identified in the bid response.
- 3) Any work not conducted by the Vendor or his subcontractor must be disclosed.

TAB G References

1) Provide references for similarly successful projects from three government agencies, including the name of the agency, contact name, telephone, fax and email address. Reference listings should also include any relevant project numbers and contract prices.

TAB H Exclusions, acknowledgement of any addenda issued.

TECHNICAL SPECIFICATIONS

1. AMR System - General

- **1.1.** The AMR system is understood to consist of:
 - **1.1.1.** Meters with direct read registers and integrated Meter Interface Units (MIUs) capable of output that can be captured by RF reading devices;
 - **1.1.2.** Mobile and/or fixed location data collection units (DCUs) capable of capturing the radio signals from the MIUs;
 - **1.1.3.** A communication system or data transfer system capable of transferring the data from the data collection units to the meter reading system control computer;
 - **1.1.4.** The Route Management Software necessary to operate the system and interface to the customer information and billing system;
 - **1.1.5.** Installation, training and documentation sufficient to enable the personnel to adequately operate and maintain the system.
- **1.2.** Communication channels. Must support two-way communications over an FCC Part 90-licensed frequency with the MIU and provide such functionality as priority alarms, endpoint reprogramming, and firmware upgrades via a Mobile Data Collector Unit. Transceiver must utilize the 450 470 MHz FCC Part 90-licensed frequency.
- **1.3. Accuracy**. The system shall include provisions to ensure data accuracy (for example, error checking) to prevent accidental loss of data.
- **1.4. System integrity.** The system must ensure data integrity, accuracy (so that the reading on the meter, ID numbers, and other data are always correct). The MIUs must ensure against loss of data.

1.5. Environmental tolerances. All electronic system components must operate within a temperature range of 4° F to +140° F, and a humidity range of 0% to 100% noncondensing.

2. METER INTERFACE UNIT (MIU)

2.1. Operation Specifications.

- **2.1.1.** The MIU must operate on an FCC-licensed frequency within the 450 MHz to 470 MHz licensed band and operate within FCC Part 90 regulations for this band. The output power of the device will be no less than 20mw and will be governed by their conformance to these relevant FCC standards.
- **2.1.2.** No programming of the MIU must be necessary during field installation. The MIU must be shipped pre-programmed to the customer and must be able to be initialized via flow or magnetic reboot.

2.1.3. The MIU:

- **2.1.3.1.**Must utilize two-way communications with the Mobile Data Collector Unit to allow for Remote Communications for reprogramming, time synchronization, firmware upgrades, alarm notifications, and mode migration to fixed network mode.
- **2.1.3.2.** Must utilize data logging to deliver usage data in 15-minute intervals.

2.2. Physical Characteristics – Integrated Unit.

- **2.2.1.** Meter Interface Units (MIUs) must be integrated and permanently sealed within the meter register using a stainless-steel register base, wrap around gasket and tempered glass lens. The unit must be battery operated using two 3.6volt Lithium Thionyl Chloride batteries for long operational life greater than 10 years.
- **2.2.2.** The MIU must transmit the meter reading and other information via a 450-470 MHz FCC Part 90 licensed frequency to a Mobile Data Collector Unit.
- **2.2.3.** The MIU must be capable of being configured to transmit priority alarms for leak, reverse flow events, low battery, and magnetic tamper.
- **2.2.4.** The MIU must be capable of two-way communication for field programming of a user selected ID number or for resetting specific alarm codes.
- **2.2.5.** Unit must be able to be programmed remotely and programming must be accomplished without removing the MIU from a pit, basement, or wall application.

2.2.6. The MIU:

- **2.2.6.1.**Must be capable of operating at temperatures of (-4°F to +149°F) and operating humidity of 0 to 95% condensing.
- **2.2.6.2.**Must incorporate a dual band antenna capable of providing consistent and reliable connections while the pit environment is flooded or dry.
- **2.2.6.3.**Range will not be affected substantially when the pit is partially flooded.
- **2.2.6.4.**Must have an integrated unit option where the power source, RF circuitry, meter register, and antenna are fully enclosed in a single IP-68 rated ruggedized enclosure.
- **2.2.6.5.**Must have an integrated unit option where the power source, RF circuitry, and meter register are connected to an external antenna in an IP-68 rated ruggedized solution.

- **2.2.6.6.**The MIU must be compatible with use on multiple brands of water meters. These units must have programmable gear ratios and available with LCD displays. LCDs must permanently display consumption status and alarms: Totalization, Rate of flow, Unit of Measure, Billable Units, Low Battery Alarm, Direction of flow.
- **2.2.6.7.**Each unit must be supplied with an appropriate register housing and adapter to retrofit the current make and model of 5/8" through 2" meters of the following meter manufacturers: Master Meter, Sensus SRII, AMCO/Elster C700, Hersey 400 / 500 Series, and Neptune T-10,

2.3. Physical Characteristics – Non-Integrated (external) Unit.

- **2.3.1.** Non-integrated or wired MIUs are acceptable for commercial meters or to provide connectivity to meter brands other than the brand proposed.
- **2.3.2.** The MIUs must be housed within a high-density ABS plastic enclosure.
- **2.3.3.** The unit must be battery operated using two 3.6volt Lithium Thionyl Chloride batteries for long operational life greater than 10 years.
- **2.3.4.** The MIU must transmit the meter reading and other information via a 450-470 MHz FCC Part 90 licensed frequency to a Mobile Data Collector Unit.
- **2.3.5.** The MIU must be capable of being configured to transmit priority alarms for leak, reverse flow events, and low battery.
- **2.3.6.** The MIU must be capable of two-way communication for field programming and for resetting specific alarm codes.
- **2.3.7.** Unit must be able to be programmed remotely and programming must be accomplished without removing the MIU from a basement or wall application.
- **2.3.8.** The MIU:
 - **2.3.8.1.**Must be capable of operating at temperatures of (-22°F to 176°F) with operating humidity of 0 to 95% condensing.
 - **2.3.8.2.**Circuit board and the battery will be fully enclosed and permanently sealed in a weatherproof enclosure.
 - **2.3.8.3.**Unit must be able to retrofit to existing meter installations.
 - **2.3.8.4.**The non-integrated MIU must be able to interface the Mobile Data Collector Unit with multiple brands of water meters via a 2-wire or 3-wire connection to the register.

3. Mobile Data Collection Unit (MDCU)

- **3.1. Mounting and power**. The MDCU must be a portable interrogator designed to operate from within a vehicle. The unit must be capable of transfer between vehicles without difficulty. The mobile interrogator should be powered from the vehicle battery. There must be a back-up battery to preserve internal memory.
- **3.2. System Operation**. The MDCU will provide signals such as audible tones to the driver during the reading of a route so that the driver will not have to take his or her eyes off the road. The reading software shall process all incoming RF data within range of the Receiver. Readings shall be automatically inserted into the correct account records based upon a MIU/Meter ID search. Once started, the reading software shall not require user intervention.

- **3.3. Reading System Software.** System will have the ability to stream meter reading data, work orders, meter pictures, location pictures, and GPS coordinates in real time with Wi-Fi or Cellular data connection back to the route management software. Route data and incoming reading data shall be optionally displayed in a text format or, graphically displayed on maps showing water utility streets and roads. The reading system software shall provide a function to determine meter latitude & longitude based on meter service address. Read and unread meters shall be displayed at the same time. The reading system software shall flag all problem codes such as tamper detection, no-reads, etc.
- **3.4. Route Management Software.** The route management software will be web based. The route management software will have the ability to send and receive meter reading data, work orders, meter pictures, location pictures, and GPS coordinates in real time to and from the reading systems while they are in the field. The route management software will have the ability to track the reading systems in real time and show their current locations on a map.
- **3.5. System Reports.** The reading system software must provide the ability to create and modify system reports with a third-party report writer. Standard reports shall include but not be limited to the following:
 - **3.5.1. Reading Master Report.** Master list showing Customer Name, Service Address, Meter ID, Previous Reading and High Read Limit.
 - **3.5.2. Reading Exception Report.** A list showing all readings that failed the high/low limit test, zero usage test or unread meter.
 - **3.5.3. Meter Alert Report.** A report designed to list problem meters. Problems reported should include Leak Alarms, Back Flow or Tamper.
 - **3.5.4. Orphan Read Report.** A listing of radio readings received but not found in reading route.
- **3.6. Control Computer.** The system should operate using a standard laptop computer with an RS-232 serial port, USB Port, or Bluetooth connection. The MDCU shall include the Intel® Core i5TM 2.60 GHz Processor, 4 GB of RAM, 320 GB Hard Disk DVD-Writer Intel HD 4000 Graphics, 14" 1366 x 768 Display, Bluetooth and a 3-Year manufactures warranty. Additional interfaces should include a wired and wireless network interface, USB and serial ports. The system should include Windows 10 or higher.
- **3.7. Transceiver.** The MDCU shall utilize a transceiver that must operate in a 450-470 MHz FCC Part 90 licensed frequency. The transceiver shall connect to the control computer through the use of either a standard serial or USB port. It shall be powered by the vehicle's 12volt cigarette lighter adapter with a reserve battery life of approximately 3 hours. The transceiver shall be furnished with all cables and suitable magnetic mount antenna. The transceiver shall be capable of communicating with the control computer using Bluetooth.

- **3.8. Field Programming and Testing.** The MDCU should include software for field programming and testing of the MIUs. The system must allow for single unit or batch programming. Please indicate if additional equipment is required for programming and testing MIUs.
- **3.9. Manual entry.** The system must permit manual entry of meter readings and comments.
- **3.10. Software documentation**. Documentation shall be and shall include at a minimum: system overview description, record layouts, description of program function and logic, operating procedures, screen layouts, data entry procedures, report descriptions and descriptions of all user options.
- **3.11. Software license and support**. All software must be supplied with a perpetual license indicating the software's designer, owner and licenser, and detailing the manufacturers terms and conditions, including annual cost of maintenance by the Vendor.
- **3.12. Mobile Interrogator Warranty.** The control computer and data collection unit shall be covered by a manufactures warranty for a period of no less than one year.

4. Support Services

- **4.1.** The vendor must have an in-house customer support department. The customer support department is required to maintain a telephone help desk and must have the capability of continuing the support through the use of a service agreement. A list of required services to be provided by the help desk includes but is not limited to the following:
 - **4.1.1.** Answer and resolve hardware/operation/maintenance questions and problems.
 - **4.1.2.** Answer and resolve software operation questions and problems.
 - **4.1.3.** Evaluate information for updates or revisions.
 - **4.1.4.** Evaluate personnel for training needs.
 - **4.1.5.** Perform additional on-site training or evaluation as needed.
- **4.2.** The help desk must be available weekdays between 8:00 a.m. and 5:00 p.m. CST with afterhours numbers available as needed.
- **4.3.** The customer support department of the vendor must provide metrics demonstrating that it routinely meets or exceeds the following minimum support performance metrics:
 - **4.3.1.** 95% Same Call Resolution
 - **4.3.2.** 95% Same Day Resolution

5. Installation and Training

- **5.1.** Complete installation and operating instructions will be included for all of the supplied hardware and software equipment. The training must be supplied by the system manufacturer or approved distributor.
- **5.2.** Bid must include any additional costs for training and assistance to install and begin operation of the system. The vendor will also inform the customer of any pre-installation activities that are to be completed and the support material that will be needed for the initial installation.

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6. WARRANTIES

6.1. In evaluating bid submittals, warranty coverage will be considered. The vendor must be required to state its warranty and/or guarantee policy with respect to each item of proposed equipment. The procedure for submitting warranty claims must also be provided. The terms and conditions of the warranty coverage for: all MIUs, register integrated or non-integrated, supplied in connection with this bid are covered under the *Register & Electronics – General Limited Warranty*.

7. SYSTEM MAINTENANCE AND SUPPORT

7.1. In addition to warranty periods, vendors are required to supply information on required or optional maintenance programs beyond the warranty period for both hardware and software. Vendor must offer multiple-year maintenance contracts so utility can take advantage of multi-year discounts. The location of, and procedures for, obtaining such support must be stated.

8. VENDOR QUALIFICATIONS

- **8.1.** The qualified vendor will have a minimum of twenty (20) years of experience with meter reading systems. The selected vendor must be thoroughly versed in meter and RF AMR/AMI technology and have been a major supplier in the US marketplace. The proposed system must be of a single brand, purchased through a single vendor and maintained by the selected vendor to ensure compatibility among system components.
- **8.2.** All vendors must document which water meter manufacturers and models they are capable of interrogating with the proposed meter reading equipment. A customer reference list must be enclosed with the bid.



BID PROPOSAL FORM

I hereby submit my proposal for the City Metering Infrastructure System.	's purchase of an Automated Meter Reading/Advanced
Bid Amount:	
THE CITY OF BLUE RIDGE RESERV AND/OR WAIVE ANY INFORMALITI	YES THE RIGHT TO REJECT ANY AND ALL BIDS IES.
-	fications and requirements listed in the Request for Sealed accepted by the Blue Ridge city Council, the bid amount d project.
I hereby certify that I Have read and underst for Sealed Bid. I hereby approve and accep	tand the terms of this agreement as specified in the Request of all of the conditions of this agreement.
Bidder's Signature	Bidder's Printed Name
Company Name	Phone Number
Email Address	
Mailing Address:	