

**AGREEMENT FOR PROFESSIONAL SERVICES
WITH THIRKETTLE CORPORATION DBA AQUA-METRIC SALES COMPANY
FOR ADVANCED METERING INFRASTRUCTURE (AMI) UPGRADE AND
CUSTOMER ENGAGEMENT PROGRAM**

CITY PROJECT NO. 86700

THIS AGREEMENT is entered into this _____ day of _____, 2024, by and between the City of Burlingame, State of California, herein called the "City", and **Thirkettle Corporation dba Aqua-Metric Sales Company** engaged in providing the services herein called the "Consultant".

RECITALS

- A. The City is considering for consultant to provide AMI water metering system network implementation services to assist the City with the Advanced Metering Infrastructure (AMI) Upgrade and Customer Engagement Program (Project), City Project No. 86700.
- B. The City desires to engage Consultant to perform the desired work, described in the exhibit(s) hereto. In the event of a conflict in terms between the documents affixed hereto, the terms and conditions of this Agreement shall prevail.
- C. The Consultant represents and affirms that it is qualified and willing to perform the desired work pursuant to this Agreement.

AGREEMENTS

NOW, THEREFORE, THE PARTIES HERETO AGREE AS FOLLOWS:

- 1. Scope of Services. The Consultant shall provide professional AMI network implementation services such as procurement of AMI network and software, AMI system planning and design, installation, configuration, integration and training of AMI software, and as detailed in "Scope of Services" of the attached Exhibit A of this agreement.
- 2. Time of Performance. The services of the Consultant are to commence upon the execution of this Agreement with completion of all work estimated by December 31, 2027.

3. Compliance with Laws. The Consultant shall comply with all applicable laws, codes, ordinances, and regulations of governing federal, state and local laws. Consultant represents and warrants to City that it has all licenses, permits, qualifications and approvals of whatsoever nature which are legally required for Consultant to practice its profession. Consultant represents and warrants to City that Consultant shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Agreement any licenses, permits, and approvals which are legally required for Consultant to practice its profession. Consultant shall maintain a City of Burlingame business license.
4. Sole Responsibility. Consultant shall be responsible for employing or engaging all persons necessary to perform the services under this Agreement.
5. Information/Report Handling. All documents furnished to Consultant by the City and all reports and supportive data prepared by the Consultant under this Agreement are the City's property and shall be delivered to the City upon the completion of Consultant's services or at the City's written request. All reports, information, data, and exhibits prepared or assembled by Consultant in connection with the performance of its services pursuant to this Agreement are confidential until released by the City to the public, and the Consultant shall not make any of these documents or information available to any individual or organization not employed by the Consultant or the City without the written consent of the City before such release. The City acknowledges that the reports to be prepared by the Consultant pursuant to this Agreement are for the purpose of evaluating a defined project, and City's use of the information contained in the reports prepared by the Consultant in connection with other projects shall be solely at City's risk, unless Consultant expressly consents to such use in writing. City further agrees that it will not appropriate any methodology or technique of Consultant which is and has been confirmed in writing by Consultant to be a trade secret of Consultant.
6. Compensation. Compensation for Consultant's services shall not exceed \$297,848; and payment shall be made within thirty (30) days of the date on Consultant's invoice and in accordance with applicable California Public Contract Code; however, the policy shall not apply to payments withheld by City in the event: (a) there is a bona fide dispute between City and Consultant concerning the goods, supplies, materials, equipment delivered, or the services performed, that causes the payment to be late; or (b) the payment application is not mailed or invoiced to City in accordance with Agreement. City shall provide Consultant with written notice of a disputed invoice within thirty (30) days from the date of receiving the

invoice. If City has not furnished such notice, Consultant may consider the invoice accepted and ready for payment.

7. Availability of Records. Consultant shall maintain the records supporting this billing for not less than three (3) years following completion of the work under this Agreement. Consultant shall make these records available to authorized personnel of the City at the Consultant's offices during business hours upon written request of the City.
8. Project Manager. The Project Manager for the Consultant for the work under this Agreement shall be Jeff Brockman.
9. Assignability and Subcontracting. The services to be performed under this Agreement are unique and personal to the Consultant. No portion of these services shall be assigned or subcontracted without the written consent of the City.
10. Notices. Any notice required to be given shall be deemed to be duly and properly given if mailed postage prepaid, and addressed to:

To City: Weizhi Cheng, PE, Associate Engineer
 City of Burlingame
 501 Primrose Road
 Burlingame, CA 94010

To Consultant: Tommy Thirkettle or Chris Newville
 Aqua-Metric Sales Company
 4050 Flat Rock Drive
 Riverside, CA 92505

or personally delivered to Consultant to such address or such other address as Consultant designates in writing to City.

11. Independent Contractor. It is understood that the Consultant, in the performance of the work and services agreed to be performed, shall act as and be an independent contractor and not an agent or employee of the City. As an independent contractor he/she shall not obtain any rights to retirement benefits or other benefits which accrue to City employee(s). With prior written consent, the Consultant may perform some obligations under this Agreement by subcontracting, but may not delegate ultimate responsibility for performance or assign or transfer interests under this Agreement.

Consultant agrees to testify in any litigation brought regarding the subject of the work to be performed under this Agreement. Consultant shall be compensated for its costs and expenses in preparing for, traveling to, and testifying in such matters at its then current hourly rates of compensation, unless such litigation is brought by Consultant or is based on allegations of Consultant's negligent performance or wrongdoing.

12. Conflict of Interest. Consultant understands that its professional responsibilities is solely to the City. The Consultant has and shall not obtain any holding or interest within the City of Burlingame. Consultant has no business holdings or agreements with any individual member of the Staff or management of the City or its representatives nor shall it enter into any such holdings or agreements. In addition, Consultant warrants that it does not presently and shall not acquire any direct or indirect interest adverse to those of the City in the subject of this Agreement, and it shall immediately disassociate itself from such an interest should it discover it has done so and shall, at the City's sole discretion, divest itself of such interest. Consultant shall not knowingly and shall take reasonable steps to ensure that it does not employ a person having such an interest in this performance of this Agreement. If after employment of a person, Consultant discovers it has employed a person with a direct or indirect interest that would conflict with its performance of this Agreement, Consultant shall promptly notify City of this employment relationship, and shall, at the City's sole discretion, sever any such employment relationship.
13. Equal Employment Opportunity. Consultant warrants that it is an equal opportunity employer and shall comply with applicable regulations governing equal employment opportunity. Neither Consultant nor its subcontractors do and neither shall discriminate against persons employed or seeking employment with them on the basis of age, sex, color, race, marital status, sexual orientation, ancestry, physical or mental disability, national origin, religion, or medical condition, unless based upon a bona fide occupational qualification pursuant to the California Fair Employment & Housing Act.
14. Insurance.
 - A. Minimum Scope of Insurance:
 - i. Consultant agrees to have and maintain, for the duration of the contract, General Liability insurance policies insuring him/her and his/her firm to an amount not less than: One million dollars

(\$1,000,000) combined single limit per occurrence and two million dollars (\$2,000,000) aggregate for bodily injury, personal injury and property damage in a form at least as broad as ISO Occurrence Form CG 0001.

- ii. Consultant agrees to have and maintain for the duration of the contract, an Automobile Liability insurance policy ensuring him/her and his/her staff to an amount not less than one million dollars (\$1,000,000) combined single limit per accident for bodily injury and property damage.
- iii. Consultant agrees to have and maintain, for the duration of the contract, professional liability insurance in amounts not less than two million dollars (\$2,000,000) each claim/aggregate sufficient to insure Consultant for professional errors or omissions in the performance of the particular scope of work under this agreement.
- iv. Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

B. General and Automobile Liability Policies:

- i. The City, its officers, officials, employees and volunteers are to be covered as insured as respects: liability arising out of activities performed by or on behalf of the Consultant; products and completed operations of Consultant, premises owned or used by the Consultant. The endorsement providing this additional insured coverage shall be equal to or broader than ISO Form CG 20 10 11 85 and must cover joint negligence, completed operations, and the acts of subcontractors. This requirement does not apply to the professional liability insurance required for professional errors and omissions.
- ii. The Consultant's insurance coverage shall be endorsed to be primary insurance as respects the City, its officers, officials,

employees and volunteers. Any insurance or self-insurances maintained by the City, its officers, officials, employees or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

- iii. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officers, officials, employees or volunteers.
- iv. The Consultant's insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.

C. Workers' Compensation and Employers Liability Coverage:

- i. In addition to these policies, Consultant shall have and maintain Workers' Compensation insurance as required by California law. Further, Consultant shall ensure that all subcontractors employed by Consultant provide the required Workers' Compensation insurance for their respective employees.
- ii. The insurer shall agree to waive all rights of subrogation against the City of Burlingame, its officers, officials, employees, or volunteers for losses arising from work performed by the Company for the City of Burlingame.

D. All Coverages: Each insurance policy required in this item shall be endorsed to state that coverage shall not be canceled except after thirty (30) days' prior written notice by mail, has been given to the City (10 days for non-payment of premium). Current certification of such insurance shall be kept on file at all times during the term of this agreement with the City Clerk.

E. Acceptability of Insurers: Insurance is to be placed with insurers with a Best's rating of no less than A:-VII and authorized to do business in the State of California.

F. Verification of Coverage: Upon execution of this Agreement, Contractor shall furnish the City with certificates of insurance and with original endorsements effecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person

authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be on forms approved by the City. All certificates and endorsements are to be received and approved by the City before any work commences. The City reserves the right to require complete, certified copies of all required insurance policies, at any time.

15. Indemnification. To the fullest extent permitted by law, Consultant shall save, keep and hold harmless indemnify and defend the City, its officers, employees, authorized agents and volunteers from all damages, liabilities, penalties, costs, or expenses in law or equity, including but not limited to attorneys' fees, that may at any time arise, result from, relate to, or be set up because of damages to property or personal injury received by reason of, or in the course of performing work which arise out of, pertain to, or relate to, directly or indirectly, in whole or in part, the negligence, recklessness, or willful misconduct of Consultant, or any of the Consultant's officers, employees, or agents or any subconsultant. This provision shall not apply if the damage or injury is caused by the sole negligence, active negligence, or willful misconduct of the City, its officers, agents, employees, or volunteers.
16. Waiver. No failure on the part of either party to exercise any right or remedy hereunder shall operate as a waiver of any other right or remedy that party may have hereunder, nor does waiver of a breach or default under this Agreement constitute a continuing waiver of a subsequent breach of the same or any other provision of this Agreement.
17. Governing Law. This Agreement, regardless of where executed, shall be governed by and construed under the laws of the State of California. Venue for any action regarding this Agreement shall be in the Superior Court of the County of San Mateo.
18. Termination of Agreement. The City and the Consultant shall have the right to terminate this agreement with cause by giving not less than forty-five (45) days written notice of termination. In the event of termination, the Consultant shall deliver to the City all plans, files, documents, reports, performed to date by the Consultant. In the event of such termination, City shall pay Consultant for all work completed or goods delivered through the date of termination.
19. Amendment. No modification, waiver, mutual termination, or amendment of this Agreement is effective unless made in writing and signed by the City and the Consultant.

20. Entire Agreement. This Agreement constitutes the complete and exclusive statement of the Agreement between the City and Consultant. No terms, conditions, understandings or agreements purporting to modify or vary this Agreement, unless hereafter made in writing and signed by the party to be bound, shall be binding on either party.

IN WITNESS WHEREOF, the City and Consultant have executed this Agreement as of the date indicated on page one (1).

City of Burlingame

“Consultant”

By _____
Lisa K. Goldman
City Manager

Thirkettle Corporation dba
Aqua-Metric Sales Company
Print Name:
Title:

Approved as to form:

City Attorney – Michael Guina

ATTEST:

City Clerk - Meaghan Hassel-Shearer



Aqua-Metric Sales Company
1060 National Drive, #5
Sacramento, CA 95834
Phone: (951) 637-1400
Fax: (951) 637-1500

Primary Contact
Mike Bortoletto
Territory Manager
Phone: (916) 824-4552
Email: mike.bortoletto@aqua-metric.com

Proposal Response Contact
Kristy Segarra
Bids and Proposals
Phone: (210) 967-6300
Email: kristy.segarra@aqua-metric.com

City Project No. 86700

Advanced Meter Infrastructure (AMI) Upgrade and Customer Engagement Project

City of Burlingame, CA
Public Works Department
501 Primrose Road
Burlingame, CA 94010

Project Proposal



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Section 1: Cover Letter

Cover Letter

September 24, 2024

City of Burlingame, CA
501 Primrose Road
Burlingame, CA 94010

RE: RFP 86700, AMI Upgrade Project

To Whom It May Concern:

The idea of change can be an exciting yet intimidating experience, especially when considering vast types of technology such as AMI. To reflect on how much metering technologies have advanced in recent years is to acknowledge an impressive industrial accomplishment. Operations once performed manually can be completely automated; and tasks that formerly took several steps for a utility to complete will soon be performed with just a click of a button. Having a database that offers hourly usage data will allow the City of Burlingame the ability to provide detailed information immediately to your customers. This is a convenience that will be appreciated not just by your residents, but by utility employees as well.

Thirkettle Corporation, dba Aqua-Metric Sales Company, is excited to propose our Advanced Metering Infrastructure (AMI) Solution to the City of Burlingame, CA, in response to their Request for Proposals, City Project No. 86700, Advanced Metering Infrastructure (AMI) Upgrade and Customer Engagement Project, due September 24, 2024. As the prime respondent, Aqua-Metric will provide AMI system implementation, training, infrastructure installation, and support as a part of our solution to the utility. However, no two AMI technologies are alike in the means of performance, security, efficiency, reliability, and support. The enclosed response encompasses Aqua-Metric's unparalleled solution of the Sensus FlexNet Advanced Metering Infrastructure system with Sensus Analytics Meter Data Management software, which will place the progressive City of Burlingame, CA on the map as a Smart-City.

FlexNet Technology Summary

Advancements in automated technology have contributed to substantial changes in utility operations allowing a migration from multi-step manually captured information to complete one-click communication at a centralized location. Sensus FlexNet AMI is a powerful and protected migratable system based on its Primary-use FCC Licensed Frequency; consistently delivering two-watts of transmission power from each of its two-way, or pingable, transmitters at all times. This unmatched power leads to drastically reduced infrastructure requirements and maintenance costs for utilities.

As AMI continues to grow and produce increasing amounts of data, utilities have an evolving need to efficiently turn the data into useful information. With minute-by-minute, system-wide operational views, Sensus Analytics meter data management software is the answer for any utility seeking to maximize the value of the data collected from various intelligent devices on their distribution system. Sensus Analytics organizes data acquired across water, gas, and electric network communications platforms to drive revenue, improve customer service, and promote better planning. Upon data collection, the system's flexible user interface presents information in detailed reports for a utility's use. Sensus Analytics enhances the capabilities of Sensus' intelligent meters and FlexNet communications network, so utilities maximize the return on infrastructure investments over time.

As you consider your options and review our proposal herein, you will quickly discover:

- We have a true two-way AMI system, broadcasting at two-watts of power at all times.
- We provide a dedicated Primary FCC Licensed Frequency, delivering a secure private highway of communication.
- We have an industry leading 20-year SmartPoint Warranty (15-year full warranty plus a 5-year prorated warranty).
- We manage the technology, the infrastructure installation, and the post-project support with our in-house technology team.

Commitment to the City of Burlingame

Aqua-Metric has reviewed the City’s RFP and understands that they are looking for an AMI system software and support. Aqua-Metric will commit the resources as described herein for the City of Burlingame’s AMI Project. Below is an overview of the personnel who will be assigned to the City’s AMI project.

Name	Title/Role	Phone
Chris Newville	Manager Proposal Contact and Contract Administrator	Office: (210) 967-6300 Direct: (210) 943-3544
Mike Bortoletto	Territory Manager Sales and Business Development	Direct: (916) 824-4552
Jeff Randolph	Western Sales Manager Sales and Business Development	Direct: (951) 232-1346
Jeff Brockman	Technical Support Specialist Project Management & Implementation	Direct: (209) 275-7606
Ryan Stevenson	Technical Support Specialist Project Management & Implementation	Direct: (916) 668-4656

As you review our response, City of Burlingame can rest assured that when a utility chooses a partnership with Aqua-Metric and Sensus they are receiving the most proven technology with best-in-class service that does not have an expiration date. City of Burlingame will receive the most accurate water meters, transmitting data over the most secure AMI network, requiring the least amount of infrastructure, and supported during- and post-project by our in-house technology support team. We appreciate the opportunity and thank you in advance for your time and thoughtful consideration.

Sincerely,

Christopher Newville, Manager
Aqua-Metric Sales Company
4050 Flat Rock Drive
Riverside, CA 92505
Phone: (951) 637-1400
Procurements@aqua-metric.com

Section 2: Project Team

Company Overview

Project Team

Company Overview

Thirkettle Corporation has served the utility industry for over thirty years and is an exclusive authorized distributor for Sensus, USA. Thirkettle Corporation originated as an authorized distributor for Precision Meters in 1992 and has grown into one of Sensus' leading distributors. Founded in Ontario, California, Thirkettle Corporation quickly became entrenched in the water metering industry approaching 1999 when Precision Meters was acquired by Sensus Metering Systems. Soon thereafter, Thirkettle Corporation became an authorized Sensus distributor in Southern California. It was at this point Thirkettle Corporation began to drive the marketplace from a direct read brass commodities business to technology driven Automated Meter Reading (AMR) systems. Thirkettle Corporation rapidly became the industry leader selling more AMR radios in Southern California than all competitors combined. As result of continued growth and success, Thirkettle Corporation transitioned into a larger facility in Riverside, CA becoming the sole Sensus distribution in Southern California, and was given the opportunity to expand into other territories through the southern United States. To date, Thirkettle Corporation continues to drive the industry and fully commits our organization in parallel to Sensus' progressive direction within the AMI market.

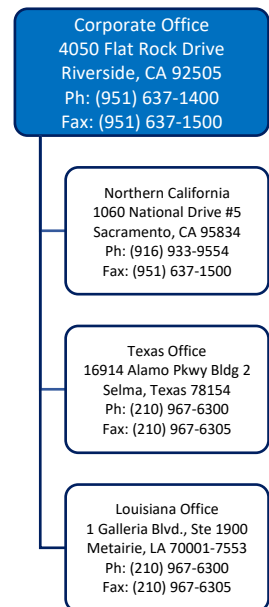
Aqua-Metric Sales Company Overview

Aqua-Metric Sales Company, a subsidiary of Thirkettle Corporation, has been an exclusive Authorized Sensus Distributor for twenty years. As their exclusive metering provider, we are able to focus all of our efforts on the Sensus product line and delivering the best possible services and support to our customers. Our Riverside Warehouse maintains an inventory of Sensus products and is constantly updating inventory levels to assure the lowest lead times to our customers.

In 2016, Sensus recognized Aqua-Metric's efforts in southern California and Texas by awarding us distribution for Louisiana, where we have used our AMI knowledge to expand Sensus technology within the entire state. Furthermore, in October 2020, Sensus expanded Aqua-Metric's distribution into northern California, making us the sole Sensus distributor for the entire state.

Aqua-Metric currently employs forty-nine dedicated full-time staff members. Our employees are based throughout multiple states, allowing for the best coverage of our distribution area. All employees receive ongoing product training from Sensus to ensure that they are knowledgeable in the full Sensus product line.

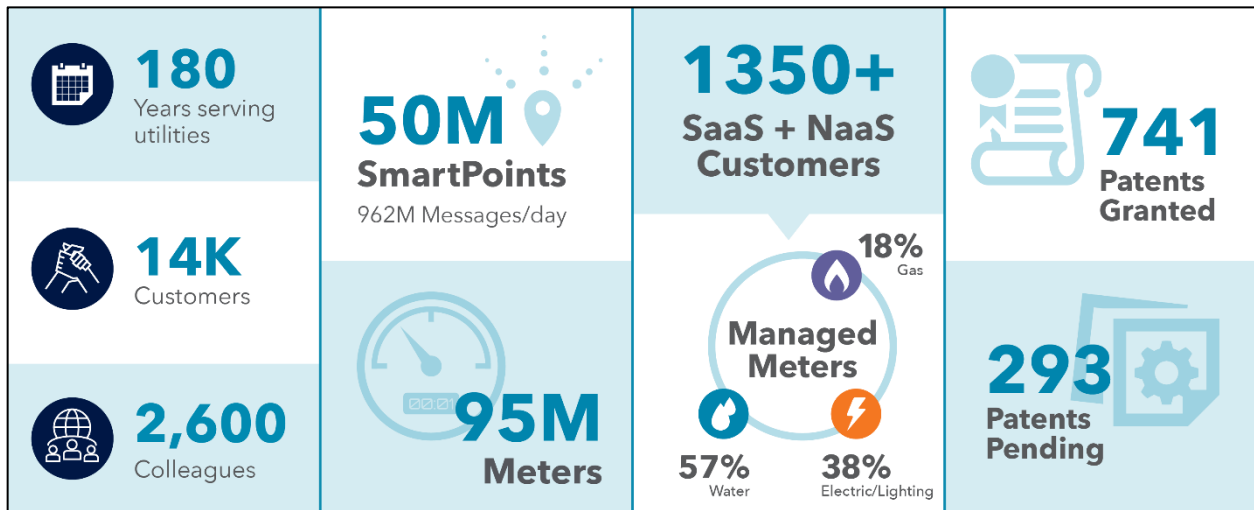
Aqua-Metric has been recognized by Sensus as an Authorized Value-Added Reseller focused on customer service. With the advent of so many technical systems, Aqua-Metric has developed and expanded its technology department to implement and service Sensus AMI/AMR systems. Our California AMI/AMR support specialists devote their time solely to assisting customers with technical issues related to the installation and operation of Sensus AMI/AMR products. This focus and attention to detail allows Aqua-Metric to offer local factory level software and field support to California customers without the delays often associated with remote support locations common to our industry. In addition, all Aqua-Metric employees are specialists in their own right, as they sell and support only Sensus meters and AMR/AMI systems.



Manufacturer and Subcontractor Overview

Sensus Overview

Sensus has been a cornerstone in the metering industry for more than 150 years. As a global market leader for smart grid products and technologies, Sensus is committed to helping the world's public service providers reach farther with innovation in sensing and communication technologies, data analytics, and a broad portfolio of services.



The FlexNet system debuted in 2006. To date, the FlexNet system is the backbone of more than 1,400 electric, water, and gas AMI systems, supporting more than 45 million total endpoints and including more than 200 combination networks.

Every day, the FlexNet system delivers more than 795 million messages of critical data so utilities can provide better service to electric, water, and gas end consumers. Our longstanding success is rooted in our commitment to providing an AMI solution that is designed to meet our customers' current objectives as well as their future business needs.

Sensus is a Xylem brand (XYL (NYSE)), which is headquartered in Washington, DC. In addition to providing smart metering, network technologies, and advanced infrastructure analytics solutions for electric, water, and gas utilities through Sensus, Xylem provides innovative technology solutions to solve the world's water challenges.

JM Electrical Services Overview

J M Electrical Services personnel have served the electrical and wireless telecom industry for over 15 years. JMES has specialized in commercial/ industrial electrical installs as well as AMI systems, network infrastructure, point to point microwave, and telecom structure builds. Their team can offer reliable, efficient, and competitive services within the electrical and telecom industries.

Project Team



Jeff Randolph	Western Sales Manager
<ul style="list-style-type: none"> • Employed with Aqua-Metric since 1997 • Operations manager for Aqua-Metric from 2005-2009 • Six years of experience as AMI/AMR project management • Certifications <ul style="list-style-type: none"> ○ C-61 D-65 Contractors License <p>Key Role with Utility: Jeff Randolph will be the Utility’s and Aqua-Metric’s lead liaison to Sensus. Mr. Randolph will work with our operations team to ensure product order, delivery, and acceptance. Additionally, he will work alongside Mike Bortoletto providing product support and overseeing the Utility’s long-term development.</p>	

Mike Bortoletto	Solutions Specialist
<ul style="list-style-type: none"> • Over fifteen years of meter industry experience. • Provided sales, management, and installation supervision / support for all aspects of AMR and AMI Projects. • Educational Background <ul style="list-style-type: none"> ○ Bachelor of Arts in Communication Business Marketing with a Minor in Business Administration <p>Key Role with Utility: Mike Bortoletto will manage the day-to-day activities with the City. He will serve as the liaison between the Utility and Aqua-Metric, providing unparalleled customer service and support.</p>	

Jeff Brockman	AMI Project Management / Technical Support Specialist
<ul style="list-style-type: none"> • Over twenty years of experience in the IT field including associate and bachelor’s degree level instruction. • Seven years of experience managing projects large and small, individually, or team-led, including segments of a multimillion-dollar data center co-location project. • AMR/AMI implementation training and management • Educational Background <ul style="list-style-type: none"> – Master of Business Administration – Bachelor of Arts in Political Science <p>Key Role with Utility: Jeff Brockman will work alongside our primary project manager, Chris Berg, to assist the Utility with any technology and system support services. Jeff Brockman will assist with monitoring the Utility’s network for their managed solution.</p>	

Ryan Stevenson	Technical Support Specialist
<ul style="list-style-type: none"> • Technical Support Specialist to Aqua-Metric AMR/AMI partners throughout Northern California and the Bay Area. • Over six years of technical support and repair experience. • AMR/AMI implementation training and management • Educational Background <ul style="list-style-type: none"> – Bachelor of Science in Computer Science <p>Key Role with Utility: Ryan Stevenson will provide additional on-site and remote support for the City alongside our project management team. This will include network monitoring, training, and ongoing support services.</p>	

JM Electrical Services

Subcontractor

• Basestation Installation Services and Tower Build • Status: S Corp • Service Area: California, Nevada, Arizona • Company General Liability: Colony Industrial Company; Coverage: @ 5-Million • Auto Insurance: Integon; Coverage: 1-Million • California Contractor’s License: 1056901 C-10 • Industry Certifications: OSHA 10 and 30; Comtrain Tower Climbing and Rescue; Manlift/Boomlift; Sensus Certified Installer; CPR/First Aid; Anritsu Sweep Testing • Contact Information: Owner, Jeff Mandell; J Mandell@jmeservices.net • Phone (714) 488-1970; Website: www.jmservices.net • Address: 2581 Union Avenue, La Habra, CA 90631
Key Role with the Utility: JME will provide basestation collector installation services.

Section 3: Project Approach and Scope of Work

Proposed Project Approach

Aqua-Metric Implementation Overview

Post-RFP Request for Additional Information Response

Proposed Project Approach

Aqua-Metric's optimal business solutions provide comprehensive offerings to our customers, encompassing solution planning and design, network deployment, meter installations (where applicable), and life-cycle support. We endeavor to give each customer peace of mind knowing they are receiving the absolute best technology, implemented and supported locally by our team of committed and highly knowledgeable professionals.

Aqua-Metric practices a standard operational philosophy and approach from initial project commencement through completion and acceptance, combining the benefits of best practices and local support. Leading into the City of Burlingame's AMI project, Aqua-Metric will host a series of Planning and Solution Design workshops allowing us to gain a better understanding of the City's current business processes and identify any immediate needs. Once we understand these requirements, our project team will work closely with the City to establish a project plan, deliverables, communication plans, and project acceptance. During this time, we will devise a deployment timeline conducive to product acquisition, software integration, and network implementation services.

Aqua-Metric's in-house technology department will be responsible for managing installation, integration, and commissioning of the Utility's FlexNet system. Our technology department is proficient in all aspects of FlexNet AMI system deployment with particular emphasis on integration with the City's CIS Tyler Munis. Our team will work closely with City of Burlingame and their CIS to facilitate the successful integration of the CIS software with the proposed Sensus Analytics MDM software.

Aqua-Metric's technology team will provide instructor-led and one-on-one field training needed for optimal system operation. Throughout the initial project start-up, our technology team will deliver on-site training courses for key city personnel. Each training session will be relevant to the audience and will include necessary product documentation and handouts.

Within the solution's lifetime, City of Burlingame will inevitably encounter obstacles to overcome in the future. Aqua-Metric is committed to assisting the City overcome these hurdles to ensure the continued operational health of the network through the project. Through Sensus and Aqua-Metric's annual support offering, we will provide comprehensive onsite and remote support to ensure the Utility will receive the best service, hardware, and software support for Sensus AMI products.

Scope of Work

As City of Burlingame's primary system integrator, Aqua-Metric will commit the necessary time and resources to fulfill the City's goals for a successful AMI project. Our team will work alongside the City during all phases of their prospective AMI project and provide post-project support for the AMI System upon system acceptance. Our fundamental services will include:

- AMI Implementation
 - Procurement of the AMI network and software
 - AMI system planning and design in collaboration with the Utility
- Design, installation, and acceptance of the AMI Network
- Installation, configuration, integration, and training of the AMI Software
 - Sensus FlexNet RNI
 - Sensus Analytics MDMS
 - Sensus FieldLogic Tools (handhelds)
- Project close out.

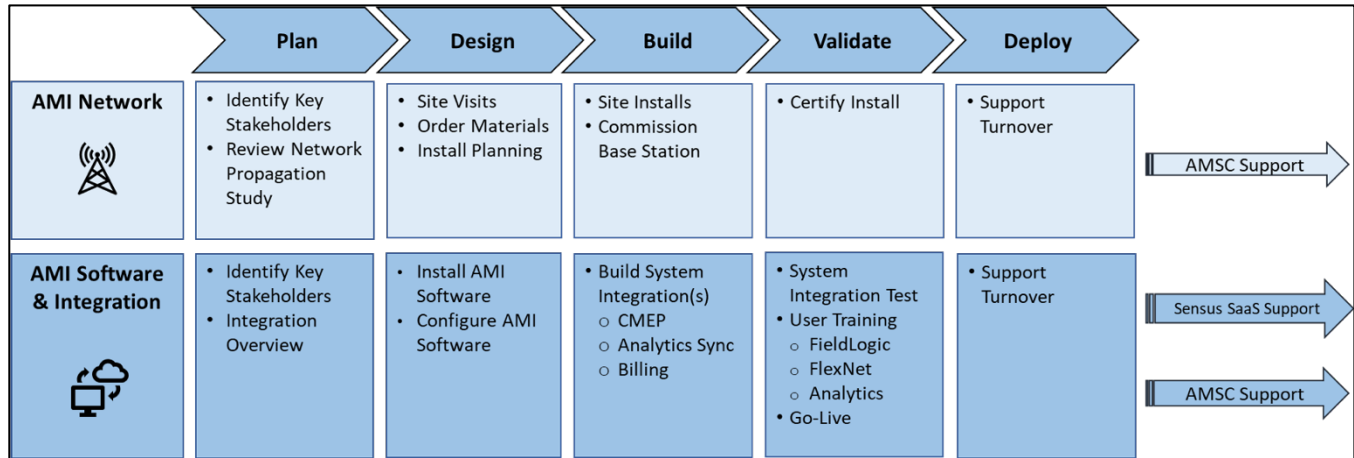
Project Approach

Aqua-Metric utilizes a phased, waterfall approach for AMI Implementations. The phased approach calls for four major workstreams to work in parallel to accomplish the project objectives.

The proposed workstreams are:

- AMI Network Installation
- AMI Software Installation and Integration
- Deployment & Closeout

The following diagram depicts the Aqua-Metric work activities by phase:



Aqua-Metric’s proposal is for the AMI system only – no metering product / endpoints or their installation – as detailed herein. Aqua-Metric’s approach includes network infrastructure and software implementation and management until the network is deployed. All scope regarding the purchase and/or installation of metering products (ex. water meters, SmartPoints, etc.) – anything outside of the network collectors – will be the responsibility of the Utility outside of this project.

Optional Over-the-Air Reprogramming

Aqua-Metric understands that the City has an existing AMR drive-by system with existing AMR-ready meters. While these meters can be read using the FlexNet AMI System, it is likely that the register will need to be re-programmed to read all dials. To help account for this, Aqua-Metric’s itemized quote reflects an optional “Over-the-Air Reprogramming” line item that reflects contracting with the Sensus Professional Services department to attempt to reprogram the City’s current assets.

Optional Network and System Monitoring and Management Services

Aqua-Metric understands that the City is interested in an optional Network and System Monitoring and Management Service. Upon review of this section within the City’s RFP documents, we believe our proposed suite of software and services provides the additional monitoring requested by the City. In consideration of this, we would like to discuss the system monitoring features of FlexNet prior to quoting any additional services to the City. However, features requested such as maintaining the backhaul network, and providing spare parts would not be included, as we do not provide this service.

Aqua-Metric AMI System Implementation Overview

Aqua-Metric provides ongoing collaborative partnership and support to its clients throughout the lifecycle of their project. Aqua-Metric's technical support specialists are responsible for managing infrastructure installation, commissioning, and the City's acceptance of their newly implemented system. Aqua-Metric has developed a technology team dedicated to providing technical support after the implementation of the project. Upon system acceptance, there will be a transition to Aqua-Metric's support division, alongside Sensus's support team for SaaS subscription.

The Aqua-Metric in-house technology department prides itself on being deeply knowledgeable in all aspects of AMI system setup, implementation, configuration, and support. We are not only familiar with the Sensus FlexNet System itself, but also its integration with third-party software. The Aqua-Metric team will work alongside Sensus personnel to perform a complete system setup and software implementation. Aqua-Metric has deployed and supported over one-hundred AMI systems; additionally, Sensus has participated in over 1,500 network deployments.

Aqua-Metric Project Management Services

Aqua-Metric will provide project management services in accordance with the legal agreement between the parties, which may include coordination and support to the customer utility as outlined below:

- Pre-deployment planning and customer review meetings
- Project schedule development
- Project coordination, facilitating equipment, order placement, and fulfillment.
- Testing of the data transfer to the customer billing system
- Training sessions for installers and AMI system operators
- Facilitate customer acceptance testing of the AMI system (phased acceptance) in accordance with the mutually developed plan.

Aqua-Metric Technical Support Criteria

All projects will be deployed as per the agreed upon criteria outlined with the Utility.

- The technical support team will coordinate with the Utility according to the criteria identified and agreed upon for each milestone of the project.
- The technical support team will manage commissioning, optimization, and acceptance of the project.

Aqua-Metric Project Management Phased Activity

Aqua-Metric will work closely with the Utility to establish the installation project plan, project deliverables, accountabilities, communications planning, and project acceptance. We utilize our standard operational philosophy and approach through Project Acceptance and Closure, combining the benefits of best practices and local management. Aqua-Metric's technology team will carry out the following responsibilities when implementing an AMI solution.

Aqua-Metric Responsibility Overview

Administer the Project

- Participate in pre-deployment planning.
- Develop and maintain project schedule.
- Conduct customer review meetings
- Coordinate subcontractors

Manage AMI Network Deployment

- Coordinate tower site preparation
- Coordinate Sensus Basestation and antenna installation
- Coordinate Sensus Regional Network Interface (RNI) SaaS setup and build

- Coordinate Sensus Analytics SaaS setup and build

Manage Commissioning of the System

- Coordinate Sensus Basestation commissioning
- Coordinate Sensus RNI commissioning
- Coordinate Sensus Analytics commissioning

Facilitate System Setup and Deployment

- Support configuration of RNI and Sensus Analytics user accounts and access
- Conduct field training for installers and/or utility personnel on the installation of SmartPoints and meters
- Schedule and coordinate Sensus Analytics and RNI training
- Coordinate AMI Integration between Utility's Billing System and Sensus, to integrate nightly synchronization of account data (vFlex) and provide billing read information.
 - Note: The Utility will need to contract with billing vendor to provide the billing part of the interface for vFlex integration and for the billing read process
- Assist with Monitoring of system read performance.

Manage final system acceptance process.

- Facilitate customer acceptance testing of the Sensus FlexNet system.
- Secure customer sign-off of system acceptance

Aqua-Metric Responsibilities by Phase

The following tasks are the responsibility of Aqua-Metric during each specific phase of an AMI Project sale and deployment.

Pre-Sales Phase

- Obtain area site map from utility.
- Evaluate potential tower sites.
- Input collected data to Sensus System to get propagation model completed.
- Prepare AMI Base Terms document.

Initiation Phase

- Gather project documents.
- Gain understanding of project scope and deliverables.
- Coordinate network infrastructure installation contractor
- Review equipment orders
- Create a preliminary schedule.
- Host project kick-off meeting

Planning Phase

- Verify Network Propagation Analysis
- Refine Project Plan
- Meter Configuration Workshop
- FieldLogic Configuration Workshop
- Confirm Basestation site preparation.

Execution Phase

- AMI Network Basestation installation and certification
- Facilitate SaaS Sensus RNI and Sensus Analytics servers and software.
- Perform RNI and Sensus Analytics configuration.
- Coordinate integration with CIS or Billing system for meter billing reads

- Pre-Deployment
 - Test deployment process
 - Validation Workshop
- Training
 - Schedule customer training
 - Analytics
 - Field Training - FieldLogic
 - RNI

Closeout Phase

- Evaluate system performance.
- Perform any system cleanup needed.
- Close out project

FlexNet Integration Overview

The FlexNet Head End System may be integrated with any type of third-party application through standards-based interfaces. Whenever possible, integrations are facilitated using existing standard interfaces. Two main methods support integrations with third-party systems like such as Customer Information Systems (CIS) and Meter Data Management Systems (MDMS):

- CSV flat file exports (CMEP files) for applications that consume data in a batch mode, such as passing meter readings to billing systems
- MultiSpeak web services for applications that use real-time interaction and two-way communication

Metering data is often transmitted to third-party billing systems as a CMEP file—a comma-delimited file based on a standard protocol that defines contents and structure. The CMEP file is made available to the billing system at a pre-defined location and frequency; the billing system picks up the files and consumes the billing data into the system.

The MultiSpeak web service can transmit real-time readings, such as on-demand reads or alarms, from the head end system to a third-party system. This web service also allows third-party systems to pass commands, such as disconnect or connect, to the head end system.

November 6, 2024

City of Burlingame, CA
Attn: Weizhi Cheng, P.E.
501 Primrose Road
Burlingame, CA 94010

RE: RFP 86700 – Post-RFP Questionnaire

Mr. Cheng,

Aqua-Metric would like to thank City of Burlingame for their continued consideration of the Sensus FlexNet AMI Solution as a part of your Request for Proposals, City Project No. 86700, Advanced Meter Infrastructure (AMI) Upgrade and Customer Engagement Program. Please find below responses to the Utility’s request for additional information.

- 1. The proposal does not include installation of a new tower at Alcazar Tank. The assumption is to install a new antenna mast and antenna onto existing railing. We do not want the antenna to be attached to the water tank railing. If Alcazar Tank site is the selected location, a new tower is needed.*
-

Aqua-Metric’s cost proposal has been updated to reflect the following services at the Alcazar Tank.

- **Construct new tower footing, ground ring, and stack tower**
- Install new antenna mast and antenna onto existing railing
- Install new 7/8" coax rom antenna to base station utilizing ladder for cable supporting
- Install new 3" pipe embedded in concrete for equipment mounting
- Install new ground rod and ground coax and equipment
- Mount base station to new 3" pipe
- Install new 120v AC circuit from source provided within 10' of base station
- Sweep Test

- 2. In addition to assumption that City will provide power to the base stations, there is an assumption that “Customer to provide...base station mounting hardware” and similarly, City to “provide mounting racks and/or antenna mounts, as needed”. We should make sure we understand what this entails.*
-

Aqua-Metric’s cost proposal does include base station mounting hardware, mounting racks, and/or antenna mounts, as needed. Considering this, we would like to update the clarifications provided regarding base station installations to reflect the following.

“Basestation Installation – City of Burlingame will be required to provide an electrical base at and run electricity to each basestation tower, ~~as well as provide mounting racks and/or antenna mounts, as needed~~. Site / Installation or engineered drawings are not included...”

Furthermore, Note 10 from Aqua-Metric’s itemized quote can be modified to state, “10. Customer to provide electricity to basestations ~~and basestation mounting hardware~~.”

- 3. The proposal did not address the requested system performance standards (e.g. “At least one meter register reading within a three-day interval from at least 99.5 percent of all meters on which the system is installed;”... etc.). What mechanism do you have to make sure that our AMI system will meet performance standard?*
-

It is our understanding that the following were the read success requirements indicated in the RFP.

- At least one meter register reading within a three-day interval from at least 99.5 percent of all meters on which the system is installed;

- At least one meter register read per day from at least 97.5 percent of meters on which the system is installed; and
- At least 95 percent of all readings taken hourly or at more frequent intervals

The enclosed propagation analysis was performed to reflect these parameters; therefore, we can meet the City's performance requirements.

4. What is meant by "System Tuning" on the schedule?

This is a backend process that is performed by Aqua-Metric for system optimization of coverage and read rate performance of the SmartPoints through the RNI.

5. Why does the City need FieldLogic software training? What is this used for?

This is already a part of the city process and is being utilized to make changes on register with reading profiles and SmartPoint tuning.

6. Section 22.1. Limiting Aqua-Metric's liability to the terms of the contract is unacceptable, since an issue could lead to far more liability. City requires general liability insurance per our Professional Services Agreement, then that should be the controlling limit of liability.

We would like to discuss items 6 – 9 further with the City to resolve questions or concerns they may have. Below is an overview of items to discuss.

Aqua-Metric holds a commercial General Liability insurance policy and the provisions of insurance liability, including the claim period, will prevail.

7. Section 22.2. We are OK limiting this to direct damages if 22.1 can be addressed.

Please see response to item 6 above.

8. Section 22.3. We can't accept the 12 month cause of action here, because we may not know whether there is damage. Typically this should be 24 months following the end of the contract, but I would be OK changing to 24 months from the date of the incident.

Please see response to item 6 above.

9. Section 24. Confidentiality. I'd want them to add a small amount of language here: The foregoing restrictions on disclosure shall not apply to information which is: (i) already known by the recipient, (ii) becomes, through no act or fault of the recipient, publicly known, (iii) received by recipient from a third party without a restriction on disclosure or use, (iv) independently developed by recipient without reference to the other party's Confidential Information, or (v) is a public record under applicable laws, subject to the terms of this Section. Aqua-Metric understands that the Customer in this Agreement is a California public entity, and is subject to the California Public Records Act and the disclosure requirements therein.

Clarifying language, such as this, can be added to an ensuing contract.

Section 4: Estimated Project Schedule

Estimated Project Schedule

Sample Project Schedule

ID	Task Name	Start	Finish	Duration	4th Quarter				1st Quarter			2nd Quarter			3rd Quarter		4th Qu
					Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Burlingame CA - FlexNet Project (2024)	Mon 10/28/24	Mon 9/8/25	226 days													
2	Council Approval	Mon 10/28/24	Mon 10/28/24	1 day													
3	Notice to Proceed	Mon 10/28/24	Mon 10/28/24	1 day													
4	Kickoff Meeting	Tue 10/29/24	Thu 11/14/24	13 days													
5	Project Kick-Off Meeting	Tue 10/29/24	Tue 10/29/24	1 day													
6	M400B2 Basestation Site survey	Wed 10/30/24	Wed 10/30/24	1 day													
7	Burlingame Project Plan & Schedule Developme	Thu 10/31/24	Tue 11/12/24	9 days													
8	Post Kick-off - Project Plan & Schedule Adjustme	Wed 11/13/24	Thu 11/14/24	2 days													
9	RNI Configuration	Fri 11/15/24	Thu 11/28/24	10 days													
10	TGB Delivery and Install	Fri 11/15/24	Thu 2/27/25	75 days													
11	1 - 4240.09-875-03ET Antenna	Fri 11/15/24	Thu 2/6/25	12 wks													
12	1 - DB589-Y Antenna	Fri 11/15/24	Thu 2/6/25	12 wks													
13	2 - Communication Backhaul	Fri 11/15/24	Thu 12/26/24	30 days													
14	2 - M400B2 Basestations	Fri 11/15/24	Thu 12/19/24	5 wks													
15	Basestation Installs	Fri 2/7/25	Thu 2/27/25	15 days													
16	Base Station Commissioning & Modem Installation	Fri 2/28/25	Mon 3/24/25	17 days													
17	TGB, Cordex, & Modem Configuration and Test	Fri 2/28/25	Mon 3/3/25	2 days													
18	Base Station Commissioning	Tue 3/4/25	Mon 3/24/25	15 days													
19	System Testing	Tue 3/25/25	Tue 3/25/25	1 day													
20	Installation Training	Wed 3/26/25	Wed 3/26/25	1 day													
21	Sensus Analytics/Billing Integration(Dependent on CIS Completion)	Thu 3/27/25	Wed 7/9/25	75 days													
22	Sensus Analytics Training	Thu 7/10/25	Mon 7/14/25	3 days													

Project: Burlingame CA - FlexNe Date: Fri 9/20/24	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
	Inactive Milestone		Finish-only			

Sample Project Schedule

ID	Task Name	Start	Finish	Duration	4th Quarter				1st Quarter			2nd Quarter			3rd Quarter			4th Qu
					Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
23	System Tuning	Thu 7/10/25	Mon 8/25/25	33 days														
24	System Clean up	Tue 8/26/25	Mon 9/1/25	5 days														
25	System Performance Acceptance	Tue 9/2/25	Fri 9/5/25	4 days														
26	Project Closed Out	Mon 9/8/25	Mon 9/8/25	1 day														



Project: Burlingame CA - FlexNe Date: Fri 9/20/24	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
	Inactive Milestone		Finish-only			

Section 6: References

Experience and Past Performance

Client Reference List

Experience and Past Performance

Thirkettle Corporation has served the utility sector for more than twenty-five years, providing innovative solutions necessary to enhance and maximize utility efficiency. We have achieved this through metering, Automated Meter Reading (AMR) and Advanced Metering Infrastructure (AMI) Systems, and resource management solutions for water, electric, and gas distribution systems. The Thirkettle Corporation family of companies is comprised of experienced and dedicated individuals providing our customers with the knowledge, integrity, and insight required to implement efficient and reliable metering solutions. Our keen focus on customer satisfaction ensures our service commitment to provide and support the related components needed for a successful meter reading system.

As an exclusive distributor for the most innovative metering and system manufacture, Aqua-Metric recognized the necessity to develop an in-house technology team to provide the most responsive and comprehensive customer support. Thus, Aqua-Metric developed and expanded its technology department to implement and support Sensus systems. In March 2012, Aqua-Metric became one of the first Sensus Certified Value-Added Resellers to further support Sensus technologies our company deployed in California, Texas, and Louisiana.

Similar Project Experience

Enclosed within our response is Aqua-Metric’s complete Client Reference list showcasing our diversified customer base. Below are recently implemented systems we believe are of relevant size and/or scope to the Utility’s proposed project.

City of Woodland, CA

City of Woodland, CA	16,800 Services
655 N Pioneer Ave. Woodland, CA 95776 • Phone: (530) 661-5953	
Greg Meyer – Public Works Director • Email: Greg.Meyer@cityofwoodland.org	
Duration of Project: July 2008 – Finish September 2011 • Total Contract Value: \$6 Million	
Meter Type: iPERL/SRII residential meter; OMNI commercial meter	

The City of Woodland, CA is one of the oldest AMI systems utilized in Northern California. Starting as a Sensus direct read account, Woodland incorporated Sensus’ first version of AutoRead software in 2002. In 2006, the City transitioned to AMI Drive-By and continued to use this system until 2009 when they initiated a two-year AMI changeout project. To date, Woodland continues to read their legacy AMI product (520X endpoints) as well as incorporate the newest 2-way migratable 520M SmartPoints to read their OMNI and fire service iPERL Meters.

Currently, Aqua-Metric is working on a large-scale meter changeout program for the City of Woodland installing new iPERL and ally RD water meters. To date, Aqua-Metric continues to provide water meters, endpoints, automated shut off meters (ally), and SmartGateway units.

City of Lincoln, CA

City of Lincoln, CA	18,600 Services
600 6th St. Lincoln, CA 95648 • Phone: (916) 434-2450	
Jennifer Brown– IT/GIS Manager • Email: jennifer.brown@lincolnca.gov	
Duration of Project: April 2021 – Current • Total Contract Value: Approximately \$1.5 Million	
Meter Type: iPERL/SRII residential meter; OMNI commercial meter	
Summary of Work: Sensus FlexNet AMR Drive-By Water System with migration to AMI.	

City of Lincoln was a long time AMR system that proceeded with a system upgrade solution to AMI. The entire system is covered by two base stations. The city elected to migrate toward AMI due to the large number of new builds and the expansion of the city. What was taking weeks to read, and cover is now down to minutes as the read rate success is at 99%. The expansion will provide lasting coverage through the AMI and can expand upon the solution with lighting, water treatment and help curtail non-revenue water.

City of Armona, CA

City of Armona, CA	1,400 Services
10114 14th Ave. Armona, CA 93230 • Phone: (559) 584-4542	
Kelly Granger – General Manager • Email: kelly@grangerwater.com	
Duration of Project: January 2024 – Ongoing • Total Contract Value: \$500,000.00	
Meter Type: iPERL; OMNI commercial meter	

Armona CSD has been reading 520M SmartPoints via AMR/Handheld RadioRead for the past year. They have committed to installation of the Sensus FlexNet network and begin their conversion to AMI. While only one base station is required to give Armona 100% two-way coverage, the district decided to install two collectors for complete redundant coverage. Both base stations are planned to be installed in March 2024 and begin reading previously installed SmartPoints via FlexNet. In addition, Armona CSD will be installing iPERL, OMNI, and SmartPoints throughout the remainder of the district to be fully AMI.

Aqua-Metric California AMI Customer Listing

City of San Bruno, CA	City of Redwood City, CA	City of Foster City, CA
Township of Hillsborough, CA	City of Menlo Park, CA	Yucaipa Valley Water District, CA
Big Bear Lake Department of Water and Power	City of Alhambra, CA	City of Atwater, CA
City of Blythe, CA	City of Chino, CA	City of Fountain Valley, CA
City of Garden Grove, CA	City of Glendora, CA	City of Imperial, CA
City of Madera, CA	City of Norco, CA	City of North Las Vegas
City of Santa Ana, CA	City of Santa Maria, CA	City of Sierra Madre, CA
County of Ventura, CA	Eastern Municipal Water District	Helendale Community Services District, CA
Laguna Beach County Water District, CA	Moulton Niguel Water District, CA	Nipomo Community Service District, CA
Olivenhain M.W.D., CA	Orchard Dale Water District	Santa Fe Irrigation District, CA
Triunfo Sanitation District (Oak Park Water)	Vallecitos Water District, CA	Valley Center Water District, CA
West Valley Water District, CA		

Section 7: Appendix A – FlexNet Technology Overview

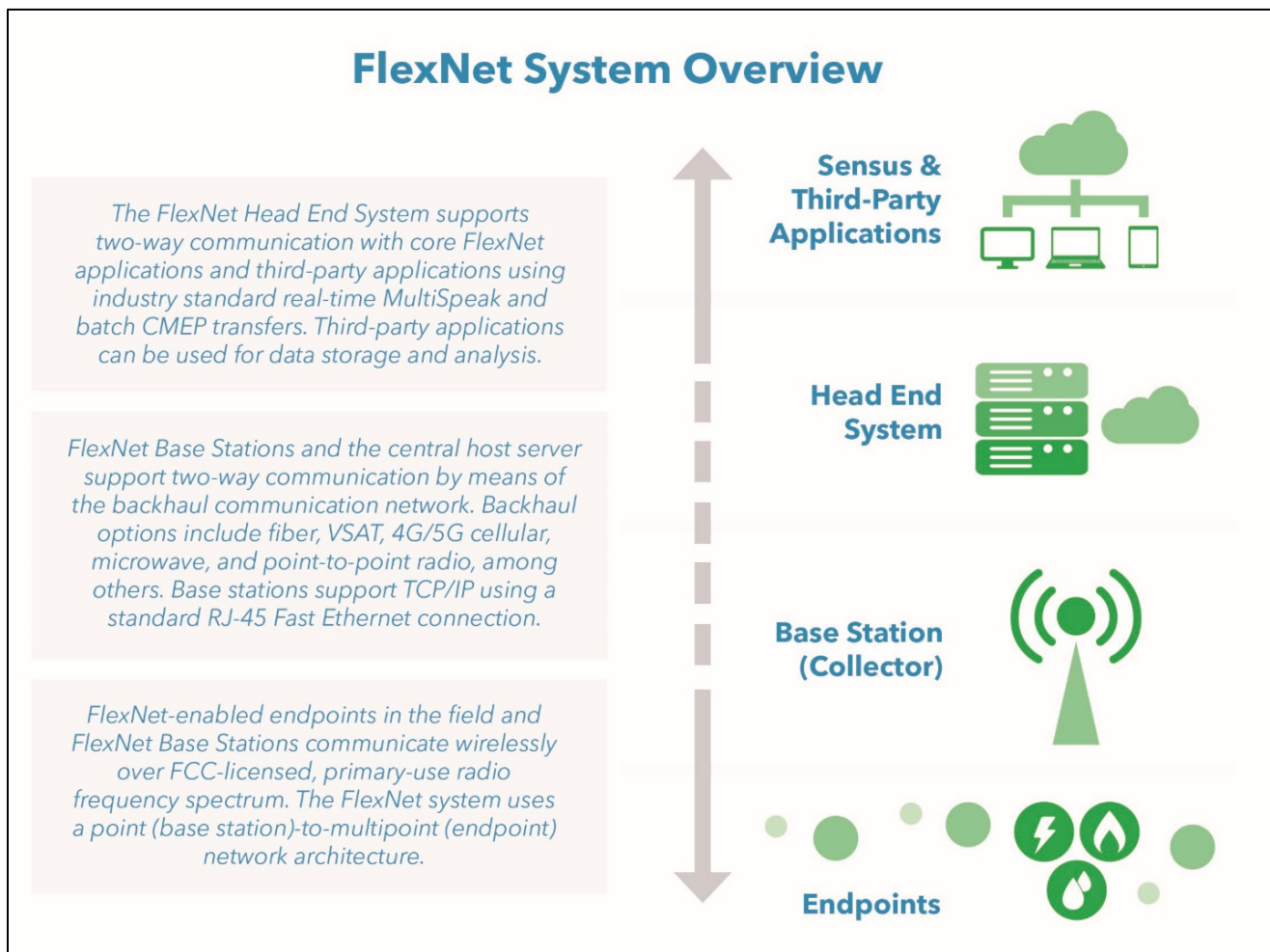
Sensus FlexNet AMI Technology Overview
Sensus Analytics Application Suite Overview
Sensus Software-as-a-Service Overview
Propagation Analysis Overview
Aqua-Metric Annual Support Overview
Aqua-Metric AMI System Training Overview

Sensus FlexNet AMI Technology Overview

The FlexNet system is point-to-multipoint communication network that uses FCC-licensed, primary-use RF spectrum. It is the most complete communication network solution on the market today that is capable of supporting multiple applications.

Sensus develops and manufactures a complete complement of AMI communication network products. This includes electric, water, and gas meters, communication modules, solutions for distribution automation (DA) communications, and communication products that support third-party products and applications to meet the business and operational requirements of utilities.

The following diagram shows the high-level system architecture of the FlexNet system, in which FlexNet-enabled endpoints communicate wirelessly to long-range FlexNet Base Stations via the FlexNet communication network. The base stations pass the data to the FlexNet Head End System software, which interfaces with the utility’s existing software systems and passes the appropriate data, such as billing and outage data, to each. FlexNet system communication is completely two-way from end to end.



The FlexNet system is distinguished from competitive offerings through expandability, performance, efficiency, security, and experience. The solution is purpose-built to meet utilities’ needs today and in the future.

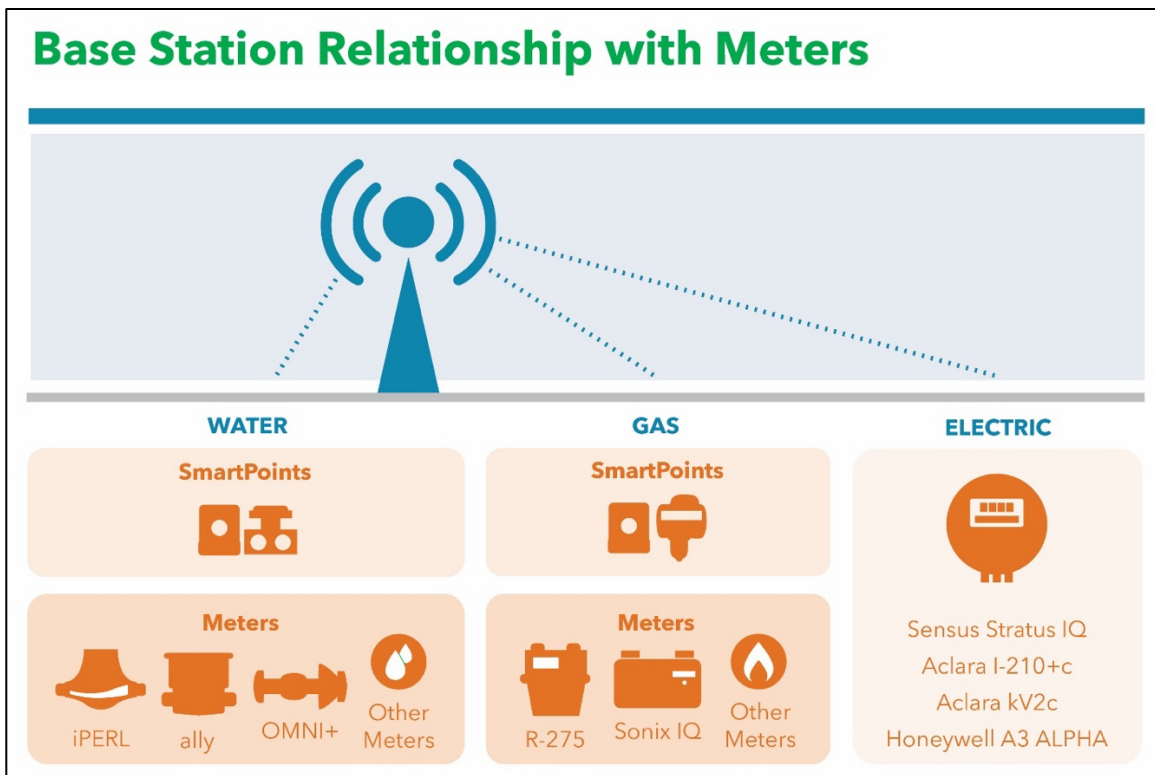
Sensus is committed to providing systems and solutions that enable utilities mitigate the risk of utilities of stranded assets. Sensus avoids obsolescence by developing products that bring in new applications while maintaining backward compatibility to network devices in the field for the life of the FlexNet system.

FlexNet Communication Network

Sensus' industry-leading, two-way wireless AMI communication network consists of multiple synchronized, high-performance, 900-MHz, FCC-licensed, primary-use RF bands. The FlexNet system operates on FCC-protected, extended-range, and extended-penetration Personal Communications Service (PCS) frequencies. Top-level specifications of the wireless solution include the following:

- Protected FCC-licensed, primary-use spectrum. No one else will be allowed to use the RF frequencies that Sensus licenses to your utility.
- FlexNet-enabled endpoints communicate directly to the FlexNet communication network.
- Fewer network collectors (FlexNet Base Stations) mean less infrastructure. FlexNet-enabled endpoints communicate at up to 2-watts of power, resulting in the fewest number of collectors of all AMI systems.
- Deploy network collectors on hardened vertical assets that stay up during storms.
- Best-performing AMI system for small and large outage events like hurricanes, storms, and ice and wind events.
- Forward-looking development roadmaps and backward compatibility for customers mean no endpoint obsolescence. The FlexNet communication network, and the endpoints you install, will be supported for the life of the FlexNet system.
- Base stations operate at up to 32-watts of power, enabling overlapping RF coverage of endpoints in the field.
- Management and troubleshooting of the network is provided by advanced, industry-leading status dashboards, with drill-down capabilities to analyze network base stations and endpoints.
- The FlexNet communication network design supports the ability to divide assigned RF spectrum up into separate channels, which separate different kinds of messages from each other. This reduces congestion on the network and speeds up message throughput.

The following diagram shows how FlexNet-enabled endpoints communicate with FlexNet Base Stations over the air via the FlexNet communication network.



FlexNet's FCC-Licensed, Primary-Use Spectrum

Like AT&T, Sprint, Verizon, and other mission-critical data communication networks, FlexNet uses FCC-licensed, primary-use spectrum. The FlexNet communication network boasts five key range and performance criteria:

- Use of existing vertical assets and efficient high-gain antennas.
- Sensus' acquisition of clear, nationwide, primary-use radio spectrum with a low noise floor years ago.
- Design and use of high-power SmartPoint communication modules (up to 2-watts) with state-of-the-art, all-digital modulation techniques that can be updated over the air.
- Design and use of highly sensitive (-120 dBm to -130 dBm), all-Digital Signal Processor (DSP)-based transceivers (base stations) that can be updated over the air.

A key to achieving high-quality performance from for the FlexNet system was the acquisition of FCC-licensed, primary-use spectrum for the best and most reliable network operation. To that end, Sensus obtained nationwide and local licenses. This RF spectrum is 100% primary-use, meaning that Sensus has primary rights to its RF spectrum, with no other entities allowed to use the channels without Sensus' permission. Additionally, RF interference is regulated and prohibited by the FCC.

Another advantage to the licensed frequency band is that the limits for total RF output power are higher than those for systems using the unlicensed ISM band, where many different communication solutions have to coexist. The ISM band is typically limited from 100 mW to 1 watt.

Sensus' FCC-licensed spectrum operates at higher power levels, and this power translates directly into a greater range for their radio system, with one base station capable of covering tens of thousands of meters. This, among other advantages, means that FlexNet system costs can be amortized over several more devices than is typical for other AMI systems.

FlexNet Base Stations

FlexNet Base Stations can be installed in substations, on existing vertical assets, on water towers, on poles, and on buildings. Sensus base stations provide field-proven, overlapping, high-bandwidth communications to all FlexNet endpoints in the field.

The FlexNet system is recognized as being the highest-performance, highest-bandwidth, and most reliable and resilient AMI communication network on the market today, providing predictable and reliable service for dense urban, suburban, and rural applications – even in extended power outage situations.

FlexNet uses multiple wireless modulations; multiple packet sizes; multiple simultaneously operating, FCC-licensed spectrum bands; multiple RF frequencies; and multiple RF subchannels to expedite low-latency, full-duplex, two-way communications in a wide variety of AMI and smart grid applications.

Backhaul Communication

Sensus designed their FlexNet Base Stations to be as flexible as possible to support a variety of backhaul communication options from the base station to the central host server. This interoperability helps utilities work with their preferred communication systems and helps them realize long-term technical and financial goals.

Base stations support Transmission Control Protocol/Internet Protocol (TCP/IP) using a standard Register Jack 45 (RJ-45) Fast Ethernet connection. If desired, different backhaul types can be used at different base stations throughout the same network. Common backhaul options used by customers include: Fiber; Very Small Aperture Terminal (VSAT); 4G/5G cellular; Microwave; and Point-to-point radio.

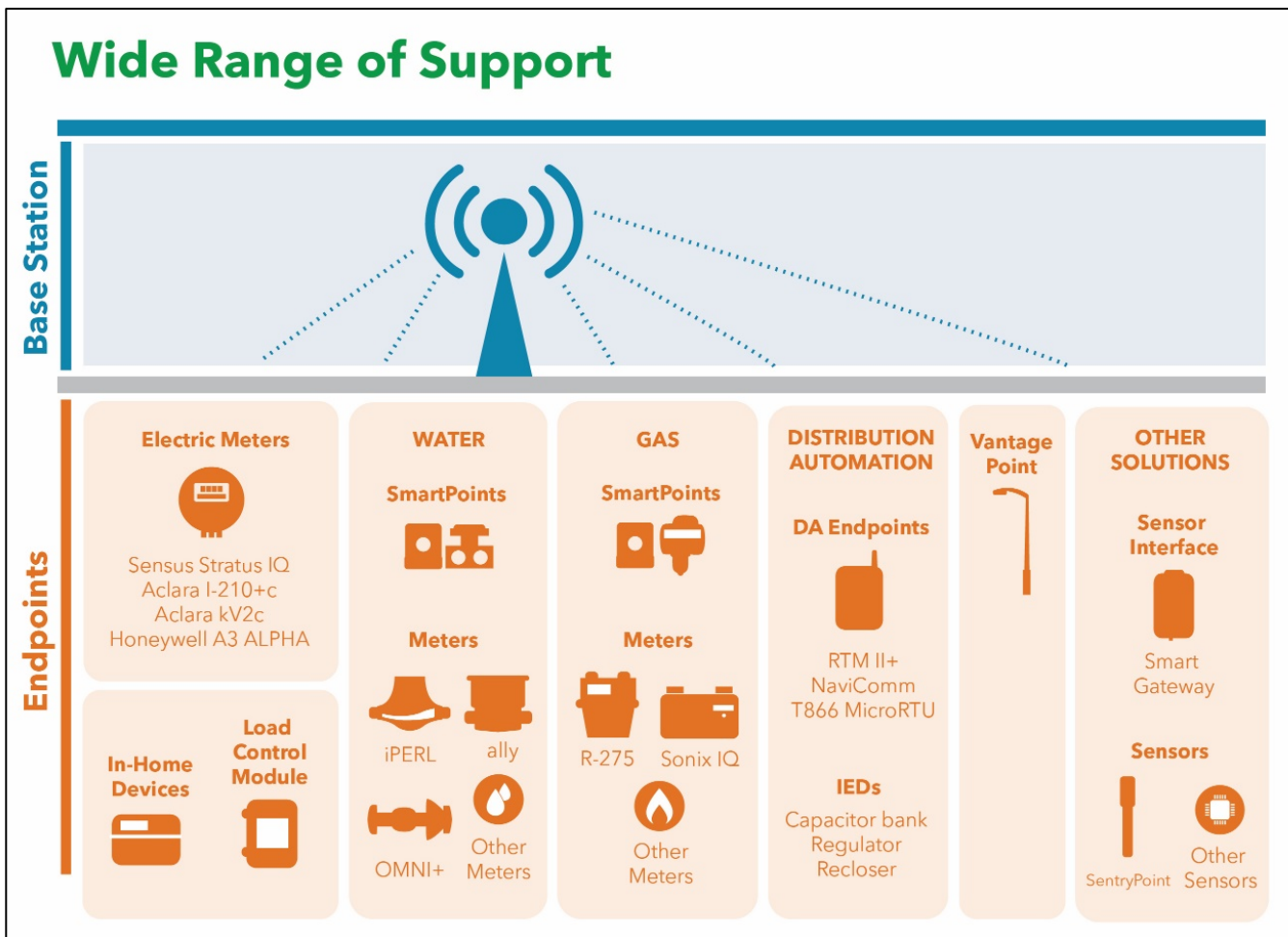
The FlexNet system operates most efficiently with a backhaul communications latency of less than 100 milliseconds (ms) and a minimum data speed of 256 kilobytes per second (kbps), with higher speed backhaul facilitating faster file transfers (such as firmware downloads).

Due to the many solutions that can be used by a Utility, our preference is to work with the Utility to determine the best solution for each site. All sites do not need to have the same Backhaul solution; however, each site must have a Static IP Address and be available to connect from the Utility data center. Aqua-Metric will help the Utility discuss and develop the best backhaul option.

FlexNet-Enabled Endpoints

The Sensus SmartPoint communication modules provide two-way wireless communications capabilities for water, gas, and electric meters. Water and gas endpoints typically transmit their hourly billing reads every four hours. Electric meters can be programmed to send data as fast as every five minutes for billing reading. FlexNet SmartPoint modules transmit and receive data via the FlexNet communication network to provide meter readings, on-demand information, remote disconnect and reconnect functionalities, and diagnostic data, and to receive and validate configuration changes, new protocols and modulations, and firmware updates.

The following diagram shows the FlexNet-enabled endpoints that can be deployed as a part of a FlexNet system.



The FlexNet Head End System

The FlexNet Head End System software is a secure, web-based portal to the FlexNet system. The portal is secured using encryption via HTTPS.

The head end system software receives meter and other endpoint messages from the field via the FlexNet communication network, which comprises FlexNet Base Stations (collectors).

The head end system software provides reports, diagnostics, deployment information, and on-air meter configuration and firmware upgrade capability for the two-way FlexNet endpoints, as well as other functions that are part of the FlexNet system. It also monitors FlexNet Base Station performance and status.

The FlexNet Head End System software provides role-based access to its functions to ensure separation of duty and restriction of access to critical functions. This design provides a granular level of access control to support the utility's ability to assign various roles within the software. The system features a default configuration with a variety of predefined roles that have various levels of permission, such as administrator, read-write, or read-only, and can be further customized by the utility to meet its specific needs. Utilities can create unlimited roles with an unlimited number of permissions, depending on their needs.

In addition, the head end system software records an audit log of all transactions, including date, user, and a description of each transaction for record keeping. This audit trail is valuable to ensure someone with the proper user permissions is not misusing their access control.

Any number of users can concurrently access the FlexNet Head End System software. Additionally, role-based access control is enforced within the system through Lightweight Directory Access Protocol (LDAP) and Active Directory (AD); it extends into solutions that support multiple operating companies and customer types.

Sensus Analytics Application Suite Overview

In addition to the core analytics capabilities of the FlexNet Head End System software, Sensus offers a value-added suite of applications called Sensus Analytics (SA). With built-in MDM features and billing access, this platform helps utilities across the globe turn the data they bring back from electric, water, and gas meters and sensors into actionable intelligence that saves time and money.

The suite of applications provides the core business functionality required to streamline customer service, billing, and operations. It also equips utility personnel with user-friendly dashboards so that they can make informed decisions quickly and confidently.

Cloud-Based Computing Frees up Utility Resources

The Sensus Analytics solution is a powerful data management system that aggregates information from AMI, AMR, and other IoT sources. The intuitive applications it comprises are delivered by a secure connection to a SaaS commercial cloud service, which can be accessed from any desktop computer, tablet, or smartphone.

This cloud-based management requires a lower upfront capital investment, offers a reduced cost of ownership, and enables utilities to take advantage of new software functionality more quickly and easily. Utilities need not manage or pay for hardware, third-party licenses, and backup capabilities – instead, maximizing the value of their investment in communication networks and advanced network applications through data analytics that improve operations, reduce cost, and enhance customer service.

Highly Available, Actionable Data

Data is stored in the Sensus Analytics server for 36 months, with optional additional durations available. The base data store keeps all data – including meter reads, alarms, and notifications – available to users for this time.

Data and images can be exported and copied in a wide variety of file formats, enabling utilities to aggregate data from smart meters, SCADA systems, customer billing software, and myriad other sources into one simple platform.

Utilities can maximize the value of their investment in communication networks and advanced network applications through data analytics that improve operations, reduce cost, and enhance customer service.

Application Offerings for Data Management

Meter Data Management Capabilities

Some utilities need an MDM for simple but accurate data collection, management, and reporting. Sensus Analytics is a bundle of applications that provides core meter data management performance, enabling daily utility operations like billing and meter and sensor monitoring. The solution also provides alarm management capabilities, allowing utilities to go beyond billing applications and gain insight on system performance and health.

Currently Available Applications

The following table shows the modules that are currently available through Sensus Analytics.

Application	Vertical(s)	Description
Alert Manager	Electric, water, gas	A notification tool to immediately alert individuals, teams, or key customers via SMS or email when events are reported by the meters and network. Events include conditions such as tampering, reverse flow, empty pipe, leakage, reverse power flow, outage and restoral, and high temperature alarms.
Billing Access	Electric, water, gas	A billing interface tool that previews and audits billing extracts for issues, enabling the utility to take corrective action and then generate final billing files for production. Provides customized formatting and creation of billing files for the utility's CIS system.

Application	Vertical(s)	Description
Device Access	Electric, water, gas	A customer service tool that, combined with account and customer information, presents detailed usage history and trends, identifies anomalies, provides validation of interval data, and enables custom alert programming to track specific issues.
Alarm Insight	Electric, water, gas	A monitoring tool for the entire system with near-real time alarms, allowing users to drill down to individual events, view historical data, and map or list the alarm events to track event trends. This is a convenient and time-saving alternative to creating reports and using a third-party application to sort alarms.
Meter Insight	Electric, water, gas	A dashboard providing a summary of incoming network, account, and meter data to identify and prioritize issues needing resolution. Drill-through capabilities identify current meters and their associated status, including Active Orphaned, Inactive, Stale, Almost Stale, and No Read Available.
Acoustic Monitoring	Water	An acoustic leak detection analysis tool used in conjunction with PermaLog+ acoustic sensor devices to identify leaks in water distribution systems by monitoring distribution lines. This add-on solution requires setup and customization from the Sensus Professional Services team.
Service Management	Electric, water, gas	An application allowing the utility to initiate billing-related commands in bulk to open, reduce, or close the automatic valve on groups of ally, Sonix IQ meters, or remote disconnect (RD)-enabled electric meters, and provides near-real time status updates on the process. Also tracks billing system updates.
Pressure Profile	Water	An application enabling remote pressure monitoring capabilities, providing visibility into the utility's water distribution system as a whole. Combines pressure data from ally meters and Smart Gateway sensor devices into a map-based solution, graphically displaying the pressure of measured points with respect to location over time. This add-on solution requires setup and customization from the Sensus Professional Services team.

Software as a Service (SaaS) Overview

We understand that the City is interested in additional information regarding monitoring status of endpoints and data collection network. The proposed Sensus FlexNet AMI solution gives the City and its agents the ability to perform monitoring services themselves. This is detailed within the following SaaS overview. However, if the Utility is interested in day-to-day monitoring by an Aqua-Metric employee, this service can be provided with an understanding of scope requirements. Pricing will be determined based on this scope.

Software as a Service (SaaS) Overview

Sensus' Software as a Service (SaaS) is a managed offering in which Sensus is responsible for the day-to-day monitoring, maintenance, management, and support of the utility's FlexNet Head End System software applications as a private cloud-based service. Nearly all of Sensus' utility customers take advantage of our SaaS offering, with approximately 99.9% of utilities choosing Software as a Service.

The SaaS offering provides all the benefits of a FlexNet communication network by placing the FlexNet Head End System in Sensus' private, cloud-based data centers. Sensus provides all the hardware and software needed to operate the head end system and manages the application and servers in its two U.S.-based, world-class Tier IV data centers.

Utilities do not need to invest additional expenditures, such as IT hardware and software, additional office space, and specialized IT resources like security or database administrators, specifically for the FlexNet Head End System. SaaS enables utilities to achieve their required business outcomes with the lowest total cost of ownership and complete peace of mind.

Our highly trained professionals are responsible for ensuring that your system is always operating at peak performance. Sensus monitors the utility's servers around the clock to ensure high availability and reliability. Sensus data center teams perform all hardware maintenance and software patch installation, updates, and upgrades to ensure that your team has access to all the latest features and capabilities that FlexNet has to offer.

Sensus guarantees a 99.9% application availability (uptime).

In addition to administering standard in-house security testing procedures, Sensus' certified cybersecurity partners perform annual third-party audits and security testing on the system to ensure that all information is protected. Through the use of data centers, the FlexNet system has multiple levels of redundancy to mitigate potential loss of data in the event of a temporary failure of a component or the head end system. This redundancy is continuously tested through each release.

In the Software as a Service solution, Sensus owns all components of the solution that are required to run and operate the head end system software, including server hardware, storage, network equipment, Sensus software, and all third-party software. This model provides the utility with the ability to turn capital dollars (capital assets such as servers and software licensing) into operational dollars (operations and maintenance expenditures).

In addition, the SaaS service comes standard with their disaster recovery (DR) capability using Sensus data centers in Raleigh, North Carolina and Boise, Idaho – eliminating the need for utilities to maintain a separate disaster recovery environment. With more than 1,400 utility customers, Sensus has the experience to deliver top-tier performance to your team for your FlexNet Head End System.

Software as a Service Catalog

- Application availability
- Event, incident, and problem management
- Change management
- Disaster recovery
- Application operation, maintenance, monitoring, and optimization

- Security services (IDS/IPS, regular security updates/patches, 24/7 security monitoring)
- FlexNet Head End System patches, updates, and upgrades
- Tech support
- Reporting services (SLA and request fulfillment)

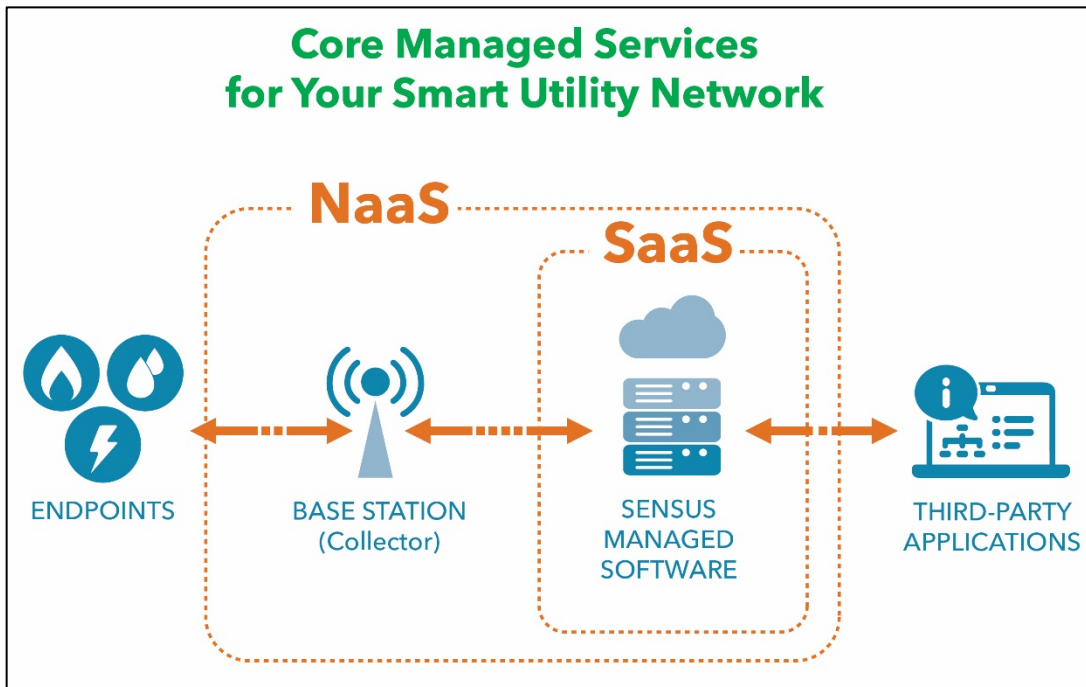
Software as a Service (SaaS) Features

The standard SaaS service includes:

- Sensus purchases and owns the FlexNet Head End System software and license, as well as all third-party software and licenses required to run the application, such as Microsoft, Red Hat, and SQL.
- All server hardware required to operate the system. Includes server hardware refresh as necessary.
- Sensus manages, maintains, and monitors software and server hardware.
- All FlexNet software maintenance, including patches, updates, and upgrades (coordinated with your team).
- Production and disaster recovery environments using our two U.S.-based data centers.
- Disaster recovery solution with Recovery Time Objective (RTO) of 48 hours.
- Standard technical support.
- A set of standard Service Level Agreements (SLAs) for uptime and availability of the head end system.
- Web portal access to the head end system.
- Sensus submits a daily file in standard file format containing hourly consumption reads and all available alarms collected by the network, including exception reports, such as zero consumption reads, non-responding meters (including traceability to the meter location).
- 24/7/365 server and network monitoring and trouble ticket generation, advanced security monitoring, and preventative maintenance monitoring using diagnostic software tools.
- 60 days of historical data available on the FlexNet Head End System and on the Storage Area Network (SAN). Secure vaulting of encrypted backup containing one year of history is available for auditing purposes.

Software as a Service Benefits and Outcomes

- Increased operational efficiency leveraging Sensus' Network Operations Center.
- Full and continuous access to servers via web portal.
- All system screens and reports appear as if servers are installed locally.
- Utility staff maintains operational control.
- Leverage Sensus staff for system support and updates.
- Sensus monitors the entire system 24/7; initiates and tracks trouble tickets through issue resolution.
- Faster issue response and less system downtime.
- System is future-proofed through ongoing upgrades.
- Predictable and more level cost structure.
- Reduced IT and operational costs.
- Convert capital dollars to Operations & Maintenance (O&M) dollars.
- Internal utility IT personnel can be repurposed to other strategic activities.
- Reduced risk associated with system configuration and maintenance.
- Reduced risk in planning for business continuity through disaster recovery, with data backup provided.
- Reduction of environmental impact and contributes to sustainability goals.
- Increased availability and system performance through dedicated network and servers.
- Increased and strengthened security of IT systems.
- Accelerated time to market with new technologies.



SaaS System Availability for the FlexNet Head End System

Application Availability

Sensus strives to provide utilities with industry-leading performance, value, and peace of mind, knowing how crucial this system is to their businesses and operations. Sensus stands by its ability to deliver a reliable solution and guarantees performance with a contractual monthly Service Level Objective (SLO) for system availability of 99.9% uptime, with a planned maintenance exclusion.

Disaster Recovery

Further providing peace of mind to its customers, Sensus delivers in the most critical times. Sensus maintains a geographically separated disaster recovery head end system. When a catastrophic disaster event is declared, Sensus will fail over to the disaster recovery instance, guaranteeing that its utility customers have a live production system up within 48 hours (RTO) of a catastrophic event, with no more than 1 hour’s worth of data lost (RPO).

For utilities that have greater needs, with more reliance on real-time applications, Sensus can offer to provide faster failovers and less data loss. For some utilities, we provide a disaster recovery failover within 4 hours (RTO) with no more than 5 minutes of data loss (RPO).

SaaS Capacity and Performance Management

SaaS Performance Management includes capacity and performance planning and management, process monitoring, and proactive issue identification, notification, escalation, and resolution for the planning and monitoring processes for your FlexNet Head End System.

Exceptions to normal or scheduled processing attributed to hardware, software, or procedural problems are logged, reported, and resolved. Appropriate levels of management will review these reports, with action taken as necessary. Procedures and tools to assist in monitoring daily activities are purchased and developed as needed to accommodate changes to the FlexNet system.

Capacity and Performance Management

- Monitor capacity and performance of the head end system server and software applications 24/7 using KPI metrics, thresholds, and alerts to proactively identify any potential issues related to system capacity and/or performance.

- If an issue is identified to have a potential impact to the system, Sensus opens an incident ticket and manages the ticket through resolution.
- Manage and maintain the performance of the server and perform any change or configuration to the server, in accordance to the standard configuration and change management policies and procedures.
- Manage and maintain the server storage capacity and performance of the Storage Area Network (SAN) devices attached to the servers, in accordance to the standard configuration and change management policies and procedures.
- Exceptions may occur to the system that require Sensus to take immediate action to maintain the system capacity and performance levels, in accordance to the standard configuration and change management policies and procedures.

Notification to Customer

Sensus has a robust notification process for keeping utility customers informed of pertinent information about their AMI systems.

Notifications from Sensus AMI Operations or the Global Network Operations Center (NOC) come from a centralized email address. Customers may either reply to emails or click a link within them to view a ticket's status and add comments.

In addition, they can visit a Status Page site, allowing them to view the status of their software environment on demand. Customers also have the option to set up notifications for status changes via email or text message.

This system allows Sensus to manage communications and provide an enhanced user experience for our customers.

Security Management for the SaaS Service

Sensus data centers and the SaaS solution are highly secured by separate firewalled networks (IP addresses and VLANs), dedicated database, secured architecture in accordance with NIST security standards, as well as SOC 2 Type II cybersecurity certifications. Sensus performs regular security assessments provided by a dedicated Sensus security team, and actively participates in and monitors industry regulation and standards regarding security. Sensus performs monthly vulnerability scanning, security patching, and antivirus management.

Security management provides the physical and cybersecurity management of the applications managed by Sensus in our world-class data centers. Data center highlights are as follows.

Physical Security

- 24/7/365 onsite staffed technicians and security personnel, with a dedicated guard room protected by ballistics-rated glass.
- Electronic badge card key and PIN access.
- Motion-activated digital security cameras (interior and exterior).
- Biometric authentication readers on data center access doors through a mantrap entrance.

IT-Secured Architecture

- Each managed customer has a separate firewalled network (IP addresses/VLANs).
- Conducted in accordance with NIST security standards.

Internal Security Assessments

- Dedicated Sensus Security Team.
- Responsible for all data center security.
- Actively participates in and monitors industry regulations and standards regarding security, such as NIST, ISAC, Infragard, and CSA.
- Monthly vulnerability scanning.
- Patch and antivirus management.

Third-Party Security Assessments

- First and only AMI provider internationally certified in cybersecurity.
- Periodic penetration testing (e.g., Rapid-7 or Wirehead).
- SOC provides real-time firewall, log, and IPS/IDS monitoring.
- Intrusion Prevention System/Intrusion Detection System (IPS/IDS)

Security Operations

- Monitor the physical and cybersecurity of the server and head end system 24/7 to ensure system is highly secure in accordance with NIST security standards.
- Perform active intrusion prevention and detection of the data center network and firewalls, and monitors logs and alerts.
- Conduct period penetration testing of the network and data center facilities.
- Conduct monthly vulnerability scanning both internal and external to the environment.
- Perform antivirus and malware patch management on all systems.
- Sensus shall install updates to virus protection software and related files (including virus signature files and similar files) on all servers from the update that is generally available from the antivirus software provider.
- Respond to any potential threat found on the system and work to eliminate virus or malware found.
- Sensus actively participates in and monitors industry regulations and standards regarding security through the dedicated Sensus Security team.

Propagation Analysis Overview

The following Propagation Analysis was created in partnership with Sensus USA based on information provided by the City of Burlingame and completed in September 2024. Based on the information given, Sensus anticipates two (2) M400 basestations will provide complete coverage for the Utility’s service area. As shown within our formal analysis below, the two basestations will be located at the following City-owned sites: Alcazar Tank and Public Works Building. Altogether the basestations will provide 100% coverage for the City’s service area as reflected within the enclosed analysis.

Collector Site	Antenna Installation
Alcazar Tank	Top of Existing Water Tank
Public Works Building	Top of Building on New Mast to Achieve 55’ Centerline.

Base Station Installation Overview

FlexNet Base Stations are installed on any vertical asset, including communication towers, water tanks, poles, and buildings. They provide field-proven, overlapping, high-bandwidth communications to all FlexNet-enabled endpoints, including water, gas, and electric meters, as well as to a wide variety of smart network devices using Sensus’ FCC-licensed, primary-use, full-duplex RF frequencies.

When the order for the M400B2 is placed, the mounting type is also selected: pole mount or wall mount. This selection determines the mounting kit that will be shipped with the base station.

The base station installation guide provides details and guidelines on how to install M400B2 FlexNet Base Stations. This can be provided to the Utility upon award.

Base Station Mounting

The M400B2 FlexNet Base Station is packaged in a NEMA-4 cabinet enclosure that facilitates easy mounting outdoors or indoors on a wide variety of structures, poles, or walls. This design makes the M400B2 a flexible network device that can be installed virtually anywhere.

Typically, the M400B2 is mounted at ground level for easy mounting and access by field personnel, with the coaxial cable going up to the antenna, which is mounted at the height delineated in the RF propagation study.

FlexNet Design

Propagation Analysis

14708 - BURLINGAME CITY OF-AM
Burlingame, CA

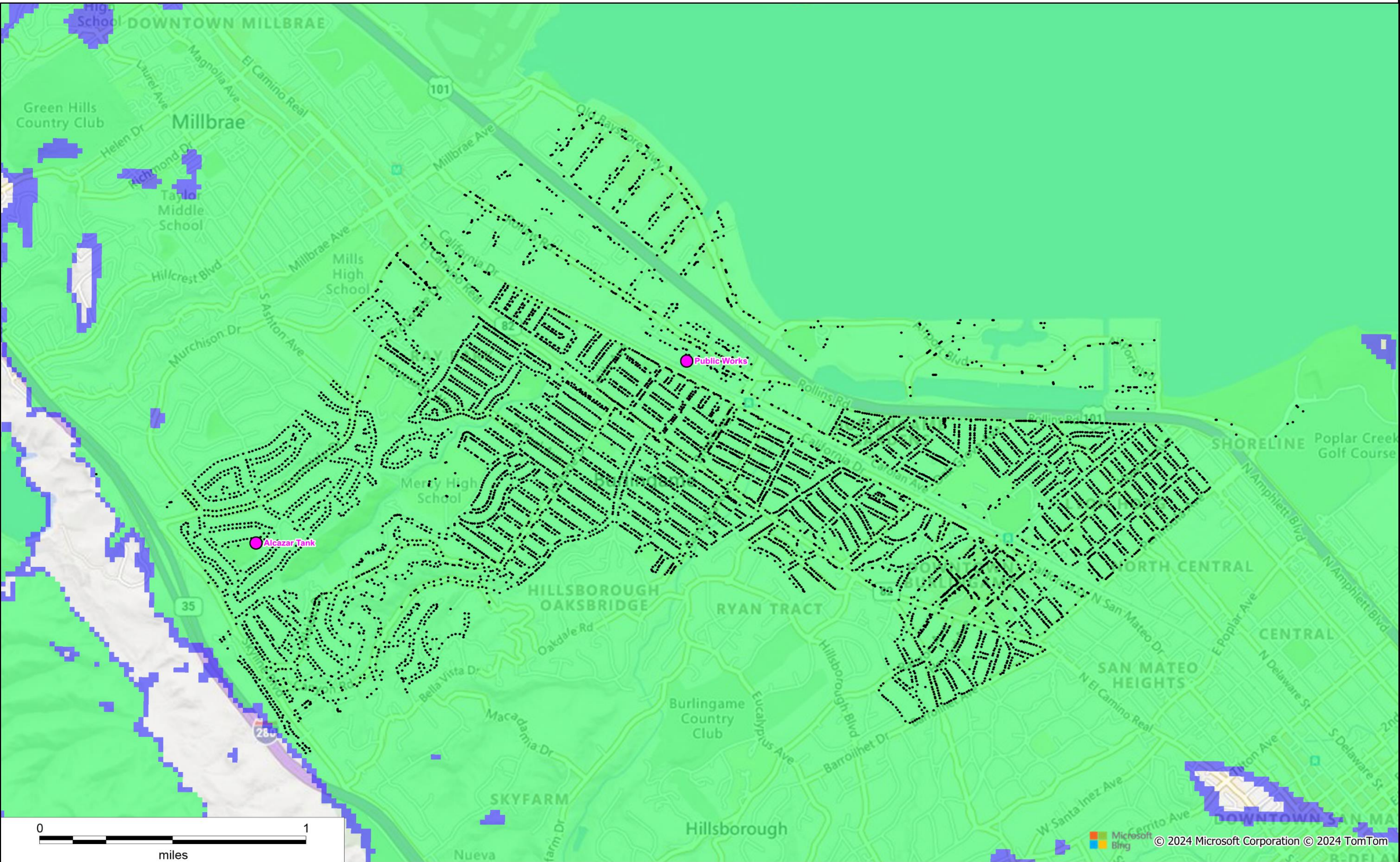
RF Engineer: Cameron Sisson
Date: 9/18/2024

Proposed Site Details

Total Site Locations: 2
Total Base station Counts: 2
M400B2 = 2

Design Factors

Flex Net Version: V1
Endpoint Type: Water
Smart point Location: Pitset Above-Lid



	Count	%
Total Endpoints Covered	9,219	100.00%
2 Way Coverage	9,219	100.00%
1 Way Coverage	0	0.000%
Total Endpoints Analyzed	9,219	

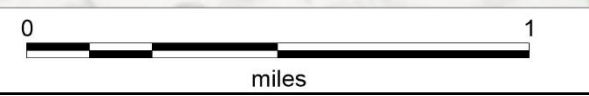
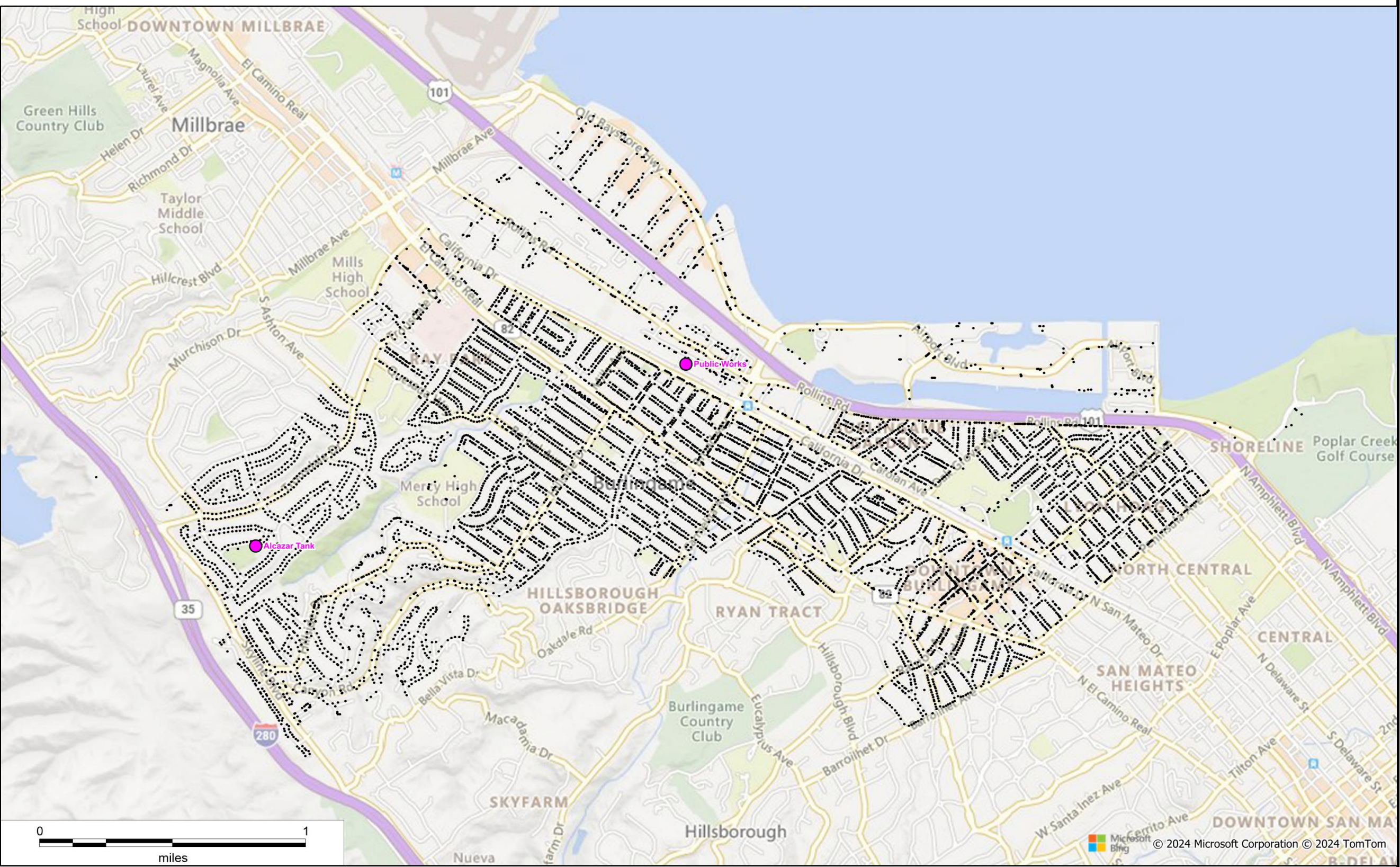
LEGEND

- 2 Way Coverage
- 1 Way Coverage
- Site Location
- Endpoint Location



Microsoft Bing © 2024 Microsoft Corporation © 2024 TomTom

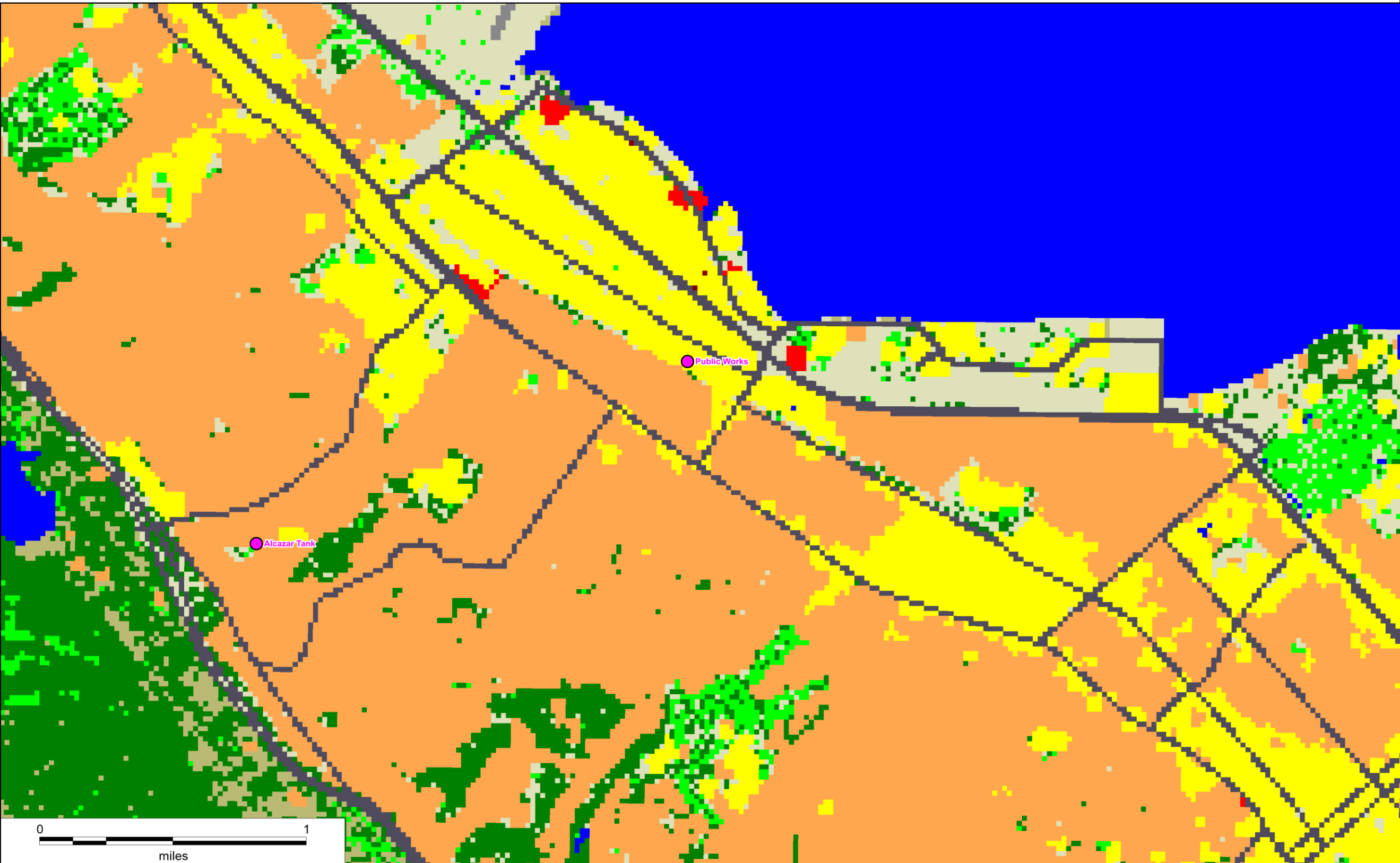
This propagation study is based on actual information provided by the utility pertaining to meter type, Smart point Location, potential antennae height on structure, structure height, and structure location. Any changes, deletions and/or additions that are not provided to the design engineers during the creation of this design may result in a study that does not correlate to actual field conditions.



LEGEND

- Site Location
- Endpoint Location

This propagation study is based on actual information provided by the utility pertaining to meter type, Smart point Location, potential antennae height on structure, structure height, and structure location. Any changes, deletions and/or additions that are not provided to the design engineers during the creation of this design may result in a study that does not correlate to actual field conditions.




LEGEND

- Site Location
- Core Urban
- High Density Urban
- Urban
- Commercial Industrial
- Residential with Trees
- Residential with few Trees
- Airport
- Transportation
- Grassland Agriculture
- Open in Urban
- Open
- Seawater
- Rural
- Forested Dense Vegetation
- Marsh Wetland
- Inland Water

This propagation study is based on actual information provided by the utility pertaining to meter type, Smart point Location, potential antennae height on structure, structure height, and structure location. Any changes, deletions and/or additions that are not provided to the design engineers during the creation of this design may result in a study that does not correlate to actual field conditions.

CONFIDENTIAL

Customer Name: 14708 - BURLINGAME CITY OF-AM						Date: 9/18/24		RF Engineer: Cameron Sisson					
City/State or Country: Burlingame, CA						Meter Type: Water							
Number of Meters Analyzed: 9,219						Smart Point Location: Pitset Above-Lid							
BTS Name	Latitude	Longitude	Structure Status	Structure Type	Basestation Equipment	Mandatory Antenna Centerline (Feet)	Antenna Model	Base Antenna 3dB Beamwidth (Degrees)	Base Antenna Azimuth (Degrees) <small>(Values are True North. Please apply declination adjust at time of construction)</small>	Base Antenna Mechanical Tilt <small>Down tilt (+) Degrees Up tilt (-) Degrees</small>	Mandatory Antenna Installation Location & Azimuth	Endpoints Covered	Comments
Alcazar Tank	37.580026	-122.386472	Existing	Water Tank	M400B2	40	4240_09-875-03ET	Omni	Omni	0	Top of tank	9,191	The meter counts indicated for the individual sites are cumulative in nature, and coverage overlap is involved.
Public Works	37.589919	-122.366957	Proposed	Building	M400B2	55	DB588-V	Omni	Omni	0	Top of building	9,048	

	Count	%
Total Endpoints Covered	9,219	100.00%
2 Way Coverage	9,219	100.00%
1 Way Coverage	0	0.000%
Total Endpoints Analyzed	9,219	

Comments: ***Minimum 3 feet tip to tail vertical separation is required when mounting the antenna next to any existing antennas unless otherwise noted.***

- * Objective: Determine FlexNet Coverage Requirements
- * Coverage Requirement: 98%
- * Endpoint Location & Attenuation: Pitset Above-Lid @ 10 dB
- * Modulations: 13FSK1R & 7FSK1R
- * Coverage Breakdown: Total Water Meters = 9,219; Two-Way Covered = 9,219; Total Covered = 9,219
- * 2 Vertical Asset Selected

Required coax size based on total cable length (ft)	
Total Cable Length (ft)	Coax Size
0 - 200	7/8"
200 - 300	1-1/4"
300 - 500	1-5/8"

Aqua-Metric Annual Support Overview

Aqua-Metric is committed to supporting our customers and their AMI System; and therefore, has developed a technology team dedicated to providing technical support after the implementation of the project.

Aqua-Metric offers a value-added service to our customers through our annual support subscription services in addition to the support services provided by Sensus. This support provides access to Aqua-Metric's in-house support specialists to provide remote and on-site assistance for the Utility, including troubleshooting and issue tracking.

Our on-site and remote support services include:

- Assistance with billing integration
- Access to Subject Matter experts on Sensus products and tools
- Remote and on-site support
- Hardware and Software troubleshooting assistance
- Technical support for Field Troubleshooting
- Training updates as tools, techniques, and software change
- Assistance with software updates and recommendations on the updates needed for your system and devices.
- Coordination with Sensus to facilitate support as required.
- Once-per-year on-site health check of each base station.
- Labor to replace defective base station warranty parts.

Aqua-Metric AMI System Training Overview

The success of any system deployment is largely dependent on the knowledge and proficiency of the project team members. From the initial implementation to project closure and beyond, Aqua-Metric's technology team will work with the Utility to provide instructor-led and one-on-one training needed for optimal system operation.

As a part of Aqua-Metric's initial project start-up, members of the technology team will perform on-site training for the Utility as detailed below. Product documentation will also be provided at this time. Additional services and training can be provided to the Utility as requested. We highly recommend that the Utility maintain their annual support subscription services to ensure ongoing use of our technology team and their support services.

Over the system's start-up period, between five and seven days of training are provided. Depending on project complexity and training requirements, Aqua-Metric will provide additional and/or refresher training, as necessary.

Training Plan

Step One – 1/2 to 1 Day: In the Field - SmartPoint Module Field Training for Utility Personnel

Once the AMI infrastructure is installed, training of field personnel or installation contractors in radio installation and activation will be held.

- Handheld operation
- Proper documentation of change-out information to support AMI
- Safety & Security
- Quality audits of installations
- SmartPoint installation and activation
- Verification of SmartPoint activation
- Troubleshooting SmartPoint Issues

Step Two – 1/2 to 1 Day: Overview Sensus FlexNet and Analytics

Once the infrastructure is installed and the system has at least two weeks of data for a sampling of meters, we will have overview training that provides a one-hour overview of the system with an additional two-hour session for billing personnel.

Overview (field and billing personnel – 1 hr.)

- Sensus FlexNet architecture and components
- Field Activation – overview of field activation
- FlexNet roles and responsibilities
- Device Manager Overview (Gas, Water, and Electric)
- Sensus Analytics Overview

Details (focus on billing – additional 2 hrs.)

- Billing setup and integration
- Device Manager deeper dive – show information and troubleshoot.
- Sensus Analytics Meter Insight – look at performance of the System.
- Sensus Analytics Billing Overview – show integration to provide reads in seconds.
- FlexNet and Sensus Analytics Alarms
- Sensus Analytics Report Access – getting data out to answer questions.

Step Three – 1 Day: Expand on System Capabilities

Additional formal training is provided on the Sensus FlexNet system, including administration functions. These sessions provide a deeper dive into the system's capabilities. This training will occur two to three months into the project to expand the knowledge and capacities of utility personnel now that they are familiarized with the Sensus FlexNet.

Step Four – 2 to 3 Days: Additional Training Support

During the next few months of the project there will be on-site visits or web-based training for groups or individuals to answer questions and provide additional support and training as needed.

Step Five – 1/2 Day: Project Closeout Training

Project close-out training and transitioning of the project to the support team will occur once all meters have been installed.

Section 9: Product Specification Sheets and Warranty

Product Specification Sheets

Warranty Documents



FlexNet

Network Communications System

Redefining Intelligent Utility Communications

Technology that takes you
from today to tomorrow.



FlexNet™ – Technology you can trust

FlexNet is a robust, high-powered solution based on open standards. It gives electric, gas and water utilities a communications network that is designed and built specifically for smart grid applications. Working with smart meters, FlexNet provides utilities a dedicated and secure two-way communications highway over which to transmit and receive customer usage data – the hallmark of Advanced Metering Infrastructure (AMI) solutions. Utilities can more effectively monitor and manage the distribution and use of electricity, water or gas.

With automatic delivery and analysis of consumption data, utilities are able to match supply with consumer demand, resulting in much better utilization of resources with the least amount of waste. Customers can be billed based on actual usage patterns and be encouraged to use resources more wisely. They can receive early notification of water or gas leaks, tampering, equipment problems or outages.

With these advantages and more, Sensus is redefining the standard for utility AMI.

In the FlexNet environment, smart meters communicate data throughout the day – such as electric power consumed from the grid and returned to the grid by customers who generate alternative energy – or water leaks in a home or business. In-home devices inform customers of their energy or water usage patterns. Utilities gain new visibility through infrastructure monitors that can sense trouble conditions and trigger an alert to the need for corrective action.

Customers are empowered to participate in demand response programs that save them money while conserving resources.

A Dedicated and Protected Communications Highway

Reliable, secure and cost-effective.

Unlike other utility networks that operate on costly power line infrastructures or low-powered, shared radio frequencies, FlexNet uses primary use radio spectrum, protected by law from interference and bundled into the network solution. This strategy presents essential advantages that other systems cannot offer.

No frequency sharing, no interference, no problems – period. While other systems fight interference and signal noise in shared bands, FlexNet transmits with a clarity and security that is protected by federal law.

The highest signal power and range in the industry. FlexNet wireless devices can transmit at up to two watts, potentially 10 to 100 times more power than devices on unlicensed spectrum. High signal power and low noise combine to significantly extend network reach. Instead of a fraction of a mile between endpoints, a FlexNet network can transmit up to 40 miles from point to point.

A simpler, more manageable infrastructure. One tower gateway can cover 30 to 300 square miles, depending on population density and terrain. In hard-to-reach areas, smart meters can pass

along data for each other. That means less equipment to buy, deploy and operate.

More reliable communications.

FlexNet's dedicated highway for data transmission makes communication more reliable than other systems that require channel hopping over radio frequencies.

Cost-effective, rapid build-out.

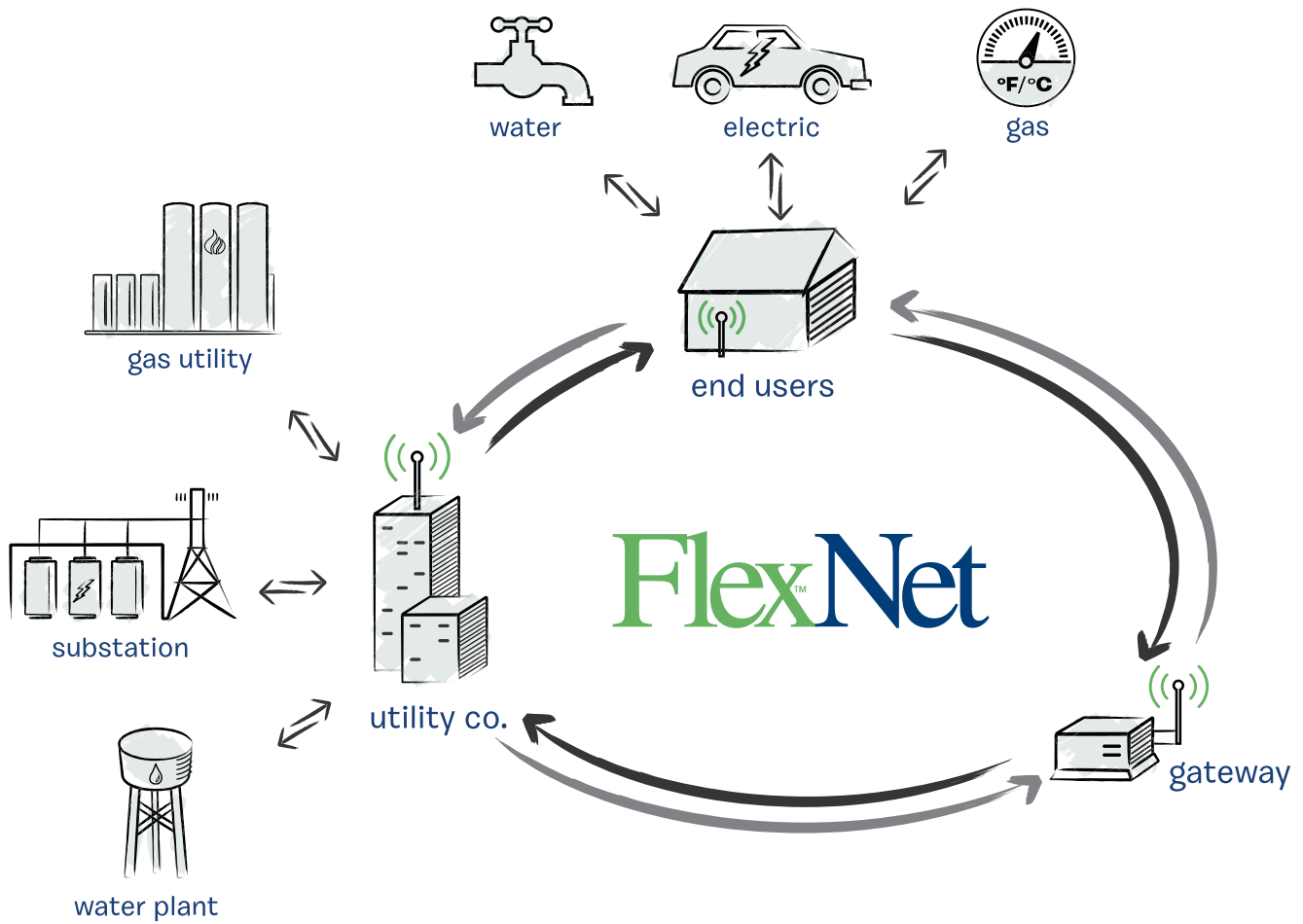
FlexNet systems have access to more than 4,000 tower sites covering more than 90 percent of the U.S. population. The tower-based architecture can be quickly deployed without concern for easement and access issues. And because FlexNet transmits stronger over a wider signal area, initial infrastructure build-out and ongoing maintenance costs are reduced.

Multilayered security to protect data privacy and integrity. Federal law prohibits infringement on licensed spectrum. On top of that, the FlexNet system adds multiple layers of built-in security, from strong AES-256 encryption to multilevel authentication, access controls and more for premium protection. With less traffic to interfere with communication, data is transmitted more securely.

Meeting utility needs today and tomorrow. FlexNet gives gas, water and electric utilities the ability to add functionality to keep up with utility growth. Demand response, distribution automation, home area network and new applications can easily be incorporated into a utility's operations over the FlexNet network, a future-proof investment.

Conserve capital while maintaining flexibility and ensuring scalability, whether you want to serve a few thousand homes or a few million.





FlexNet™ – Technology that delivers

Sensus Smart Meters at customer premises communicate consumption, status and diagnostic data to the FlexNet network for monitoring and billing purposes.

Energy meters also accept control instructions and software upgrades from the utility to intelligently manage consumption and remotely upgrade features and services.

Wireless communication between meters and towers is securely carried on licensed radio spectrum for distances of up to 40 miles, depending on the environment.

Sensus Tower Gateway Base Stations (TGBs) installed on existing towers (50–600 feet tall) communicate with SmartPoint meters and with the Regional Network Interface (RNI).

Backhaul communication between towers and the utility data center can be wireless, wired or satellite, whichever best suits the utility's business case.

Sensus Regional Network Interface (RNI) servers at the utility's data center manage network communications and data storage and processing.

Sensus FlexWare software provides an intuitive, Web-based interface to manage the system and its data.

The **Sensus FlexServer** Web-based portal enhances utility monitoring and management, expands consumer participation and improves public outreach.

Sensus is redefining the standard for utility AMI systems.

- The highest data transmission power in the industry
- No interference from other broadcasters
- Blanket coverage of your entire area
- Maximum range, reliability and security
- Minimal infrastructure for flexible and rapid build-out
- Robust, direct, secure communications

FlexNet™ – Technology without limits

FlexNet Water

FlexNet gives water utilities an acoustic leak detection solution that saves not only valuable natural resources but also lost revenue due to leaks in utility lines.

FlexNet SmartPoint M2 series transceivers offer water utilities two-way, fully migratable, AMR-to-AMI solutions and unprecedented freedom to expand and modify system capabilities without having to replace or revisit meters and equipment.

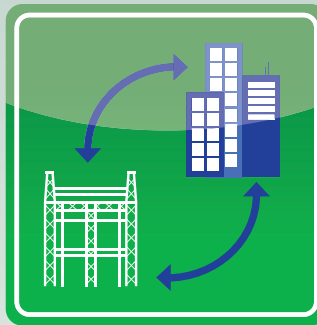


Smart utilities are using FlexNet data capabilities to inform and interact with customers and promote good conservation practices.

FlexNet Electric

The Sensus Smart Grid solution provides electric utilities with a standards-based, secure, dedicated, two-way, long-range wireless data communications network that will future-proof their AMI investment.

Electric utilities of all sizes benefit from our FlexNet dedicated RF spectrum with the ability to assign separate communications channels for discrete applications, such as distribution automation, demand response and SCADA.



The unparalleled RF design and operational efficiencies of Sensus can blanket a utility's entire service territory to deliver ubiquitous coverage.

FlexNet Gas

FlexNet allows gas utilities to increase meter reading accuracy, reduce overhead costs and enhance customer service – all while keeping more utility trucks off the road.

The innovative gas product line produced by Sensus combined with the FlexNet secure, reliable communications network delivers a gas AMI solution that expands easily and meets the requirements for safety and accuracy. Minimal infrastructure means lower maintenance cost and ease of installation.



FlexNet lets gas utilities excel in safety, reliability, efficiency and environmental responsibility, because no one has energy to burn.



We're not just promising results. We're delivering the smart grid today.

With roots that go back more than a century, Sensus is redefining the way utilities think about metering. Not only are we the world's largest manufacturer of water meters, we are now a leading innovator and installer of utility communications and automation systems that put the "smart" in smart metering.

We are literally building on that foundation every day as we manage hundreds of deployments and install millions of endpoints in the United States, Canada and Europe.

Whether your utility is rural or urban – electric, gas, water or a combination – a FlexNet solution can deliver superior communications on a secure network that scales to meet your current and future needs.

Find out more about how the Sensus FlexNet system redefines the possibilities for intelligently managing costs, resources, infrastructure and customer engagement.

Visit us on the Web at www.sensus.com or call **1-800-638-3748**.



Regional Network Interface (RNI)

The nerve center of your FlexNet® communication network

The Regional Network Interface (RNI)TM is the head end system for the FlexNet communication network. The RNI manages communications by reading and delivering near real-time data, providing a window into the field. Communicating with end points, the RNI continuously gathers and processes device and network data, providing you with status updates and storing or sending data to other systems including your CIS, MDM, OMS and Sensus Analytics. From the data received, you can monitor the operation of meters, base stations, and the various RNI components to ensure timely and accurate billing for services. Priority alarms are delivered immediately, and onboarding diagnostic tools optimize performance by monitoring and managing system health.

BENEFITS

- Receive reliable, accurate device data to support billing and data analytics.
- Configure end points over the air.
- Operate more efficiently.
- Monitor and optimize system performance.
- Manage system security.

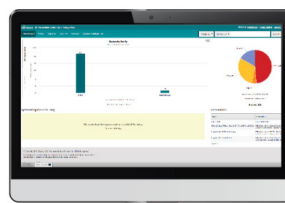
COMPONENTS

- **Hardware:** Whether licensed and hosted onsite at your facility, or in one of our data centers through a managed services partnership, servers are part of the RNI, used to host multiple components. Configuration varies with the size, structure and data needs of your network (e.g. number of end points, number of base stations, message duplication rate, base station to meter density).
- **Database:** This is the primary system of record for information consumed and produced by FlexNet. The database contains data such as meter read information and end point configuration information.
- **Software:** a suite of intuitive applications used to manage FlexNet.

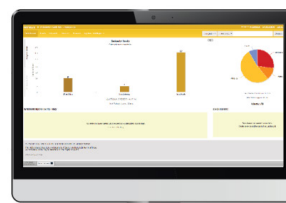
RNI software applications

The RNI software applications are used to monitor and maintain the FlexNet AMI communication solution. Core functions include:

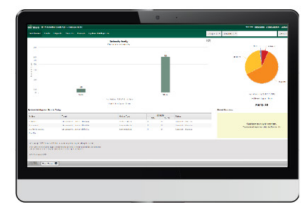
- **Configure:** set up of the devices and network settings; manage user access and security settings.
- **Monitor:** observe, detect and record network status using charts and graphs.
- **Tune:** make adjustments for proper system operation.
- **Troubleshoot:** analyze monitoring data and alerts to maintain proper network operation.
- **Optimize:** perform firmware and configuration downloads, and maximize the efficiency and speed of your network.



Water



Gas



Electric

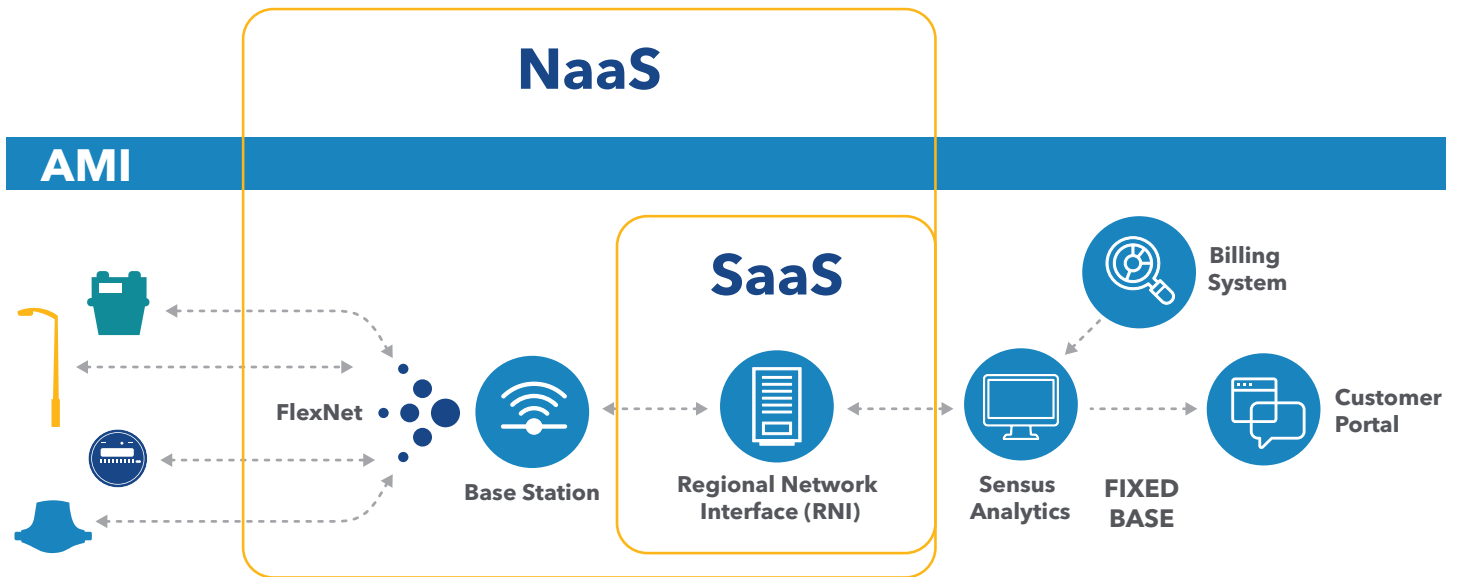
Regional Network Interface (RNI)

The nerve center of your FlexNet® communication network

Optional Managed Services

You have choices for hosting and managing the RNI. We can install the RNI at one of your data centers or other climate controlled environment. Or, with our Software as a Service (SaaS) offering, Sensus hosts the RNI through a secure cloud-based solution. When you select a SaaS model, we provide all the hardware and software required to operate the RNI through world-class, Tier IV data centers.

To take it a step further, you have the option to own and manage your base stations or allow Sensus to do it for you with our Network as a Service (NaaS) offering. With NaaS, all network base stations, firmware RF spectrum and system health are managed and maintained 24/7/365 by our Network Operations Center (NOC) engineers.



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FlexNet M400B2 Base Station

Compact Point-to-Multipoint Base Station

The Sensus FlexNet® M400B2 Base Station offers a strategic communications option for public service providers with endpoints deployed in remote or densely populated areas.

The efficient transceiver can transmit and receive in a 200kHz band of spectrum. 200kHz enables more dedicated channels, resulting in higher network capacity, allowing more granular data and more channels of data. And the Sensus FlexNet communication network delivers double the transmit power of competitive systems over primary-use licensed spectrum - ensuring reliability for mission critical applications.

The tower-based architecture enables reliable communication of status and usage information with fewer access points than other network architectures. These compact, efficient base stations fit in space-constrained environments and require no air conditioning.

FEATURES

- GPS receiver for time synchronization
- Duplexer for single antenna
- IP-addressable power supply with hot-swap capability
- 8-hour battery backup
- Alarms and reporting capability
- Backhaul via Ethernet/IP
- Heated battery for cold weather environments
- Modular construction for easy serviceability

APPLICATIONS

- Two-way Advanced Meter Infrastructure (AMI)
- Distribution Automation (DA)
- Demand Response (DR)
- Home Area Networks (HAN)
- Sensus VantagePoint® Lighting Control

Licensed Radio Spectrum

In North America, FCC/IC protected primary-use spectrum avoids competition with other wireless services, interference from other radio devices and the risk of being taken over by emergency service providers

Fewer Access Points

Our point-to-multipoint architecture directly connects base stations to endpoints over large geographic areas - greatly reducing the number of network backhaul connections as well as O&M costs

Resilient Network Design

Sensus Base Stations continue to provide real time data during outages and emergencies because of eight hour plus battery backup - enabling better workforce management and faster service restoration

Small Footprint

Flexible pole or wall-mounting options enable strategic deployment with a discreet appearance

Industry Leading Security

Sensus has achieved GE/Wurldtech™ Achilles® communications certification for critical infrastructure security against cyber threats

FlexNet® M400B2 Base Station

Compact Point-to-Multipoint Base Station



Properties

Receive bandwidth	200 KHz
Transceivers	Single
Spectrum	Licensed 900 MHz PCS/MAS
Duplexing	Single transmit Sixteen receivers - simultaneous/dedicated
Applications	Single
Expandability	No
Compatibility	SNMP
FlexNet	Requires RNI 3.x or newer

Enclosures - Outdoor - Pole/Wall Mount

Height	22" (55.9 cm)
Width x Depth	22" (55.9 cm) x 10.5" (26.7 cm)
Capacity	One transceiver
Temperature	-40° to +122° F (-40° to +50° C)
Voltage	120 VAC
Battery backup	8 hours
NEMA rating	4
Air conditioned	No



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Sensus Limited Warranty

- General Product Coverage.** Unless otherwise provided herein, Sensus USA Inc. ("Sensus") warrants its products and parts to be free from defects in material and workmanship for one (1) year from the date of Sensus shipment and as set forth below. All products are sold to customer ("Customer") pursuant to Sensus' Terms of Sale, available at: sensus.com/TC ("Terms of Sale").
- SR II® and accuSTREAM™ 5/8", 3/4" & 1" Meters** are warranted to perform to new meter accuracy level set forth in the SR II and accuSTREAM Data Sheets available at sensus.com for five (5) years from the date of Sensus shipment or until the registration shown below, whichever occurs first. Sensus further warrants that the SR II and accuSTREAM meters will perform to at least AWWA Repaired Meter Accuracy Standards for fifteen (15) years from the date of Sensus shipment or until the registration shown below, whichever occurs first:

	New Meter Accuracy	Repair Meter Accuracy
5/8" SR II Meter and accuSTREAM Meter	500,000 gallons	1,500,000 gallons
3/4" SR II Meter and accuSTREAM Meter	750,000 gallons	2,250,000 gallons
1" SR II Meter and accuSTREAM Meter	1,000,000 gallons	3,000,000 gallons
- SR II maincases** are warranted to be free from defects in material and workmanship for twenty-five (25) years from the date of Sensus shipment. **accuSTREAM maincases** will be free from defects in material and workmanship for fifteen (15) years from the date of Sensus shipment.
- ally® Meters** that register water flow are warranted to perform to the accuracy level set forth in the ally data sheet available at sensus.com for fifteen (15) years from the Date of Installation, but no longer than sixteen (16) years from date of manufacture, not including the meter's sensors, valve, and gear motor, which are warranted under different terms described below. As used herein, "Date of Installation" means the date after which the ally Meter has been out of empty pipe for seven (7) consecutive days, as those days are measured by the ally Meter and stored in the meter's nonvolatile memory.
- iPERL® Meters** that register water flow are warranted to perform to the accuracy levels set forth in the iPERL data sheet available at sensus.com for twenty (20) years from the date of Sensus shipment. The iPERL System Component warranty does not include the external housing.
- Sensus OMNI™, OMNI+ Meters and Propeller Meters** are warranted to perform to as set forth in OMNI and Propeller data sheets for eighteen (18) months from the date of Sensus shipment.
- Sensus Cordonel Meters** are warranted to perform to the accuracy levels as set forth in the Cordonel data sheet available at sensus.com for twenty (20) years from the date of Sensus shipment. The Cordonel System Component warranty does not include the external housing.
- Sensus Cordonel maincases** are warranted to maintain their structural integrity for a period of twenty (20) years from the date of Sensus shipment.
- Sensus accuMAG™ and Hydroverse™ Meters** are warranted to be free from defects in material and workmanship, under normal use and service, for 18 months from the date of Sensus shipment or 12 months from startup, whichever occurs first.

- Sensus Registers** are warranted to be free from defects in material and workmanship from the date of Sensus shipment for the periods stated below or until the applicable registration for AWWA Repaired Meter Accuracy Standards, as set forth above, are surpassed, whichever occurs first:

5/8" thru 2" SR II, accuSTREAM Standard Registers	25 years
5/8" thru 2" SR II, accuSTREAM Encoder Registers	10 years
All HSPU, IMP Contactor, R.E.R. Elec. ROFI	1 year
Standard and Encoder Registers for Propeller Meters	1 year
OMNI and OMNI+ Registers with Battery	10 years

- Sensus Electric and Gas Meters** are warranted pursuant to the General Limited Warranty available at sensus.com/TC.

- Batteries, iPERL System Components, AMR and FlexNet® Communication Network AMI Interface Devices** are warranted to be free from defects in material and workmanship from the date of Sensus shipment for the period stated below:

Electronic TouchPad	10 years
Act-Pak® Remote Monitoring Instruments	1 year
Gas SmartPoint® Modules and Batteries	20 years ¹
7500 series Hand-Held Device	2 years
Vehicle Gateway Base Station (VGB) and other AMR Equipment	1 year
EasyLink Reader	1 Year
CPTP100	20 Years ²
FlexNet Base Station (including the R100NA and M400 products)	1 year
RM4160	1 Year
iPERL System Battery and iPERL System Components	20 years ³
Sensus® Electronic Register+™	20 years ⁴
Sensus® Smart Gateway Sensor Interface	1 year ⁵
SmartPoint® 510M/520M/515M/512M Modules and Batteries	20 year ³

¹ Sensus will repair or replace non-performing Gas SmartPoint Modules (configured to the factory setting of six transmissions per day under normal system operation of up to one demand read to each SmartPoint Module per month and up to five firmware downloads during the life of the product) and batteries, for the first ten (10) years from the date of Sensus shipment, and for the remaining ten (10) years, at a prorated percentage, applied towards the published list prices in effect for the year product is accepted by Sensus under warranty conditions according to the following schedule:

Years	Replacement Price	Years	Replacement Price
1 – 10	0%	16	55%
11	30%	17	60%
12	35%	18	65%
13	40%	19	70%
14	45%	20	75%
15	50%	>20	100%

² Sensus will repair or replace non-performing CPTP100 modules (configured at factory setting of four transmissions per day under normal system operations of up to one demand read per month and up to five firmware downloads during the life of the product) and batteries.

³ Sensus will repair or replace non-performing:

- iPERL System Batteries, and/or the iPERL System flowtube, the flow sensing and data processing assemblies, and the register ("iPERL System Components") with hourly reads manufactured after April 2018
- Cordonel System Batteries, the flow sensing and data processing assemblies, and the register ("Cordonel System Components")
- SmartPoint 510M/520M/515M/512M-PLS/522M Modules manufactured after April 2018 (configured to the factory setting of six transmissions per day under normal system operation of up to one demand read to each SmartPoint Module per month and up to five firmware downloads during the life of the product) and batteries, unless the SmartPoint 510M/520M/522M Module is ever paired with an ally Meter, which immediately amends the warranty terms to those described in Section 13

at no cost for the first fifteen (15) years from the date of Sensus shipment, and for the remaining five (5) years at a prorated percentage, applied towards the published list price in effect for the year the product is accepted by Sensus under the warranty conditions according to the following schedule:

Years	Replacement Price	Years	Replacement Price
1 – 15	0%	19	60%
16	30%	20	70%
17	40%	>20	100%
18	50%		

⁴ Sensus will repair or replace non-performing Sensus Electronic Register+ with hourly reads for the first ten (10) years from the date of Sensus shipment, and for the remaining ten (10) years, at a prorated percentage, applied towards the published list prices in effect for the year product is accepted by Sensus under warranty conditions according to the following schedule:

Years	Replacement Price	Years	Replacement Price
1 – 10	0%	16	55%
11	30%	17	60%
12	35%	18	65%
13	40%	19	70%
14	45%	20	75%
15	50%	>20	100%

⁵ Sensus® Smart Gateway Sensor Interface warranty valid only for analog Meter Sample Rates of four times per hour with a Standard Transmit Rate of hourly or greater for the analog channel(s).

Sensus Limited Warranty

13. **ally® Meter Batteries and Components, including SmartPoint 510M/520M Modules** are warranted to be free from defects in material and workmanship from the Date of Installation, as defined in Section 4, for the period stated below:

Batteries	15 years ⁶
Sensors	5 years
Valve & Gear Motor	5 years ⁷
SmartPoint 510M/520M Modules and Batteries in service w/ally	15 years ⁶

14. **Cordonel Meter Batteries and Components** are warranted to be free from defects in material and workmanship from the Date of Installation, as defined in Section 7, for the period stated below:

Batteries	20 years ³
Sensors	5 years
SmartPoint 510M/520M Modules and Batteries in service w/Cordonel models with pressure	15 years ⁶

15. **iPERL and ally Connectors and Cables** are warranted to be free from defects in materials and workmanship, under normal use and service, for ten (10) years from the date of Sensus shipment. Nicor or Itron connectors included with a Sensus product are warranted according to the terms for Third-Party Devices in Section 16.

16. **Third-Party Devices** are warranted to be free from defects in materials and workmanship, under normal use and service, for one (1) year from the date of Sensus shipment. As used in this Sensus Limited Warranty, "Third Party Devices" means any product, device, or component part used with a Sensus product that is manufactured or sold by any party that is not Sensus. Failure of a Third-Party Device which subsequently causes failure to a Sensus device shall be the responsibility of the manufacturer of the Third-Party Device.

17. **Software.** Software supplied and/or licensed by Sensus is supported according to the terms of the applicable software license or usage agreement. Sensus warrants that any network and monitoring services shall be performed in a professional and workmanlike manner.

18. **Return.** Sensus' obligation, and Customer's exclusive remedy, under this Sensus Limited Warranty is, at Sensus' option, to either (i) repair or replace the product, provided the Customer (a) returns the product to the location designated by Sensus within the warranty period; and (b) prepays the freight costs both to and from such location; or (ii) deliver replacement components to the Customer, provided the Customer installs, at its cost, such components in or on the product (as instructed by Sensus), provided, that if Sensus requests, the Customer (a) returns the product to the location designated by Sensus within the warranty period; and (b) prepays the freight costs both to and from such location. In all cases, if Customer does not return the product within the time period designated by Sensus, Sensus will invoice, and Customer will pay within thirty days of the invoice date, for the cost of the replacement product and/or components.

The return of products for warranty claims must follow Sensus' Returned Materials Authorization (RMA) procedures. Water meter returns must include documentation of the Customer's test results. Test results must be obtained according to AWWA standards and must specify the meter serial number. The test results will not be valid if the meter is found to contain foreign materials. If Customer chooses not to test a Sensus water meter prior to returning it to Sensus, Sensus will repair or replace the meter, at Sensus' option, after the meter has been tested by Sensus. The Customer will be charged Sensus' then current testing fee. All products must be returned in accordance with the RMA process. For all returns, Sensus reserves the right to request meter reading records by serial number to validate warranty claims.

For products that have become discontinued or obsolete ("**Obsolete Product**"), Sensus may, at its discretion, replace such Obsolete Product with a different product model ("**New Product**"), provided that the New Product has substantially similar features as the Obsolete Product. The New Product shall be warranted as set forth in this Sensus Limited Warranty.

THIS SECTION 18 SETS FORTH CUSTOMER'S SOLE REMEDY FOR THE FAILURE OF THE PRODUCTS, SERVICES OR LICENSED SOFTWARE TO CONFORM TO THEIR RESPECTIVE WARRANTIES.

⁶ If applicable, any SmartPoint 510M/520M Modules ever paired with an ally meter or Cordonel with pressure meter are warranted with the following limitations:

- When configured to the default installation setting of six transmissions of metrology and pressure per day and one update of temperature per day, the SmartPoint module is warranted to perform up to five (5) firmware upgrades for the SmartPoint module and up to five (5) firmware upgrades for the ally meter or Cordonel (with pressure) meter;
- 2500 Operational Commands, where "**Operational Commands**" include on demand reads (such as consumption, pressure, temperature), an ally meter valve command, or a configuration command; and
- 15 Diagnostic Commands, which includes two-way communications tests and installations

for the first ten (10) years from Date of Installation at no cost. For the remaining five (5) years, Customer will pay the reduced Replacement Price of the then-current list price in effect at the time the product is accepted for return in accordance with the following schedule:

19. **Warranty Exceptions and No Implied Warranties.** This Sensus Limited Warranty does not include costs for removal or installation of products, or costs for replacement labor or materials, which are the responsibility of the Customer. The warranties in this Sensus Limited Warranty do not apply to and Sensus has no liability for goods that have been: installed improperly or in non-recommended installations; installed to a socket that is not functional, or is not in safe operating condition, or is damaged, or is in need of repair; tampered with; modified or repaired with parts or assemblies not certified in writing by Sensus, including without limitation, communication parts and assemblies; improperly modified or repaired (including as a result of modifications required by Sensus); converted; altered; damaged; read by equipment not approved by Sensus; for water meters, used with substances other than water, used with non-potable water, or used with water that contains dirt, debris, deposits, or other impurities; subjected to misuse, improper storage, improper care, improper maintenance, or improper periodic testing (collectively, "**Exceptions**"). If Sensus identifies any Exceptions during examination, troubleshooting or performing any type of support on behalf of Customer, then Customer shall pay for and/or reimburse Sensus for all expenses incurred by Sensus in examining, troubleshooting, performing support activities, repairing, or replacing any Equipment that satisfies any of the Exceptions defined above. The above warranties do not apply in the event of Force Majeure, as defined in the Terms of Sale.

THE WARRANTIES SET FORTH IN THIS SENSUS LIMITED WARRANTY ARE THE ONLY WARRANTIES GIVEN WITH RESPECT TO THE GOODS, SOFTWARE, SOFTWARE LICENSES AND SERVICES SOLD OR OTHERWISE PROVIDED BY SENSUS. SENSUS EXPRESSLY DISCLAIMS ANY AND ALL OTHER REPRESENTATIONS, WARRANTIES, CONDITIONS, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE, REGARDING ANY MATTER IN CONNECTION WITH THIS SENSUS LIMITED WARRANTY OR WITH THE TERMS OF SALE, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, NON-INFRINGEMENT AND TITLE.

SENSUS ASSUMES NO LIABILITY FOR COSTS OR EXPENSES ASSOCIATED WITH LOST REVENUE OR WITH THE REMOVAL OR INSTALLATION OF EQUIPMENT. THE FOREGOING REMEDIES ARE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR THE FAILURE OF EQUIPMENT, LICENSED SOFTWARE OR SOFTWARE SERVICES, AND OTHER SERVICES TO CONFORM TO THEIR RESPECTIVE WARRANTIES.

20. **Limitation of Liability.** SENSUS' AGGREGATE LIABILITY IN ANY AND ALL CAUSES OF ACTION ARISING UNDER, OUT OF OR IN RELATION TO THIS AGREEMENT, ITS NEGOTIATION, PERFORMANCE, BREACH OR TERMINATION (COLLECTIVELY "**CAUSES OF ACTION**") SHALL NOT EXCEED THE TOTAL AMOUNT PAID BY CUSTOMER TO SENSUS UNDER THIS AGREEMENT. THIS IS SO WHETHER THE CAUSES OF ACTION ARE IN TORT, INCLUDING, WITHOUT LIMITATION, NEGLIGENCE OR STRICT LIABILITY, IN CONTRACT, UNDER STATUTE OR OTHERWISE.

AS A SEPARATE AND INDEPENDENT LIMITATION ON LIABILITY, SENSUS' LIABILITY SHALL BE LIMITED TO DIRECT DAMAGES. SENSUS SHALL NOT BE LIABLE FOR: (I) ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES; NOR (II) ANY REVENUE OR PROFITS LOST BY CUSTOMER OR ITS AFFILIATES FROM ANY END USER(S), IRRESPECTIVE OF WHETHER SUCH LOST REVENUE OR PROFITS IS CATEGORIZED AS DIRECT DAMAGES OR OTHERWISE; NOR (III) ANY IN/OUT COSTS; NOR (IV) MANUAL METER READ COSTS AND EXPENSES; NOR (V) DAMAGES ARISING FROM MAINCASE OR BOTTOM PLATE BREAKAGE CAUSED BY FREEZING TEMPERATURES, WATER HAMMER CONDITIONS, OR EXCESSIVE WATER PRESSURE. "**IN/OUT COSTS**" MEANS ANY COSTS AND EXPENSES INCURRED BY CUSTOMER IN TRANSPORTING GOODS BETWEEN ITS WAREHOUSE AND ITS END USER'S PREMISES AND ANY COSTS AND EXPENSES INCURRED BY CUSTOMER IN INSTALLING, UNINSTALLING AND REMOVING GOODS. "**END USER**" MEANS ANY END USER OF ELECTRICITY/WATER/GAS THAT PAYS CUSTOMER FOR THE CONSUMPTION OF ELECTRICITY/WATER/GAS, AS APPLICABLE.

The limitations on liability set forth in this Agreement are fundamental inducements to Sensus entering into this Agreement. They apply unconditionally and in all respects. They are to be interpreted broadly so as to give Sensus the maximum protection permitted under law.

Years	Replacement Price	Years	Replacement Price
1 - 10	0%	14	65%
11	35%	15	75%
12	45%	>15	100%
13	55%		

⁷ Notwithstanding the foregoing, valve and gear motor components of ally meters are not warranted beyond two thousand (2000) Valve State Operations, even if the warranty period provided herein has not yet expired. As used herein, "**Valve State Operations**" means adjustments of the Meter to open, close, or reduce flow.

General Limited Warranty

Revised November 2019

1. Terms of Sale. Sensus USA Inc. ("Sensus") warrants its products and parts as set forth below. All products are sold to the buyer ("Customer") pursuant to Sensus' Terms of Sale, available at: [sensus.com/tc](https://www.sensus.com/tc).
2. Electricity Meters and Electricity SmartPoint™ Modules. Sensus warrants the Sensus electricity meters and Sensus electricity SmartPoint Modules to be in compliance with their respective specifications under normal use and service, and to be free from material defects in materials and workmanship for a warranty period of twelve (12) months from the date of the installation or eighteen (18) months from the date of shipment, whichever occurs first. The warranty period for new spare parts and components sold by Sensus is twelve (12) months from the date of shipment. The warranty period for repaired or refurbished parts repaired by Sensus is ninety (90) days from the date of shipment, unless repaired pursuant to a warranty, in which case the repair is warranted for the time remaining of the original warranty period.
3. Gas Products and Gas SmartPoint Modules.
 - a. Except for the Sonix meters, Sensus warrants the Sensus gas products to be in compliance with their respective specifications under normal use and service, and to be free from material defects in materials and workmanship for a warranty period of twelve (12) months from the date of the installation or eighteen (18) months from the date of shipment, whichever occurs first. Sensus warrants the Sensus Sonix meters to be free from material defects in materials and workmanship for a warranty period of fifteen (15) years from the date of shipment. Sensus warrants the batteries in the Sensus Sonix meters to be free from material defects in materials and workmanship for a warranty period of ten (10) years from the date of shipment. The warranty period for new spare parts and components sold by Sensus is twelve (12) months from the date of shipment. The warranty period for repaired or refurbished parts repaired by Sensus is ninety (90) days from the date of shipment, unless repaired pursuant to a warranty, in which case the repair is warranted for the time remaining of the original warranty period.
 - b. Sensus warrants the Sensus gas SmartPoint Modules as set forth in the "G500" warranty, as set forth at: [sensus.com/tc](https://www.sensus.com/tc), or available at 1-800-METER-IT.
4. Water Meters and Water SmartPoint Modules. Sensus warrants the Sensus water meters and Sensus water SmartPoint Modules as set forth in the "G500" warranty, as set forth at: [sensus.com/tc](https://www.sensus.com/tc), or available at 1-800-METER-IT.
5. VantagePoint® Lighting Control Module. Sensus warrants the Sensus VantagePoint® Lighting Control Module to be in compliance with their respective specifications under normal use and service, and to be free from material defects in materials and workmanship for a warranty period of ten (10) years from the date of shipment. The warranty period for new spare parts and components sold by Sensus is twelve (12) months from the date of shipment. The warranty period for repaired or refurbished parts repaired by Sensus is ninety (90) days from the date of shipment, unless repaired pursuant to a warranty, in which case the repair is warranted for the time remaining of the original warranty period.
6. DA Devices and HAN Devices. Sensus warrants the Sensus DA Devices and Sensus HAN Devices to be in compliance with their respective specifications under normal use and service, and to be free from material defects in materials and workmanship for a warranty period of twelve (12) months from the date of shipment. The warranty period for new spare parts and components sold by Sensus is twelve (12) months from the date of shipment. The warranty period for repaired or refurbished parts repaired by Sensus is ninety (90) days from the date of shipment, unless repaired pursuant to a warranty, in which case the repair is warranted for the time remaining of the original warranty period.
7. RF Field Equipment. Sensus warrants the Sensus RF Field Equipment to be in compliance with their respective specifications under normal use and service, and to be free from material defects in materials and workmanship for a warranty period of twelve (12) months from the date of shipment.
8. Server Hardware. Sensus provides no warranty on the Server Hardware.
9. Third Party Goods. Notwithstanding anything to the contrary herein, Sensus does not warrant any goods manufactured or software supplied by third parties. For example, if Customer elects to buy meters from a third party, the Sensus SmartPoint Modules installed in such third party meters shall, subject to Section 11, below, be covered by the warranty above, but any warranty on the meter itself shall be a matter directly between Customer and such third party meter supplier.
10. Services. Sensus warrants that its services shall, at the time of performance, materially conform to the contract requirements, and shall be performed in a professional and workmanlike manner, free from material defects in workmanship.
11. Remedy.
 - a. If any Field Device or RF Field Equipment fails during the applicable warranty period (a "Failed Good"), Sensus' obligation, and Customer's exclusive remedy, is, at Sensus' option, to either (i) repair or replace the Failed Good, provided the Customer (a) returns the product to the location designated by Sensus within the warranty period; and (b) prepays the freight costs both to and from such location; or (ii) deliver replacement components to the Customer, provided the Customer installs, at its cost, such components in or on the Failed Good (as instructed by Sensus). In all cases, Customer shall be responsible for returning the Failed Good to Sensus, including all costs associated with the return of the Failed Good, and Sensus shall be responsible for shipping the repaired or replaced good back to Customer's warehouse. Customer shall, in all cases, be responsible for the In/Out Costs. If Sensus determines that the returned good is not defective, Customer shall pay and/or reimburse Sensus for all expenses incurred by Sensus in the examination of the returned good.
 - b. Customer's remedy under the warranty for services shall be, at Sensus' sole cost and expense, to correct or re-perform any defective or non-conforming services to assure compliance with the contract requirements.
 - c. THIS SECTION 10 SETS FORTH CUSTOMER'S SOLE REMEDY WITH RESPECT TO A FAILED GOOD OR ANY DEFECTIVE OR NON-CONFORMING SERVICE.
12. Warranty Exceptions. This General Limited Warranty does not include costs for removal or installation of products, or costs for replacement labor or materials, which are the responsibility of the Customer. The warranties in this General Limited Warranty do not apply to, and Sensus has no liability for, goods that have been: installed improperly or in non-recommended installations; installed to a socket that is not functional, or is not in safe operating condition, or is damaged, or is in need of repair, tampered with, modified or repaired with parts or assemblies not certified in writing by Sensus, including without limitation, communication parts and assemblies; improperly modified or repaired (including as a result of modifications required by Sensus); converted; altered; damaged; read by equipment not approved by Sensus; for water meters, used with substances other than water, used with non-potable water, or used with water that contains dirt, debris, deposits, or other impurities; subjected to misuse, improper storage, improper care, improper maintenance, or improper periodic testing (collectively, "Exceptions."). If Sensus identifies any Exceptions during examination, troubleshooting or performing any type of support on behalf of Customer, then Customer shall pay for and/or reimburse Sensus for all expenses incurred by Sensus in examining, troubleshooting, performing support activities, repairing or replacing any Equipment that satisfies any of the Exceptions defined above. The above warranties do not apply in the event of Force Majeure, as defined in the Terms of Sale.
13. THE WARRANTIES SET FORTH IN THIS GENERAL LIMITED WARRANTY ARE THE ONLY WARRANTIES GIVEN WITH RESPECT TO THE GOODS, SOFTWARE LICENSES AND SERVICES SOLD OR OTHERWISE PROVIDED BY SENSUS. SENSUS EXPRESSLY DISCLAIMS ANY AND ALL OTHER REPRESENTATIONS, WARRANTIES, CONDITIONS, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE, REGARDING ANY MATTER IN CONNECTION WITH THIS GENERAL LIMITED WARRANTY OR WITH EH TERMS OF SALE, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, NON-INFRINGEMENT AND TITLE.
14. SENSUS ASSUMES NO LIABILITY FOR COSTS OR EXPENSES ASSOCIATED WITH LOST REVENUE OR WITH THE REMOVAL OR INSTALLATION OF EQUIPMENT. THE FOREGOING REMEDIES ARE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR THE FAILURE OF EQUIPMENT, LICENSED SOFTWARE OR SERVICES TO CONFORM TO THEIR RESPECTIVE WARRANTIES.
15. Limitation of Liability
 - a. SENSUS' AGGREGATE LIABILITY IN ANY AND ALL CAUSES OF ACTION ARISING UNDER, OUT OF OR IN RELATION TO THIS AGREEMENT, ITS NEGOTIATION, PERFORMANCE, BREACH OR TERMINATION (COLLECTIVELY "CAUSES OF ACTION") SHALL NOT EXCEED THE TOTAL AMOUNT PAID BY CUSTOMER TO SENSUS UNDER THIS AGREEMENT. THIS IS SO WHETHER THE CAUSES OF ACTION ARE IN TORT, INCLUDING, WITHOUT LIMITATION, NEGLIGENCE OR STRICT LIABILITY, IN CONTRACT, UNDER STATUTE OR OTHERWISE.
 - b. AS A SEPARATE AND INDEPENDENT LIMITATION ON LIABILITY, SENSUS' LIABILITY SHALL BE LIMITED TO DIRECT DAMAGES. SENSUS SHALL NOT BE LIABLE FOR: (I) ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES; NOR (II) ANY REVENUE OR PROFITS LOST BY CUSTOMER OR ITS AFFILIATES FROM ANY END USER(S), IRRESPECTIVE OF WHETHER SUCH LOST REVENUE OR PROFITS IS CATEGORIZED AS DIRECT DAMAGES OR OTHERWISE; NOR (III) ANY IN/OUT COSTS; NOR (IV) MANUAL METER READ COSTS AND EXPENSES.
 - c. The limitations on liability set forth in this Agreement are fundamental inducements to Sensus entering into this Agreement. They apply unconditionally and in all respects. They are to be interpreted broadly so as to give Sensus the maximum protection permitted under law.
 - d. To the maximum extent permitted by law, no Cause of Action may be instituted by Customer against Sensus more than TWELVE (12) MONTHS after the Cause of Action first arose. In the calculation of any damages in any Cause of Action, no damages incurred more than TWELVE (12) MONTHS prior to the filing of the Cause of Action shall be recoverable.
16. Definitions. Any terms used in this General Limited Warranty as defined terms, and which are not defined herein, shall have the meanings given to those terms in the Terms of Sale.
 - a. "Agreement" means this General Limited Warranty, Customer's purchase order (except any Additional Terms), Sensus' Acknowledgement Form (if any), Sensus' invoice and the Terms of Sale.
 - b. "DA Devices" means RTMs and RTUs.
 - c. "Echo Transceiver" (formerly "FlexNet Network Portal" and "FNP") identifies the Sensus standalone, mounted relay device that takes the radio frequency readings from the SmartPoint Modules and relays them by radio frequency to the relevant FlexNet Base Station.
 - d. "End User" means any end user of electricity/water/gas that pays Customer for the consumption of electricity/water/gas, as applicable.
 - e. "Equipment" means the Field Devices, RF Field Equipment, Server Hardware, and any other goods sold hereunder.
 - f. "FlexNet Base Station" (formerly "Tower Gateway Base Station" and "TGB") identifies the Sensus manufactured device consisting of one transceiver, to be located on a tower that receives readings from the SmartPoint Modules (either directly or via an Echo Transceiver) by radio frequency and passes those readings to the RNI by TCP/IP backhaul communication.
 - g. "Field Devices" means the meters, SmartPoint Modules, DA Devices and HAN Devices.
 - h. "Force Majeure" shall have the meaning set forth in the Terms of Sale.
 - i. "HAN Devices" means the PCTs, IHDs and LCMs.
 - j. "IHDs" means the in-home displays.
 - k. "In/Out Costs" means any costs and expenses incurred by Customer in transporting goods between its warehouse and its End User's premises and any costs and expenses incurred by Customer in installing, uninstalling and removing goods.
 - l. "LCMs" means the load control modules.
 - m. "PCTs" means the programmable controllable thermostats.
 - n. "Remote Transceiver" (formerly "FlexNet Remote Portal" and "FRP") identifies the Sensus standalone, mounted relay device that takes the radio frequency readings from the SmartPoint Modules and relays them directly to the RNI by TCP/IP backhaul communication.
 - o. "RNI" identifies the regional network interfaces consisting of hardware and software used to gather, store, and report data collected by the FlexNet Base Stations from the SmartPoint Modules.
 - p. "RF Field Equipment" means, collectively, FlexNet Base Stations, Echo Transceivers and Remote Transceivers.
 - q. "RTMs" means the telemetric remote telemetry modules.
 - r. "RTUs" means telemetric MicroRTU (T866).
 - s. "Server Hardware" means the RNI hardware and the FlexServer hardware.
 - t. "SmartPoint™ Modules" identifies the Sensus transmission devices installed on devices such as meters, distribution automation equipment and demand/response devices located at Customer's End Users' premises that take the readings of the meters and transmit those readings by radio frequency to the relevant FlexNet Base Station, Remote Transceiver or Echo Transceiver.

Section 10: Cost Proposal

Cost Proposal



Aqua-Metric Sales Company
 1060 National Drive, #5 | Sacramento, CA 95834
 Phone: (951) 637-1400 | Facsimile: (951) 637-1500

November 6, 2024

Client: City of Burlingame, CA
Address: 0501 Primrose Road
City, State, Zip: Burlingame, CA 94010
Project: RFP City Project No. 86700, AMI Upgrade and Customer Engagement Program
Due Date: September 24, 2024 at 2:00 PM

Line No.	Item	Quantity	Unit	Extended
Sensus FlexNet AMI System				
Network Infrastructure, Setup, and Configuration				
	M400B2 Basestation with SPM-900	2	\$37,800.00	\$75,600.00
	Communication Backhaul	2	\$1,000.00	\$2,000.00
	M400B2 Basestation Installation at Alcazar Tank	1	\$47,054.17	\$47,054.17
	M400B2 Basestation Installation at Public Works Yard	1	\$16,500.00	\$16,500.00
	M400B2 Basestation Certification	2	\$1,750.00	\$3,500.00
FlexNet AMI Software Setup and Configuration				
	RNI SaaS Setup	1	\$9,400.00	\$9,400.00
	RNI Training	1	\$5,500.00	\$5,500.00
	Sensus Analytics System Setup	1	\$9,400.00	\$9,400.00
	Sensus Analytics Basic Integration	1	\$9,200.00	\$9,200.00
	Sensus Analytics Training	1	\$4,000.00	\$4,000.00
	Sensus Professional Services SOW for OTA Programming of 9,280 Water Meters, Estimated Pricing	1	\$17,600.00	\$17,600.00
	Network Implementation, Monthly Fee	3	\$10,000.00	\$30,000.00
Recurring Annual Fees: SaaS Software Hosting and Support				
	Annual Hosted RNI Software-as-a-Service, Water Only	1	\$19,850.00	\$19,850.00
	Annual Sensus Analytics Enhanced, Water Only	1	\$15,670.00	\$15,670.00
	Annual Sensus Analytics Text Messaging Fee (Optional)	1	\$1,500.00	\$1,500.00
	Annual M400 Basestation Extended Warranty	2	\$1,800.00	\$3,600.00
	Annual Aqua-Metric Support	1	\$20,000.00	\$20,000.00

This quote for the product and services named above is subject to the following terms:

- All quotes are subject to the Aqua-Metric Terms of Sale unless there is an executed agreement between the parties. Terms of Sale can be found online at www.aqua-metric.com
- Quote is valid for thirty days.
- If modifications in materials, labor, or processing are required to meet new regulations, the pricing submitted herein is subject to immediate change.
- Freight allowed on single Sensus Product orders exceeding \$80,000.00.
- Net Thirty Days to Pay
- Returned product may be subject to a 25% restocking fee. Additional details apply.
- Sales Tax and/or Freight charges are not included.
- Minimum 5 year term for SaaS Model with Annual 3% price increase
- Pricing based on 9,280 Water Services
- Customer to provide electricity to basestations.
- Customer to provide static IP address and monthly data (SIM) for backhaul communication - Aqua-Metric suggests Verizon Wireless or AT&T
- Customer's Billing System will provide Billing System Integration pricing directly to the City; Aqua-Metric is unable to determine these costs
- Network Implementation Monthly Fee subject to change based on the actual months of implementation services.
- Pricing does not include staging, product storage, or consumer outreach program
- Pricing does not include bonding
- Any items beyond quote above subject to price negotiations

Subtotal:	\$290,374.17
Estimated Tax:	\$7,472.88
Total:	\$297,847.05

Project Pricing Clarifications and Assumptions

Aqua-Metric would like to thank the City of Burlingame for allowing us the opportunity to present our Sensus FlexNet AMI Solution in response to their bid for an AMI System. We believe our system exceeds the requirements outlined within the Utility's bid documents but would like to offer the following clarifications to help better understand our proposed response. Additional deviations and exceptions are listed within Section 6: Contract Agreement.

1. Terms and Conditions

Aqua-Metric's proposal has been carefully prepared using information furnished by the City of Burlingame within their request for proposals. Aqua-Metric's response thereto is not intended to be construed as Aqua-Metric's acceptance or rejection of any specific terms or conditions except where expressly stated herein otherwise. If awarded, Aqua-Metric will enter into the required contract(s) with the City of Burlingame based on Aqua-Metric's standard agreement(s) and Terms of Sale. All contracts must be executed prior to project start. Enclosed within our response is Aqua-Metric's Terms of Sale which will govern, unless there is a mutually agreeable executed agreement between the parties.

Aqua-Metric has reviewed the specifications provided by the City of Burlingame to prepare our response in accordance with the project scope as presented. While we believe our proposal to be a comprehensive solution for the Utility's consideration, we remain mindful that potential unknown conditions may not have been identified or disclosed prior to our response which may arise through the course of the project. In such event, Aqua-Metric will work closely with the Utility on a case-by-case basis to determine how we best approach any unforeseen circumstances equitably for both the Utility and Aqua-Metric. Considering this, Aqua-Metric reserves the right to negotiate a fair and mutually agreeable contract with the City.

If awarded, Aqua-Metric intends to engage in individual subcontracts with the third-party vendors (suppliers and subcontractors) for their respective services of the project. Pricing as provided is based upon our general understanding of the plans and specifications of the Utility's RFP and may be subject to additional cost(s) in the event of scope refinement or change. Supplemental third-party suppliers included within our response may be contingent on Aqua-Metric's award, potential scope changes, and/or final mutual agreement(s) between Aqua-Metric and its third-party suppliers.

In recognition of the potential for fluctuation in raw material and inflationary costs, pricing will be held firm for 120 calendar days, after which pricing may be subject to adjustment(s) based upon inflation rates within the current market and potential supply chain constraints. The percentage change between the response price and the contract price shall not exceed the percentage change issued by Aqua-Metric's supplier's actual cost of increase. Prices for products or services unaffected by verifiable cost trends shall not be subject to adjustment.

If modifications in materials, labor, or processing are required to meet new regulations, the pricing submitted herein is subject to immediate change.

Aqua-Metric's cost proposal pricing is not considered all-inclusive, but is quoted based on our understanding of the services and material as described herein. The enclosed itemized pricing provides a list of the services / materials quoted as a part of each line item. Any additional materials / services will incur added fees and will require the Utility's approval and change order prior to services being performed. Additionally, any alternate material will require the Utility's approval and change order prior to purchasing replacement products or performing services.

2. Price Proposal Sheet Notes

Aqua-Metric's proposal pricing reflects itemized costs for the products and services we are providing. The RFP's Proposal Content Section outlines their cost proposal requirements; however, these requirements reflect services provided by a consultant. Aqua-Metric does not invoice as requested within this section; therefore, we are taking exception to the requirement stated, and are quoting based on the deliverables we provided.

Annual Sensus RNI and Sensus Analytics SaaS fees are based on 9,280 water services. There is a minimum 5-year term for all annual support and subscription services with a 3% yearly price escalator.

Backhaul System – Aqua-Metric is proposing a communication backhaul system with Sierra-Wireless Modem. City of Burlingame will be responsible for all Static IP address(es), RJ45 connection, and monthly SIM card/Data Charge for each Backhauls use. Aqua-Metric will work with the Utility to determine the best options to move forward with; Aqua-Metric prefers AT&T, Sprint, or Verizon Wireless.

Basestation Installation – City of Burlingame will be required to provide an electrical base at and run electricity to each basestation tower, as well as provide mounting racks and/or antenna mounts, as needed. Site / Installation or engineered drawings are not included. Pricing assumes the following:

- Installation of two basestations.
- Power and equipment grounding source assumed to be provided within 10’ of base station location.
- Utilizing above-ground EMP conduit only.
- Quote does not include any asphalt or concrete work.
- Pricing assumes one mobilization / trip.

Alcazar Tank	Public Works Yard
<ul style="list-style-type: none"> • Install new antenna mast and antenna onto existing railing. • Install new 7/8" coax from antennas to base station utilizing ladder for cable supporting. • Install new 3" pipe embedded in concrete for equipment mounting. • Install new ground rod, ground coax, and equipment. • Mount base station to new 3" pipe. • Install new 120v AC circuit from source provided within 10' of base station. • Sweep Test 	<ul style="list-style-type: none"> • Install new non-penetrating roof mount with 6' pipe mast. • Install antenna, coax, and base station to non-penetrating roof mount. • Install 120v AC circuit from source within 10' of base station. Install grounding for equipment and coax from grounding source within 10' of base station. • Sweep test

CIS Integration – Aqua-Metric has included costs for integrating the proposed Sensus Analytics software with the Utility’s CIS/billing software (Tyler Munis); however, the billing software provider may impose separate fees for extract and meter swap integration with the proposed software. Aqua-Metric is unable to ascertain additional fees as they are facilitated independently between the billing software provider and the Utility. We assume the billing software provider will impose one-time integration charges to the Utility, although occasionally the required services may increase the Utility’s annual fees. Aqua-Metric shall not be responsible for any new or revised fees imposed from the billing software provider.

Aqua-Metric’s cost proposal does not include third-party integration services or fees for any third-party vendor, other than the CIS/billing software as described above. While we are able to perform third-party integration, this will require a formal integration understanding and scope of work prior to providing any associated costs. Please note, integration pricing to the City’s pending Customer Engagement Portal will be provided once the City has chosen their vendor. We are unable to provide integration pricing without knowing what software we will need to integrate with.

Aqua-Metric’s proposal does not include a dedicated project manager, but does include the necessary resources for network implementation. This is quoted as our Monthly Network Implementation fee.

Performance and Payment Bond – Bonding is not included within our proposal; however, bonding can be provided based on the contract total and duration. All costs associated within bonding will be invoiced to the City.

Handheld Equipment – Aqua-Metric’s cost proposal reflects Juniper Cedar tablets within our cost proposal. We can forego this line item if the Utility has smart devices (i.e., tablets) that are readily available. For this option, we would download our FieldLogic Software onto each device and use it alongside a CommandLink II.

Payment terms are net 30 days.

Freight allowed on single orders exceeding \$80,000.00. All non-Sensus and/or non-water product orders are subject to additional freight charges (i.e., handheld equipment, backhaul modems, meter boxes and lids, etc.).

Returned product subject to a 25% restocking fee for Sensus water product(s) – must be returned within six months of shipment. Additional details and limitations apply. All non-Sensus product subject to their specific manufacturer's published return policy.

A retainer withholding surcharge will be applied if retainage is required.

Pricing does not include water meters, endpoints, installation of water meters/endpoints, staging services, product storage, trash/recycling receptacles, or consumer outreach program.

Any items beyond what is quoted within our response are subject to price negotiations.

Estimated 9.63% sales tax is provided as a line item for quoted product only. Sales tax is not included within each unit cost, but as an additional cost to the proposed unit pricing. Additional taxes and fees not included.