

**City of Dunn Request for Proposals: Advanced Metering Infrastructure Issue Date January 22, 2018** 

> City of Dunn, North Carolina Request for Proposal: Water Utility Advanced Metering

> > **Prepared By:**



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# CITY OF DUNN ADVANCED METERING INFRASTRUCTURE REQUEST FOR PROPOSALS: WATER UTILITY ADVANCED METERING

The City of Dunn is seeking proposals from qualified vendors experienced in the supply and installation of water meters for measuring potable water usage and in the network configuration, installation, and operations training of fixed base water meter reading systems. A fixed base water meter reading system hereinafter shall be referred to as Advanced Metering Infrastructure ("AMI"), which is to be purchased and operated by the City of Dunn ("City"). All constraints/limitations associated thereto will be the responsibility of the selected Vendor to manage to deliver the project scope within the awarded schedule of prices, as well as within the approved installation time frame. It is anticipated that the scope of the work should be completed, and the project closed out within 12 months (365 days) from receipt of Notice to Proceed from the City. Award of the project is subject to approval of funding by the City Council of the City of Dunn.

## BACKGROUND

The City of Dunn Water Department (CDWD) supplies potable water to residents through a network of pipes, valves, and meters. Water usage is measured for each customer through a water meter located at

each customer's property. Currently, the City records for billing water consumption in gallons measured in thousands. CDWD manages approximately 4,700 water meters of various types throughout the City for residential, commercial, and industrial customers. CDWD has replaced failed meters through an informal and ongoing change out program with approximately 140 meters replaced, on average, each year. Based on analysis of meter infrastructure presented by the City originating from the utility's Customer Information System (CIS), most of its field meters have surpassed useful life. Approximately, 75% of these meters were installed over 10 years ago and it is intended that all meters i the City's existing utility system will be replaced. The sizes and quantities of the

	3⁄4″	4196
	1"	423
h	1 1/2"	22
	2"	45
	3"	6
	4"	2
ו	6"	2
	8"	2
in	10"	0

City's metering system are approximate as presented and therefore vendors should use this information only as a guide to unit pricing.

Currently, the City utilizes a manual reading process and seeks to upgrade to an AMI Water Meter Reading System with true two-way communication capabilities. Upon review of responses to the Request for Proposal (RFPs), the City anticipates purchasing an AMI system including collectors, transmitters, hardware, software, and all necessary appurtenances to secure water meter readings for the entire City service area subject to funding approval of the Dunn City Council.

## **PROJECT DESCRIPTION**

The City is requesting proposals for the supply and installation of water meters throughout the City and the supply and installation of an AMI water meter reading system according to the desired specifications contained in this document. The City shall own the entire infrastructure from the collectors to the meters and meter interface units (MIU- also referred to as endpoints or smartpoints). City personnel

must be able to access all collected data at any time in order to perform daily operations, provide customer support, and monitor system performance. The finished AMI solution shall also provide for advanced data analysis through an effective meter data management (MDM) system.

Specific vendors and applications in use by the City are listed below. Vendors that can demonstrate or verify proven integration to these existing systems are preferred. Currently the City utilizes a variety of meter types of which most have surpassed useful operational life. The City of Dunn's goals for the project include:

- Gaining measurable and sustainable resource efficiencies
- Improving customer service and revenue collections
- Shortening the processing time for billing
- Improving water resource management
- Improved business processes through enhanced system data

In addition, preference will be given to Vendors with capability for expanded integration such that City of Dunn users (e.g. Customer Service performing a remote disconnect/ reconnect or Billing personnel identifying malfunctioning meters) will be able to do most day-to-day functions in cooperation with the existing Customer Information System (CIS) through Harris ICS. The City possesses the following software systems for consideration of interface with the selected vendor MDMS:

#### ICS version 8.0.438

ARCGIS

## FacilityDude WOM

## **PROJECT OBJECTIVE**

It is the intent of the City to issue a single contract to the selected Vendor to provide all necessary services to install and implement the system according to the specifications contained herein, yet the City reserves the right to award equipment and installation labor contracts, and also software, including customer portal contracts, separately. Therefore, responding vendors shall issue a responsive proposal considering the preferred vendor solution may be awarded as a single-vendor or multi-vendor contract if deemed in the best interest of the City considering pricing and qualifications. The completed pricing sheet should reflect clear delineation of equipment and labor. The contractor will be responsible for adhering to all requirements of the specifications and for the performance of all sub-contractor(s).

The supplied water meters shall comply with NSF/ANSI Standard 61 Annex F and G and be constructed to last a minimum of 20 years. The AMI network shall be designed to collect meter reads at a rate of 98.5% or better with redundancy in the event of network failure. Installation services shall be performed by professionally trained and experienced installers.

## **PROFESSIONAL SERVICES REQUIRED**

The selected Vendor must provide all services necessary to meet the objectives of this project. Further information on the services that the City of Dunn anticipates will be needed for this project is contained in the Scope of Services section. Any work that is to be sub-contracted or performed by others shall be clearly defined. All sub-contractor(s) are subject to the City's review and approval.

## **PROJECT SCOPE**

The City of Dunn ("City" or "Owner") is seeking to acquire a fully automated, two-way fixed-base Advanced Metering Infrastructure (AMI) system for water meter reading and related business processes. The AMI system design must provide full redundancy across the entire utility network. For purposes of these specifications, redundancy shall mean the ability of the City to obtain complete interval reading of all customer endpoints should catastrophic failure of the primary read network occur. The objective of this proposal is to evaluate and select the AMI product that best meets the functional and business requirements of the City. Proposal acceptance and award will be based on what the Selection Committee determines is the best value to the City considering factors including, but not limited to:

- Two-way Endpoint Functionality and Performance
- Design and Functionality of Network
- MDMS and Customer Portal Functionality
- Equipment Specifications Compliance / Warranty Support
- Installation Qualifications
- Similar Projects, Experience, and References
- System Functional Expandability/Future Technologies
- Pricing- Capital and Operational Expenditures
- Leak Detection Options/Functionalities

The City recognizes that, as part of an AMI deployment, most existing meters that are currently in use may not support the connection of an AMI end-point and that some AMI solutions are compatible with only specific manufacturers' meters. Therefore, the effort and cost of this project will be a meter replacement program.

The City is also seeking a Meter Data Management System (MDMS) with the capability to provide detailed analytics with an integrated Customer Portal. The Customer Portal should allow for customization of viewing account alerts and information to be disseminated by the City to their customers.

Final terms and conditions of the Scope of Work between the City and the selected Vendor shall be developed following Vendor selection and not necessarily limited by the specifications criteria herein.

## **INSTRUCTIONS TO PROPOSERS**

Proposal Issue Date: Monday, January 22, 2018

**Intent to Propose Notice Due: Monday, January 29, 2018:** Written notice of intent to propose should be submitted electronically to <u>info@metersys.com</u> by 5pm EST.

**City System Inspection Day (Optional): Thursday, February 8, 2018 10:00am EST** (All system inspections will be coordinated through MeterSYS; please email <u>info@metersys.com</u> with your intention to participate)

#### Proposer Questions Accepted Until: 5:00pm EST on Friday, February 9, 2018

#### Proposal Due Date and Time: 3:00pm EST on Wednesday, February 21, 2018

Proposals shall be clearly marked "City of Dunn Advanced Meter Infrastructure RFP Response" on all envelopes and boxes, along with the company name, date, and time proposal is due. Proposals must be submitted to the City of Dunn Attn: Steven Neuschafer via U.S. Mail, UPS, Federal Express, or hand delivery.

Proposals will not be accepted via facsimile or electronic mail. <u>Proposal must be received no later than</u> <u>3:00pm EST on Friday, February 21, 2018</u>. Proposals not submitted by the specified date and time will not be considered. The submission shall include five (5) hard copies and two (2) full electronic PDF copies on separate USB flash drives; however, the pricing sheet must be submitted in Excel format with all calculation formulas present. All submission materials should be included in a package marked "City of Dunn AMI RFP Response" and shall be delivered:

#### By US Mail, UPS, or FedEx:

City of Dunn, NC Attn: Steven Neuschafer 401 East Broad Street Post Office Box 1065 Dunn, NC 28335

<u>Questions regarding any element of this RFP document or the bidder response process shall be directed</u> <u>to: info@metersys.com</u>. Unauthorized contact or communication of City of Dunn officials during the RFP process is prohibited and would disqualify the vendor from further consideration.

## **PROPOSAL REQUIREMENTS**

## **PROPOSAL CONTENTS**

**PROPOSALS** shall contain the following in Tab format:

- I. <u>Cover Page</u> with Proposer's Company Name, RFP Reference Number, Proposer Contact Information
- II. <u>Transmittal Letter</u> (1-page maximum)
- III. <u>Company Overview- Manufacturer and Distributor as Applicable</u> (1-page maximum)
- IV. <u>Executive Summary</u> (maximum of 10 pages): Describes your ability to meet the needs of City of Dunn AMI project including, but not limited to, the specifications and requirements described in this document and present information that outlines your qualifications as a preferred vendor for this project.
- V. <u>Scope of Work and Technical Specifications</u> (maximum of 20 pages): Describes your acceptance or recommendation of alternatives to the SOW and Technical Specifications based on unique elements of your recommended solution. Outline in detail your proposed Scope of Work (SOW) to include but not limited to delivery, implementation, and testing of new system. The SOW shall also include information on specific employees that will be assigned to this project, the Vendor's management methodology, and all major tasks and/or key milestones. Vendor shall clearly define all roles and responsibilities that are expected for system implementation.
- VI. <u>Description Summary of Similar Projects</u> (maximum of 2 pages)
- VII. <u>Certificate/Proof of Insurance</u>
- VIII. Detailed Pricing Sheet (Attachment C)
- IX. <u>Qualified Reference Statement Sheet</u>: References must have a minimum of 5,000 water endpoints under contract. System must be currently operating, collecting meter reading and other data from installed endpoints. References with integration with City of Dunn Utility Billing module is preferred.
- X. <u>Exceptions Statement</u> (As Necessary)
- XI. Equipment Specifications and Warranty Details
- XII. MDM Software Specifications and Draft Software Hosting Agreement
- XIII. Draft Vendor Agreement for Equipment and Installation
- XIV. <u>Certified Propagation Analysis</u>
- XV. Technical Sheets (Specifications) of Proposed Equipment and Software
- XVI. Marketing Material (Optional)

## TERMS AND CONDITIONS OF SUBMITTAL

- 1) Bids shall be valid for a period of one hundred eighty (180) days from the date of submittal.
- 2) Faxed proposals will not be accepted.
- 3) Meter quantities, locations, and sizes are based on best available information and not guaranteed as accurate.

- 4) QUESTIONS: Inquiries involving procedural or technical matters should be directed in writing by 5:00pm on Friday, February 9, 2018 to <u>info@metersys.com</u>.
- 5) The City of Dunn reserves the right to waive any informality in all RFP's, or to reject any or all RFP's, if it be in the public interest to do so.
- 6) This RFP is a technology request for proposals consistent with N.C. G.S. 143-135.9 and award shall be made according to statute for best value and based on multiple factors including: total cost of ownership, (cost of acquiring, operating, maintaining, and supporting the product or service over its projected lifetime; the evaluated technical merit of the vendor's proposal; the vendor's past performance; and the evaluated probability of performing the requirements stated in the solicitation on time, with high quality, and in a manner that accomplishes the stated business objectives and maintains industry standards compliance).
- Any proposal may be withdrawn at any time prior to the scheduled closing time for receipt of proposals. Any proposal received after the time and date specified may not be considered.
- 8) The City of Dunn has provided for entry of the bid for the fixed network AMI system in the Price Proposal Form. The Prospective Bidder shall fill out the Price Proposal Form in its entirety and <u>summary pricing shall be inclusive of all licenses</u>, taxes, and fees. All blank spaces for requested prices within the Bid must be completed and legible. The form must be typewritten or completed in ink.
- 9) In the event of a discrepancy between the unit price and the summary pricing amount, the unit price will govern. Proposal prices shall encompass everything necessary for furnishing the item(s) specified, and in accordance with those specifications, shall include proper packing costs and the cost of delivery.
- 10) By submitting a proposal, the Prospective Bidder agrees to execute the contract and to provide the specified products and services within the agreed upon time.
- 11) All proposals must be complete, factual, and signed by an authorized officer of the Prospective Bidder's organization.
- 12) Any material alterations to the proposal must be explained or noted over the signature of the Prospective Bidder.

## **EVALUATION OF PROPOSALS**

Each proposal submitted shall be evaluated by the City of Dunn AMI Selection Committee. The defined evaluation criterion specifies the factors that will be used by the Selection Committee to evaluate responsive, responsible, and qualified proposals. Proposers shall include sufficient information to allow the Selection Committee to thoroughly evaluate their proposals and present its best value offering in a manner that is clear and concise for the Selection Committee to conduct comparative review. At the sole discretion of the City, any contract awarded will be based on what the Selection Committee determines is the best value for the City.

The City reserves the right to reject, in its sole discretion, any and all responses, and to waive minor irregularities or minor errors in responses received, if it appears that such irregularities or errors were made through inadvertence. Any such irregularities or errors so waived must be corrected on the proposal prior to acceptance by the City. The City also reserves the right to accept or reject any or all of

the items in the responses, if such action is deemed to be in the best interest of the City. This RFP includes the determining factors the City will use to evaluate the proposals. The contract will be awarded using the "best value" procurement method set out in N.C. G.S. 143-135.9. All bidders shall include in their bids documentation that their organization is qualified to design and install the AMI system as outlined in this RFP. This documentation shall include any license, certification, or permits.

This solicitation does not commit the City of Dunn to award a contract, to pay any costs incurred in the preparation of a proposal, or to procure or contract for the services. The City may cancel in part, or in its entirety, this request if it is in the best interest of the City to do so.

#### **RANKING/AWARD**

This request for proposals (RFP) is to procure an AMI system capable of meeting the current and future meter needs of the City. The Prospective Bidder shall furnish all labor, materials, equipment, and incidentals necessary to train and support Owner's personnel in the use of the MDM software system. The Prospective Bidder shall also furnish all materials, equipment, and incidentals necessary to train and support the Owner or their designated representative in the proper installation of the meters, registers, and AMI endpoints. The quality of the bid submission is considered important, along with compliance with the RFP, as both will be graded by the Selection Committee.

The term "AMI system" shall be defined as fixed, two-way meter reading collection network of collectors, repeaters, and endpoints installed throughout the City with hosted / managed reading data management software for collecting and managing data from endpoints. Programming devices required for the installation of the AMI endpoints, diagnostic, and interim meter reading shall also be included.

Technical proposals explaining the AMI system will be evaluated against individual criteria. From the individual criteria evaluation, the City Selection Committee will rank the proposals based on a numerical weighting system with criteria defined and approved by the Selection Committee consistent with the stated best-value factors noted in the Scope of Work of this RFP document. The Committee reserves the right to adjust the weighted criteria based on changes in City goals, financial capacities, technology changes, and other project influences not otherwise identified at the time of RFP issuance. The Committee reserves the right to request additional information from vendors and will likely schedule inperson presentations from vendors that are short listed, and these decisions will be communicated to the necessary parties once determined.

#### **EXCEPTIONS**

Prospective Bidders shall furnish a separate statement on Company letterhead titled, "EXCEPTIONS," giving a complete description of all exceptions to the terms, conditions, and specifications outlined within this document. The "EXCEPTIONS" section shall be listed in the Prospective Bidder's Table of Contents. If a statement is not provided, the Owner will assume that the Proposer is compliant with the bid specifications. Exceptions to requirements or specifications contain herein are not considered disadvantaged if the Proposer outlines clearly and concisely how the presented exception is advantageous over the presented requirements and/or specifications.

## **TIMELINE SUMMARY**

The timing of this project is of the utmost importance for effective management of funding and project resource oversight. The selected Vendor will be required to complete full deployment of the AMI infrastructure within 12 months of receipt of the notice to proceed. It is the intent of the City to have this project substantially completed prior to May 1, 2019. Detailed project timelines will be established with the selected Vendor and may include liquidated damages for project schedule violations and will generally adhere to the following milestones:

Vendor Award and Notice to Proceed: By May 1, 2018 Network Installation Completed: By August 15, 2018 Large Meter Installation and Systems Testing Completed: By October 1, 2018 Midpoint of Installation: Completed: By February 1, 2019 Final Installation and Project Closeout Completed: By May 1, 2019

## BONDS

Each proposer selected for short list interview must present a bid bond equal to five percent (5%) of the proposed project cost to be considered. The selected Vendor will be required to provide payment and performance bonds equal to one hundred percent (100%) of the project cost. Substitute payment and performance bonds will not be considered acceptable and will be rejected.

A corporate surety legally authorized to do business in the State of North Carolina shall execute the bid bond, as well as the payment and performance bonds required for this project. The corporate surety shall have a rating of B, B+, A-, A or A+, according to the current Best's Insurance Reports for property and casualty insurers.

## **PROPOSAL SPECIFICATIONS**

The City of Dunn seeks to enter into a contract with a qualified Vendor responsible for supplying and implementing an entire AMI system, including meter reading equipment, related software, maintenance, training, technical support, and installation. The City of Dunn is requesting proposals for the following products and services for furnishing water meters and for the upgrade of its meter reading system:

- 1. Supply and delivery of certain prescribed cold water meters complete with absolute encoder registers and automatic, two-way meter reading endpoints.
- 2. Professional and qualified installation of all required system equipment.
- 3. Supply, delivery, and testing of all equipment and software necessary for a fixed network AMI system capable of obtaining readings from all new meters, including responsibility of the systems, necessary programming, and testing for the interface with the existing billing system.
- 4. Approved training and technical support services for City staff.

 Provide installation project oversight necessary for the successful implementation of the AMI system, including providing software integration, installation oversight, training, and delivery of the solutions that meets or exceeds the performance criteria in cooperation with the City's designated project manager.

The successful Bidder must demonstrate its ability to deliver an AMI system that adheres to the specifications outlined in this document. The successful bidder will support the fixed network AMI system on an on-going basis as required through contract. Proposals will be evaluated according to the selection criteria established within this document.

#### SYSTEM REQUIREMENTS

#### **MINIMUM CRITERIA**

Any Prospective Bidder submitting a proposal must satisfy the following minimum criteria. <u>Check</u> <u>all requirements met under proposal and for any criteria remaining unchecked, please note any</u> <u>requirements variances on the exceptions section of the response.</u>

- □ The proposed AMI solution must operate as a point to multi-point (star) network system. No mesh or cellular networks will be considered unless presented and justified as a support network for remote areas that would not otherwise constitute a collector. The proposed system should leverage existing City elevated assets for fixed location of collectors before proposing alternative collector locations on City owned properties. A list of City owned properties is in Attachment A.
- □ The proposed system shall have clearly defined two-way capabilities.
- □ The proposed AMI system must have capabilities of being able to communicate with and operate a remote shut-off valve.
- □ The proposed system must provide for leak detection on the customer side, and help support leak detection capabilities on the distribution side.
- □ The proposed system must provide analytics-based software that informs the utility of utilitydefined exception conditions via email, SMS text, or through the system's interface.
- □ The system shall be capable of remotely collecting numeric meter identification, hourly interval readings, premise leaks, and tamper information from all City water meters.
- □ The AMI system shall automatically provide the Owner with daily metering data at the network control computer at least once per day without having to interrogate the endpoint or data collector.
- □ The Prospective Bidder shall support the City and the billing system provider for proper development of the interface between the AMI system software and the existing billing system. The Owner must be able to run the new AMI system and the existing meter reading and billing system in parallel, until such time as all of the meters are converted to the new AMI system. The Owner's water accounts shall be downloaded to the new AMI system software, providing for a gradual transition from existing reading system to the new meter reading as future AMI endpoints are installed.

- □ The AMI system must comply with all applicable Federal Communication Commission (FCC) Rules & Regulations.
- □ All AMI equipment and system components shall be labeled in accordance with the FCC as required.
- □ The AMI system shall successfully obtain reads 100% of the meters in the network for no less than 98.5% of all available daily reads over a three-day window.
- □ The AMI system shall be subject to an extended performance warranty, whereby the Vendor will be required to provide both equipment replacement and associated labor when system performance drops below 97% of the billing reads, in order to return the system to the required 98.5% performance reporting.
- Vendor shall detail system protections related to network privacy and security, including interference/frequency hopping, encryption, data backup/disaster recovery, and RF transmission safety.
- Vendor shall have the option to provide examples and best practice recommendations from past experience with utilities transitioning from reading and billing in cubic feet to gallons as Dunn plans to do.
- □ Vendor must have completed at least four (4) successful AMI system implementations using the same equipment and technologies proposed herein.

## WATER METERS SPECIFICATIONS AND REQUIREMENTS: AMI FUNCTIONALITY (DESIRED)

- □ Vendor shall supply water meter quantities according to the quantities noted in this document, although quantities may vary and, therefore, are not guaranteed.
- □ All water meters shall be new, unused, current year model, with current version of firmware loaded.
- □ Water measurement shall be US Gallons with resolution able to be configured to a minimum of 1/10th of a gallon.
- □ Rate of flow (low and high) shall be noted for each specified meter size.
- □ All water meters shall support all AMI functionality with two-way wireless communication.
- □ All water meters shall be able to communicate directly to the AMI collector.
- □ All water meters shall wirelessly communicate via an FCC approved regulated spectrum.
- □ All water meters shall be capable of 1-hour interval usage data. All water meters shall be capable of on-demand meter read and status and store consumption data for a minimum of forty (40) days at the endpoint.

## Small Water Meters (5/8" x 3/4", 3/4" x 3/4", and 1")

- New water meters shall be mechanical meters with a brass meter body with optional pricing for solid state/electronic technology as noted within pricing sheet.
- □ The meter register shall be hermetically sealed and with option for LCD display having indicators for leak detection, low battery, and unit of measure.

- □ Residential water meters shall have a 20-year warranty on register and body.
- □ Residential water meters shall have a 20-year warranty on battery (last 10 years prorated).
- □ New meters shall meet or exceed ANSI/AWWA Standard C700, C710, and/or C713 for accuracy and pressure loss.
- □ New meters shall comply with NSF/ANSI Standard 61 Annex F and G compliant and tested to AWWA standards.
- $\Box$  New meters shall have resolution setting to  $1/10^{\text{th}}$  of gallon.
- □ Recommendations for inventory parts and ordering lead times to be included as available.

## Large Commercial Water Meters (1.5" and larger)

- □ New meter register shall be hermetically sealed and with option for LCD display having indicators for leak detection, low battery, and unit of measure.
- □ The meter needs to comply with NSF/ANSI Standard 61 Annex F and G compliant and tested to AWWA standards.
- □ All Fire Service meters will be compliant for all (UL). FM, NSF-61.
- □ Recommendations for inventory parts and ordering lead times to be included as available.

## ADVANCED METERING INFRASTRUCTURE (AMI) ENDPOINTS

- Batteries must be Lithium Thionyl Chloride and must be fully potted and non-replaceable.
- □ The battery for each AMI endpoint must be fully warranted for a minimum period of ten years, with ten additional years prorated when the system provides a minimum of 24 hourly reads per day. The prorated calculation shall be based on the purchase price. Warranty coverages shall not limit the number of on-demand reads performed by the City.
- □ Radio frequency (RF) products must be protected against water or moisture. Proposals shall detail AMI endpoint construction for moisture and water protection.
- □ All AMI endpoints equipment must be rated to withstand non-condensing temperatures from minus 22° F to + 149° F.
- □ The Proposed system must have advanced metering infrastructure (AMI) modules capable of interpreting encoded meter reading data directly from the new or existing three-wire meter registers without error.
- Prospective Bidders must describe the operation of the AMI endpoint, including an explanation of the AMI endpoint's "broadcast" method and the manner in which the AMI endpoint transmits signals using radio frequency.
- □ Prospective Bidders must present in detail the field programming steps necessary to completely install and activate AMI endpoints so that they are ready to transmit meter readings.
- □ Prospective Bidders must provide a description about the AMI endpoint's power source and how the "broadcast" method affects the length of the life of the power source.
- □ The AMI endpoint shall have capabilities to indicate damage or tampering with the connection between the AMI endpoint and the register.

- □ The reading from the AMI endpoint must be time-stamped based on synchronized timing of the network.
- □ If the Vendor has a recommended approach or philosophy on battery preservation, it is an optional request to detail the company's approach to alternative settings or features, such as low-power mode; timed data transmission; self-charging battery; or replaceable battery capabilities.
- □ Rise of endpoint above meter lid surface shall not exceed ¼" or level required for ADA compliance against creation of a trip hazard, whichever is more stringent.
- □ All AMI endpoints shall be properly installed and secured by manufactured approved "throughthe-lid" mounting bracket.

## **COLLECTORS (GATEWAYS)**

- □ All collectors shall wirelessly communicate with endpoints via an FCC approved and regulated spectrum.
- □ Collectors shall be able to communicate directly to all endpoints in a point to multi- point topology.
- □ Vendor must design collector coverage utilizing existing towers/elevated structures controlled by the City of Dunn before proposing alternative collector locations.
- □ Vendor proposals shall assume all costs for network infrastructure beyond that which supports the proposed network design, and Vendor's proposal shall include a not to exceed price for the complete network infrastructure, including all collectors and any repeaters.
- □ Vendor will provide the necessary equipment, wiring, enclosures, and attachment hardware associated with the collector.
- □ Vendor will assist the City in securing data backhaul if not already provided by the City at the desired collector location. Backhaul will be owned and maintained by the City.
- □ Vendor will provide tower structures for collectors if a City vertical asset is not available at the desired collector location. Tower structure details/schematics shall be included in the proposal for all Vendor provided structures required to support the network with design approval to be authorized by the City prior to collector installation.
- □ Vendor will provide an alternative power source (i.e. solar panels) if City electrical power is not available at the desired collector location.
- □ Vendor shall install all collectors, mounting hardware, wiring, and associated equipment.
- Collectors will have a 10-year warranty and Vendor shall detail maintenance and support included in the warranty. Recommendations for inventory parts and ordering lead times to be included as available.

#### INSTALLATION

The Scope of Work and Technical Specifications outlines the expectations for standard meter change out with common meter pit conditions requiring no rehabilitation. In the case of required or desired rehabilitation, the City will work with the selected vendor through the contractual phase to identify time and materials pricing for repair of meter pits and ancillary system improvements.

The Scope of Work includes scheduling appointments, coordinating with water meter suppliers for delivery, removal of existing water meter, installation of new water meter, installation of transmitter, and proper documentation of installation on City approved forms. Prices include all labor to perform these functions, plus any wire, gaskets, seals and accessories necessary to successfully install new meter. The cost of installation is identified separately from the unit price for each meter and endpoint on the pricing sheet provided.

- □ The installation of all water meters is to be performed by a contractor licensed by the State of North Carolina. All site installation personnel employed on this project will be subject to background checks and shall, at all times, carry a suitable photo ID and/or other identification approved by the City. All vehicles used by the successful bidder shall, at all times, display the name and phone number of the company performing the site installation or display a City provided "City contractor" decal/magnetic sign.
- Prior to an installation, the installer shall determine if additional plumbing work is required beyond the specified scope of the contract. If so, the installation shall be rescheduled, and both the property owner and the City shall be notified. Arrangements for the additional plumbing shall remain the property owner's responsibility. Once the additional plumbing work has been completed, the installation will be rescheduled.
- Bidder shall conduct installations by route, or group of routes. Route groups should be based on geographic proximity and logistics, and neighborhoods determined by the City in discussion with the Proposer. The City retains the right to prioritize neighborhoods, or to reorganize priorities, both before the program begins, and during the program. Unless approved in writing by the City, the Bidder shall complete at least 90 percent of the installations in one route or group of routes before commencing installation on the next route. Exceptions to the requirement to complete an installation may be granted by the City.
- Bidder shall be responsible for scheduling all appointments for installation with City residents and businesses. Approval of the method used must be granted by the City before contact is made but will include, at a minimum, door hangers provided at least 48 hours in advance of the meter installation site visit.
- The City and the Bidder shall establish an overall schedule for installation of the entire project.
  On the first work day of each week, the Bidder will provide the City an updated schedule of where work is planned for the next 2 weeks.
- Bidder shall propose normal work hours, which must be approved by the City but shall, in no case, extend before 7:30am or after 6:30pm Monday through Saturday. Installers must be available for evening and Saturday installations, as well as for installations that must be conducted at other times because of special needs. Contractor should expect that some meter

replacements will occur in the evenings and on weekends. No additional compensation will be provided for appointments that occur in the evening or on weekends.

- □ All water meters' GPS coordinates will be collected by Vendor to map grade during installation. GPS coordinates should be made available for import into WOM software.
- □ All installations will be documented and digitally photographed by Vendor before and after installation.
- □ All water meters will be calibrated and tested for accuracy by Vendor.
- □ All water meter registers will be programed by Vendor.
- Any water meter box or vault modifications will be done by Vendor, including but not limited to adjusting the water service line, meter setter, and meter box.
- □ Any additional material for the meter box or vault will be supplied by the Vendor at Vendor's expense.
- The installation shall require the installer to test the new equipment to make sure it is functioning properly. The install will be sure that there are no leaks at the site that are related to the installation.
- Any non-standard installation, including missing or tampered meter, or flagrant code violations observed by the installers, is to be reported to the City immediately.
- □ Vendor shall reseed and/or repair any damage to service property at its sole expense, and shall indemnify and save harmless the City of Dunn from any costs for repair of any damage to the service property.
- Bidder shall be required to leave the installation site in a clean and neat condition, equal to, or better, than the original condition for the site. The installer shall remove the replaced equipment from the site and will be responsible for its proper organized storage at City facilities. The old meter shall become the property of the City. The unit price for the meters should not reflect any salvage value for the old meters. Vendor shall keep photographic record of damage/repair and report it to the City of Dunn.
- □ The successful bidder will be responsible for providing the City with weekly status reports detailing the number of installations performed, problems encountered, work remaining and any schedule adjustments.
- □ Vendor work attire shall clearly represent the Vendor's company name/logo during installation.
- □ Vendor shall submit a preferred or sample billing schedule that details the desired ordering, shipping, installation and invoicing approach of the vendor.
- □ Vendor shall be responsible for custody of stored material until ready to install.
- □ If the Vendor has an inventory tracking and billing validation or audit process established, please provide a description of this process and any tools or software used.
- □ If the Vendor has an installation management software that will be used during the project, please articulate the capabilities for managing the installation progress and the reporting features available, to include training and access that will be provided to the project team prior to commencement of installation.
- □ Each installation will be accepted by the City through a Route Acceptance Agreement conditioned upon:

- Electronic submission of a list of completed installations containing for that installation the premise identification number, address, old and new meter serial numbers, old and new meter readings, MIU serial number, location of meter and MIU, installer's name, Proposer's inspector's name, and all other information relevant to the installation; and,
- Receipt or access to required digital photographs;
- At its option, satisfactory inspection by the City; and,
- Confirmation that MIU ID numbers, meter register numbers, and other information have been correctly captured in the automatic reading system database and/or the City's project management database for each customer's premises; and,
- Successful capture of 98.5 percent of the scheduled readings over 3 days for meters reading hourly or more frequently. The readings shall be gathered by the City operating the system in a normal way.
- If the City finds discrepancies in the conditions of acceptance for 12 months after the date it was notified of installation, the City shall remand the work to the Bidder for correction.
- Data logging time slots must be time synchronized and programmable for 15 minutes, 30 minutes, 60 minutes, or daily.
- Recommendations for inventory parts and estimated ordering lead times of equipment should be listed.
- Bid pricing for equipment shall be held for 180 days after project close-out or until June 30<sup>th</sup> following completion of the installation project, whichever is longer. New fiscal year pricing sheets with any price changes clearly depicted should be submitted to the City no later than January 30<sup>th</sup> of each year.

## FIXED NETWORK AMI SYSTEM

- □ The fixed network may utilize one or a series of data collector units (DCU) located strategically throughout the City's service area for retrieving meter data. It may incorporate repeaters/sub-collectors to assist the fixed network system with meter reading data collection only to the extent that required for full read coverage.
- □ The Prospective Bidder shall prepare and submit as part of the technical proposal a propagation study for reading all accounts in the system. The Proposer may request from the Engineer an Excel database containing the service addresses for water accounts, along with potential infrastructure locations with approximate latitude and longitude for each property or site. The latitude and longitude are the parcel centroid. Not all services may be on this list and some locations have multiple meters. The Prospective Bidder shall assume there is at least one meter at each property. The Prospective Bidder may install equipment for the fixed network AMI system on public buildings, water reservoirs, and any City owned light poles.
- □ Transmissions of data between the utility and DCUs shall be in a proprietary format not easily deciphered by outside sources.
- □ The following information shall be transferred via RF as a minimum: unique transmitter ID/serial number, meter reading, leak tamper status, wire tamper status, reverse flow status, no usage

status, low battery alarm, and encoder error. No sensitive customer information such as name, address, or account number shall be sent in the transmission.

## AMI SYSTEM SOFTWARE, NETWORK INTEGRATION, SYSTEMS INTEGRATION

- □ Vendor shall provide AMI network integration with the existing City's networking infrastructure.
- Vendor shall provide a two-way data synchronization and validation that includes but is not limited to meter information, billing data, address location, usage, and full customer account Information between AMI system and utility billing module.
- □ Vendor shall provide data integration testing with a success rate of 100%.
- □ Vendor shall provide mass meter import of all meter information to the utility billing module.
- □ Vendor shall provide standards for the mass meter change-out process and for software integrations.
- □ A software package shall be hosted and managed by the Prospective Bidder and be available via the Owner's internet connected network for an unlimited number of users. Software must interface with the existing billing system, process meter readings, interface with the fixed network, and generate dynamic system informational reports.
- □ The software shall show and retain a minimum of 2 years of hourly usage history for all utility accounts.
- □ The software integration shall include the ability to transfer customer consumption history and account billing data for 2 years prior to AMI installation. Integration standards and requirements should be added in the optional Section XIV, Marketing Material or Specification Sheets.
- Preference will be given to Vendors with past integration experience with ICS. Please identify 3 examples of completed interfaces with ICS, to include the project location, number of accounts, and year(s) of the project, along with any identified similarities or differences as compared to Dunn that are relevant.
- □ The software shall be provided as a perpetual license to use the software with the supplied system, provided the annual maintenance agreement is upheld.
- □ The software shall provide the ability to generate error reports that identify which endpoints and data collectors have been inactive for a certain period of time.
- □ The software must support operator-based security allowing the Owner to define operator users with varying authorization levels and capabilities. Additionally, all aspects of that operator customization must be available (what screens they have access to, what data they can change, etc.)
- □ The software should include the following standard reports: Meter Reading History, Daily Leak Detection, Daily No-Use Meter, Daily Tamper Detection, and Backflow
- □ The software must provide for proactive exception alarms that can notify utility personnel via email or SMS text of desired exception conditions.
- Prospective Bidders must describe any unique features that their software provides to assist in water conservation efforts.

- Prospective Bidders must describe any unique features that their software provides to assist in Customer Service efforts.
- Prospective Bidders must describe any other unique features that their software provides to
  Owner to improve overall utility operational efficiency and management of the AMI system.
- □ Software should include a consumer portal so that all utility customers can have access to their usage data.
- □ Software should provide a smart phone app or responsive design so that all utility customers can have access to their usage data on any mobile device.
- □ Customer Portal shall have the capability for customers to see actual billing and consumption detail with proper login credentials.

## Software as a Service (SaaS)

- □ All software modules shall be SaaS and hosted by the Vendor.
- □ All SaaS shall be accessed using an Internet browser.
- □ All SaaS shall be accessed using a secure socket layer (SSL) protocol with a trusted certificate from a certification authority (CA).
- □ SaaS data is secured in Tier IV SSAE 16 certified data centers.
- □ SaaS data is maintained in (or replicated to) more than one data center.
- □ SaaS data file backup is properly scheduled and stored in a secure location.
- □ SaaS data is the property of City of Dunn and cannot be copied, shared, or sold by the Vendor.
- □ Vendor shall promptly notify the City of any unauthorized access of City data. SaaS database shall be fully retrievable by the City of Dunn.
- □ Vendor shall provide alternative software free of charge if SaaS modules become obsolete or no longer supported by vendor.
- □ Vendor will provide and install any additional software/hardware locally as needed.
- Meter Data Management (MDM) module shall be included in bid and operational price shall be clearly presented for a period of no less than 5 years from award.

## Meter Data Management(MDM)

- □ MDM shall identify and present problematic data to operators for resolution before it reaches the City's billing system.
- □ MDM shall provide standard reporting for meter exceptions, meter reads, meter events, communications, exceptional consumption, and continuous consumption.
- □ MDM shall have the ability to view raw, processed, and validated data.
- □ MDM shall be able to maintain up to 36-month history of meter data.
- DM Shall display water meter data in the same Graphical User Interface (GUI).
- □ MDM has the ability to manually insert raw register read or perform validation for a given meter.
- □ MDM dashboard provides an instant snapshot of the entire utility system.

MDM shall have the ability to remotely disconnect/reconnect meters that have that function built-in.

#### **AMI SYSTEM TRAINING**

- □ Vendor shall provide training to City of Dunn employees (operators and administrators). The price shall include all travel related expenses. Training shall include a minimum of twelve hours, occurring only Monday through Friday, of on-site instruction on the operation procedures for the AMI system. Complying with the minimum period of time specified above will not relieve the Prospective Bidder of providing sufficient service to place the AMI system in satisfactory operation.
- At a minimum, the training must cover the use of the fixed network devices (if applicable), error coding, uploading and downloading data from the reading devices from the AMI system software, and AMI system software interfacing with the existing billing system.
- Vendor's training program shall be described, highlighting how it addresses each of the following components:
  - AMI system operation, including obtaining readings, transferring data between the MDMS and compatible CIS, creating reports, diagnosing issues, definitions and recommendations for resolving alerts/alarms, customer account processes, meter change-out, etc.
  - o Meter reading database management
  - o Field diagnostics and maintenance
- Vendor shall train all appropriate Utility staff to enable staff to effectively operate and maintain the system, and proficiency will be determined according to the Customer Acceptance Plan to be defined prior to contract signing.
- □ Training must be accompanied by workbooks and training materials, with additional supporting materials composed and provided as requested by Utility staff.
- The training schedule shall be coordinated with the City. The training on operation of the AMI system shall not occur until after the software has been installed and the billing interface file has been written, tested, and is working successfully to transfer meter reading data to the billing system.
- □ Vendor will include follow up training after system has been operational for 6 months.
- Vendor will provide the Utility with up to two (2) complimentary registrations for any User Group Conferences or similar training activities designed to increase training and proficiency in the AMI system and software proposed. Vendor shall provide no less than sixty (60) days' notice of available conferences and trainings. Utility will be responsible for all other attendance costs.

## TECHNICAL SUPPORT REQUIREMENTS AND WARRANTY FOR THE AMI SYSTEM

- Prospective Bidders shall provide manufacturer's terms and conditions of all warranties offered.
  As a minimum, the AMI system must be warranted for a minimum period of one (1) year from the date of substantial completion.
- □ Vendor shall provide detailed information and pricing for annual maintenance and support.
- □ The annual hardware maintenance agreement shall include equipment, materials, and labor to maintain and update all collectors
- □ Vendor will provide vendorware updates for the life of water meters.
- Annual software maintenance agreement shall include SaaS module licenses, access, updates, hosting, backup, data security, encryption and telephone support.
  The first year (Year 1) hardware and software maintenance listed above shall start at the date the system is accepted as fully operational.
- □ Vendor will provide ongoing maintenance costs for year 2 and each year thereafter for a period of 5 years.
- A toll-free telephone Help Desk shall be available between the hours of 8:00 AM and 6:00 PM, Eastern Standard Time, with after-hours telephone numbers available as needed. The Help Desk services shall include: fixed network device problems/questions; software operations problems/questions; equipment returns and repairs; loaner equipment processing; evaluation of information for updates or revisions; evaluation of personnel training needs.

## PROJECT MANAGEMENT AND SCHEDULE

- □ The selected Bidder shall provide project management for their Scope of Work as detailed herein. The Project Manager shall be required to coordinate activities with the Owner and Owner's representative.
- □ The Vendor shall provide their proposed statement of work and project management responsibility documentation, which includes system installation, configuration, and testing.
- □ The Vendor shall submit a project schedule that includes: securing a FCC license (if required), network delivery, installation, configuration (including transfer file with billing system), meter and AMI endpoint delivery, system testing, and training.
- □ The Vendor shall work cooperatively with the City's project managers and project team members and maintain responsiveness to action items and issues resolution tasks assigned through the project management team as part of the implementation plan.

## **OPTIONAL SERVICES**

- Please provide pricing and detailed information for integration or ability of the proposed system to accommodate acoustic leak detection sensors that communicate directly to the proposed AMI and MDM system.
- □ Please detail how the proposed system is compatible with fixed and movable distribution system noise loggers for leak detection.
- □ Please detail any pricing and detailed information for a Customer Portal SaaS module that is fully integrated with proposed AMI/MDM system.
- □ Please detail how the robust reporting within MDM system of the proposed solution and what capabilities the Utility will have to modify existing reports or create new reports as desired, and any additional customization costs.
- Please detail how the proposed solution is compatible with other municipal software (i.e. ArcGIS, FacilityDude), and detail the functionality unique to these integrations, if any, and any additional integration costs.
- Please detail how the proposed solution can provide a method to demarcate and analyze district metered areas (DMAs).
- Please detail how the proposed system and all handheld and data collectors can accommodate for providing "backward compatibility" and be capable of reading all current system endpoints, including past generations from multiple vendors.

## **GUARANTEE**

The bidder unconditionally guarantees the materials and workmanship on all material and/or services. If, within the guarantee period, any defects occur due to faulty material and/or services, the bidder, at their expense, shall promptly repair or adjust the condition, or replace the material and/or services to the complete satisfaction of the City. These repairs, replacements, or adjustments shall be made only at such time as will be designated by the City to ensure the least impact to the operation of City business.

## INDEMNIFICATION OF THE CITY

All participants shall indemnify and save harmless the City from all suits, actions, and damages or costs of every name and description to which the City may be subjected or put to by reason of injury to persons or property resulting from negligence or carelessness on the part of the bidder, his employees or agents, in the delivery of materials and supplies, equipment and apparatus, and installation thereof, or by or on account of any act or omission of the bidder and/or participant, their employees or agents; and the whole, or so much of the monies due or to become due the bidder under the Contract as may be considered necessary by the City of Dunn, shall be retained by the City until such suits or claims for damages shall have been settled or otherwise disposed of, and satisfactory evidence to that effect furnished to the City. Other protections to the City by the bidder are set forth in other areas of this document.

## PUBLIC CONVENIENCE AND SAFETY

All participants involved in this Contract shall, at all times, conduct the work in such a manner as to insure the least obstruction practicable. The convenience and safety of the general public and of the

residents along and adjacent to the work sites shall be provided for in an adequate and satisfactory manner. No material or obstruction shall be placed within fifteen (15) feet of any fire hydrant. Footways and portions of highways adjoining the work sites shall not be obstructed more than is absolutely necessary.

#### DRUG FREE WORKPLACE

All participants involved in this Contract shall provide and maintain a drug free workplace, including certification, in accordance with the Federal Drug Free Workplace Act of 1988 (40 CFR Part 32).

## SAFETY AND HEALTH REGULATIONS

All participants involved in this Contract shall comply with all applicable safety and health regulations, standards and codes including but not limited to: Occupational Safety Health Administration (OSHA) requirements in the General industry (1910) and Construction (1926) Standards, NC OSHA Guidelines and Regulations, Manual for Uniform Traffic Control Devices (MUTCD), NFPS's Life Safety Code 101, and North Carolina Building codes and other state and local regulations as they apply.

The City of Dunn, its officers and employees do not propose to administer, implement, or be responsible for any safety and health program. The City will not provide any legal, insurance, or safety advice and/or counsel to any participant, supplier, or their employees.

The City shall have access to any worksite, permits, or safety-related documentation upon request. All serious incidents resulting in the injury and/or hospitalization of any persons must be reported to the City immediately and in writing within eight hours.

Other occurrences with serious accident potential, such as equipment failures and/or damage to any properties, must also be reported to the City immediately. Investigations, inspections, citations, or work stoppages must be reported immediately.

The City reserves the right to suspend work and/or terminate the contract if safety procedures are not followed, or if there is a refusal to comply. A contractor selected by the City will complete unfinished work. The cost of completion and any claims arising from the uncompleted work will be borne by the initial contractor.

Participants involved with this Contract will be responsible for:

- 1. Erecting and maintaining all necessary safeguards to protect persons and property including, but not limited to barricades, signs, and safety apparatus.
- 2. Obtaining all necessary permits prior to the beginning of work.
- 3. Responding to complaints and claims, within a reasonable period of time not to exceed two working days.
- 4. Training of employees and subcontractors' employees as required by the OSHA standards and providing the personal protective equipment needed to perform their tasks safely.
- 5. Writing a safety program covering the work performed and providing a copy of the program to employees. Confined space testing must be performed and permit must be prepared and presented prior to entry in compliance with OSHA Standard Number 1910.146.
- 6. Providing the name of an on-site employee who is responsible for safety and an evening phone number so that they may be contacted.

- 7. Exceeding the minimum safety regulations to protect citizens, City employees, contractor, and subcontractor employees and/or property from harm related to the work process as necessary orrequired by the City.
- 8. Warning those who may be injured by the contractor or the subcontractors' actions and taking necessary precautions to protect those individuals from injury.
- 9. All participants shall be responsible to restore any altered property to its original condition. Property so altered shall be approved by the City Manager or his authorized representative.
- 10. If any damage occurs to any property, the responsible participant shall be responsible to repair it to its original condition at its sole expense and shall indemnify and save harmless the City of Dunn from any damage caused herein.
- 11. Providing a "competent person" on the job at all times when work is being performed.
- 12. Disposing of all waste generated by the participant sues paints, coolants, oils, and all debris in accordance with Local, State, and Federal regulations at the contractor's expense.

## **INSURANCE REQUIREMENTS**

The successful bidder and/or any participants that are not covered under the successful bidder's insurance policy shall meet the following insurance requirement. Participant, at his own expense, shall keep in force at all times and maintain during the term of any contract resulting from this request, the insurance requirements as outlined herein and, if amended, in the scope of work language of the contract.

These guidelines are not all inclusive and scopes and limits could change due to the nature of the service provided. However, minimum standards are illustrated below. The winning bidder and any independent participants shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work by the contractor, his agents, representatives, employees or subcontractors, if applicable.

The winning bidder and any subcontractor not covered under the winning bidder's insurance policy shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work by the contractor, his agents, representatives, employees or subcontractors, if applicable. Any participant in this contract that is not covered by the winning bidder's insurance policy or a subcontractor's insurance policy shall provide coverage to the City as required of the winning bidder.

The City of Dunn must be advised immediately of any changes in required coverages.

The Contractor shall not commence work until he has obtained all insurance required, and such insurance has been approved by the City, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been obtained.

A. The Contractor shall provide and maintain or insure during the life of this contract Worker's Compensation Insurance for all employees employed at the site of the project under his contract or subcontracts in an amount meeting the statutory requirements of the State of North Carolina.

- B. The Contractor shall provide and maintain during the life of this contract Automobile Bodily Injury and Property Damage Liability covering all owned, non-owned and hired automobiles for limits of not less than \$2,000,000 bodily injury each person, each accident and \$2,000,000 property damage, or \$2,000,000 combined single limit - Bodily injury and property damage combined.
- C. The Contractor shall provide and maintain during the life of this contract Comprehensive General Liability. Bodily Injury and Property Damage Liability shall protect the contractor and any subcontractor performing work under this contract from claims of bodily injury or property damage which arise from operations of this contract whether such operations are performed by the contractor, any subcontractor or anyone directly or indirectly employed by either. The amounts of such insurance shall not be less than \$2,000,000 bodily injury each occurrence/aggregate and \$2,000,000 property damage each occurrence/aggregate or \$2,000,000 bodily injury and property damage combined single limits each occurrence/aggregate and umbrella coverage of \$3,000,000. This insurance shall include coverage for products/completed operations, personal injury liability and contractual liability assumed under the indemnity provision of this contract and broad form property damage, explosion, collapse and underground utility damage; stating if policy is written on a claim made or occurrence basis.
- D. The Contractor shall furnish such additional insurance as may be required by statutory requirements of the State of North Carolina.
- E. Each Certificate of Insurance shall bear the provision that the policy cannot be canceled, reduced in the amount of coverage or coverage eliminated in less than thirty (30) days after mailing written notice to the insured and the Owner of such alteration or cancellation, sent by registered mail.
- F. The Contractor shall furnish the City with satisfactory proof of coverage of the insurance required before written approval is granted by the City.
- G. Faxed copy of Certificate of Insurance and Endorsement will be accepted only in emergency situations, but an original copy of both must be received within five (5) working days from the insurer.
- H. Additional Insured shall be listed as the City of Dunn. Do not list an individual's name in that portion of the certificate. An original copy of the additional insured Endorsement must be included with the Certificate of Insurance.

## INDEPENDENT CONTRACTOR

All participants are independent contractors and shall not be deemed an agent or employee of the City of Dunn for any purpose whatsoever.

Submittals shall follow the guidelines of the original RFP. All bidders shall include, but is not limited to, addresses of all Vendors or persons that would participate in the proposed services. The type of organization of the bidder, whether individual, partnership, corporation, or joint venture among any types of entities shall be stated. Any affiliations, parent-subsidiary relationships, and corporate identities.

The City prefers a single, qualified company or entity to be responsible for providing the services described herein.

## ASSIGNMENT

The successful bidder shall not assign in whole or in part any contract resulting from this Request for Proposal without the prior written consent of the City of Dunn. The successful bidder shall not assign any money due or to become due to him under said contract without the prior written consent of the City of Dunn.

## **CONTRACTOR USE OF SITE AND PREMISES**

Successful bidder and all participants shall cooperate with and accommodate related work performed by the City, or any work performed under separate contract by another contractor or subcontractor, on site during the contract period. It shall be the successful bidder and participant's responsibility to coordinate its work on site.

Any additions, deletions, modifications, or changes made to the original Contract shall be processed by mutual agreement with the following City of Dunn Department's (Finance, Public Works and Purchasing).

## **COMPENSATION AND PAYMENT TERMS**

Winning bidder shall be compensated as outlined in the City's payment terms of net 30 days after the Accounts Payables Department has received approved invoices. All such invoices will be paid within these terms unless any items thereon are questioned, in which event payment will be withheld pending verification of the amount claimed, validity of the claim and verification that work performed meets the City's requirements. Contractor shall provide complete cooperation during any such investigation.

# PRICE PROPOSAL- Supply and Delivery of Water Meters and Advanced Meter Infrastructure System (Attached Spreadsheet)

Quantities are assumed for comparison of bid and are not guarantees.

Proposers may submit on multiple meter types by submitting additional Technical and Price Proposals that include the separate meter options. Each Technical proposal will be evaluated independently. All proposers must specify which commercial/industrial meter type(s) are being proposed on each page of the price proposal. An alternative bid for solid state metering, leak detection, and Customer Portal can be presented by the Vendor as desired. The City requests that all equipment priced and proposed are currently available; for that equipment that is still under development or not yet available for purchase, the anticipated release date should be provided.

#### **REFERENCE STATEMENT**

The Prospective Bidder offers the following information as evidence of held qualifications to perform the work as bid upon according to all requirements of the contract documents:

- A. How long you have been in business under the same business name and owner/management structure: \_\_\_\_\_\_ years.
- B. Have you ever been terminated on an awarded contract, or has the Prospective Bidder otherwise failed to complete any work awarded? \_\_\_\_\_\_. If "yes", attach your description of the circumstances on a separate sheet. Include names and telephone numbers of customer(s): the City will expand the list of references to include these specific customers, if any.
- C. Have you, within the previous five (5) years, performed work for the City of Dunn similar to that required by this contract? \_\_\_\_\_ (yes or no)

List on this form three (3) recent contracts under which you provided water meters and AMI systems of the type required by this contract and of the type proposed by the Proposer. Three (3) references must be listed for the AMI System being proposed. [Use a separate sheet to identify additional references, only if you desire. By electing to provide additional references, you are permitting the City the option of expanding your list of references beyond the three (3) required to include some or all of the additions, even though other Proposers may submit only the required three (3).]

Utility Name	Services Under Contract	Years of Project	Services Installed	Contact Person Name / Title / Phone / Email

## PROPAGATION

Each proposer shall provide analysis of network RF propagation and assume responsibility for delivering network design based on the quantity of DCUs, repeaters, and other network equipment in order to achieve 100% of City water customers.

Collector site options are listed in Attachment A of this document. The City has no current tank maintenance contract but does have power available at all three tank locations. Visits to the storage tank locations will be part of the optional site visit.

#### SIGNATURE SHEET

The signature below certifies that the proposal as submitted complies with all Terms and Conditions as set forth in this RFP.

The signature below also certifies that this firm has no business or personal relationships with any other companies or persons that could be considered as a conflict of interest or potential conflict of interest to the City of Dunn, North Carolina, and that there are no principals, officers, agents, employees, or representatives of this firm that have any business or personal relationships with any other companies or persons that could be considered as a conflict of interest to the City of Dunn, North Carolina, pertaining to any and all work or services to be performed as a result of this request and any resulting contract with the City of Dunn, North Carolina. Specifically, no City employee, City employee's partner, or any member of the City employee's immediate family holds a position with the offeror such as an officer, director, trustee, partner or the like, or is employed in a capacity involving personal and substantial participation in the procurement transaction, or owns or controls an interest of more than five percent.

(To receive consideration for award, this signature sheet must be returned to the City of Dunn, North Carolina as it shall be a part of your response.)

Complete Legal Name of Firm:					
Address					
Address:					
Federal Tax ID Number:					
Signature of Authorized Representative:					
Typed Name and Title:					
Please provide the primary contact person for questions and concerns relative to this project:					
rease provide the primary contact person of questions and concerns relative to this project.					
Contact Name and Title:					
Phone : () Fax : () Email :					

CITY OF DUNN REQUEST FOR PROPOSALS: ADVANCED METERING INFRASTRUCTURE ISSUE DATE JANUARY 22, 2018

## ATTACHMENT A:

## **City-Owned Assets and Properties**

	LOCATION	LAT/LONG		ELEVATION	ELEVATION
1	Eastside L.S.	35deg17'46.28"N	78deg35'06.08"W	170 ft	
2	Food Lion L.S.	32deg16'28.16"N	78deg37'48.83"W	175 ft	
3	Machine & Welding L.S.	35deg17'7.61"N	78deg37'30.80"W	181 ft	
4	Grove Park L.S.	35deg18'44.36"N	78deg35'34.30"W	177 ft	
5	Edgerton II L.S.	35deg16'6.87"N	78deg38'16.45"W	171 ft	
6	Champion L.S.	35deg19'16.26"N	78deg37'46.41"W	207 ft	
7	Wal Mart L.S.	35deg19'20.13"N	78deg38'42.40"W	168 ft	
8	Love's L.S.	35deg20'21.24"N	78deg33'31.38"W	246 ft	
9	Powell Ave. Tank	35deg19'10.83"N	78deg37'47.10"W	218 ft	359 ft
10	Mary Stewart Tank	35deg20'35.76"N	78deg34'53.26"W	247 ft	370 ft
11	Carr Street Tank	35deg18'43.62"N	78deg36'21.72"W	204 ft	336.19 ft
12	City Hall	35deg18'24.18"N	78deg36'24.29"W	209 ft	
13	Police Athletic League	35deg18'36.24"N	78deg36'1.50"W	207 ft	
14	Tyler Park	35deg18'51.57"N	78deg37'4.21"W	197 ft	
15	P.K. Vyas Rec Center	35deg17'39.75"N	78deg36'37.32"W	197 ft	
16	Greenwood Cemetery	35deg18'17.65"N	78deg37'27.40"W	188 ft	
17	Black River WWTP	35deg17'49.35"N	78deg38'12.76"W	168 ft	
18	Veterans Memorial Park	35deg19'35.23"N	78deg36'24.82"W	218 ft	
19	Resthaven Cemetery	35deg18'24.76"N	78deg35'56.88"W	197 ft	
20	Codrington Park	35deg18'28.07"N	78deg36'0.71"W	197 ft	
21	Tart Park	35deg17'45.74"N	78deg36'38.91"W	195 ft	
22	Library	35deg18'21.83"N	78deg36'40.39"W	209 ft	