

Article 1: Scope of Work

1.1 **Description:** Except as otherwise expressly provided herein, SIEMENS shall provide each and every item of cost and expense necessary to implement the following FIMs, which are further described in Section 1.2 (collectively, the "Work"):

- Water Meter Replacement;
- Advanced Metering Infrastructure (AMI).

1.2 **Specific Elements:** The Work shall include the following:

1.2.1 Water Meter & Electric Replacements and AMI System

Replacement of Water Meters with Radio Read Capabilities

SIEMENS will replace existing water meters with new water meters and radios outlined below. Water meter quantities and types are listed in Table 1.1.

Table 1.1 – Table of Water Meter Quantities and Types

Qty	Size	Type	Description
11,754	5/8" X 3/4"	Sensus iPerl Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
301	3/4" X 3/4"	Sensus iPerl Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
468	1"	Sensus iPerl Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
140	1.5"	Sensus R2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
633	2"	Sensus R2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
1	2"	Sensus C2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
9	3"	Sensus T2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
4	3"	Sensus C2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
34	3"	Sensus H2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
3	4"	Sensus T2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
5	4"	Sensus C2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
2	4"	Sensus F2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
1	6"	Sensus T2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
6	6"	Sensus F2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
3	8"	Sensus T2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
11	8"	Sensus F2 Omni Meter and 520M Smartpoint	Fixed Base Water Meter and Transmitter Replacement
13,375	Total		

For all water meters included in this scope of work, SIEMENS shall also include the following items and/or services in locations in accordance with this Scope of Work and applicable specifications:

Cut hole for transmitter antenna in existing plastic meter box lid where necessary;

- Assumes like for like replacement of all meters, Existing meters will have standard couplings or connections along with operable upstream valve.
- Digital photographs of meters and installations;
- Programming of meters

See Attachment 1- Meter Account List for a detailed listing of each water meter type and location to be included.

It is understood by SIEMENS that the components of the new AMI system will properly fit inside of CLIENT's water meter pit environment where applicable and no other rework is required. If CLIENT requires additional work to that meter, service line, or box, then SIEMENS reserves the right to propose a solution and, if necessary, the parties shall enter into a mutually agreeable change order based on a pre-negotiated price list filed with the Client at the time of the execution of the Agreement adjusting the time for project elements, completion and compensation due to SIEMENS for rework.

SIEMENS has done its due diligence to verify that the meter quantities listed in Table 1.1 above are accurate and CLIENT is in agreement with these quantities. If any changes in meter quantities occur, SIEMENS reserves the right to develop and price these additional changes to the Scope of Work and will provide CLIENT with revised cost and savings calculations.

In order to verify meter quantities and to maintain system integrity for measurement and verification purposes, after substantial completion CLIENT shall allow SIEMENS reasonable access to its meter database as long as a performance assurance and confidentiality agreement exists between the CLIENT and SIEMENS.

The final reading of the old meters pulled will be provided from the direct read dial face of the meter. If the reading is illegible due to dial face condition, SIEMENS will break the glass of the dial face to get the final reading.

Meter Access Procedure for the Project is outlined below:

- SIEMENS will attempt to access the meter a total of 3 times with a minimum of 24 hours between each access attempt.
- On each of the three access attempts, SIEMENS will "tag" the door with information on how to contact SIEMENS to allow access to meter in order to perform work.
- Each attempt to access the meter will be documented with a date and time – recorded electronically into the SIEMENS database
- After the third documented attempt, SIEMENS will submit inaccessible account to CLIENT for access assistance.
- CLIENT will take reasonable actions, including phone calls, PR announcements, and finally discontinuing service, as a means to gain access to the inaccessible meter or facility.
- If the account remains inaccessible for a period not to exceed 15 business days following submission to CLIENT, the account will be deemed permanently inaccessible and removed from the project scope.

SIEMENS will coordinate closely with the CLIENT staff for scheduling and workflow as each route is installed. Install crews will document, in an electronic format required for upload into the New World system, the customer account number, service address, serial number, size, and the final reading from the existing register prior to removal; and

will document the new meter serial number, new meter size, latitude and longitude within 3 to 5 meters, the installation date, and configure, program and verify communication of each new set upon installation. As each route is completed, the commissioning and acceptance plan described in the next paragraph will be performed to verify proper performance.

A successful and complete meter installation is defined as any meter installed to manufacturer specifications where the data has been accurately transferred into utility billing database (New World) and reads one or more times electronically on the reading network.

At the point of a successful and complete meter installation, the installation labor warranty begins and system benefits may be realized.

Upon Substantial Completion of each route in CLIENT's system, SIEMENS shall notify CLIENT in writing and request a Certificate of Substantial Completion for that route. CLIENT shall, within 10 working days, inspect the Work to determine its status of completion. If CLIENT does not consider work to be substantially complete it shall notify SIEMENS in writing, giving the reasons therefore and CLIENT shall develop a list of items to be completed or corrected ('punch list'). If CLIENT considers the Work to be substantially complete, then CLIENT shall execute a Certificate of Substantial Completion provided by SIEMENS.

Exclusions:

- Any deficiencies in existing utility infrastructure;
- Any existing water leaks found prior to beginning the meter retrofit;
- Any water leaks;
- Any repositioning or leveling of meter boxes including situations related to making new meter fit inside meter box, cosmetic appearance, or different than as-found condition;
- Any replacement or repair of any water appliances and infrastructure downstream or upstream of the meter;
- Installation of any new water meters other than those listed in Table 1.1;
- Concrete and sidewalk repairs due to meter access, rework of meter boxes, or replacement of meters.
- Lowering or relocating water service lines associated with water meters;
- Any cutting and/or removal of tree roots or shrubbery so that meter can be replaced or to gain access to water meters;
- Replacing old or damaged service pipe either from the utility-side or customer side;
- Correcting any observed plumbing code violations;
- Installation of new valves;
- Re-plumbing settings to accommodate non-standard lay lengths or meter couplings;
- Providing and installing new boxes or lids.

Automatic Metering System Upgrade

Except as otherwise expressly provided herein, SIEMENS will provide all equipment, material, and labor to install new Automatic Metering Infrastructure as follows:

Install a new Sensus FlexNet System or mutually agreed upon system and provide material and labor to make the system functional. SIEMENS will replace the meters identified in Table 1.1, and provide all material and labor to make the system functional, which includes installation of the following:

- Three (3) Sensus M400B Basestations (see Table 1.3):
- Two (2) FieldLogic 6501-GB Hand Held packages;
- One (1) Sensus Software-as-a-Service Hosted Server per Client's separate agreement directly with meter manufacture (Sensus) to include:
 - RNI SaaS Setup for Water;
 - Sensus Analytics Software for Water;
- Two (2) Command Link:
- One (1) 3096+ Mini Reader;
- One (1) UniPro Communication Tool;
- One (1) Micro Transceiver USB;
- One (1) AMR Drive-by Package including VGB and Software;
- Mass Meter Swap File for Sensus to New World billing software interface.
- Functional AMI system shall be defined as the meters being installed and capable of sending signals to the collectors, the collectors receiving those signals and transmitting the information to the Sensus meter data management system, and the Sensus meter data management system accurately sending the information to CLIENT'S billing system. It is typical that at any given time a small amount of meters capable of communicating may be hindered from communicating due to external conditions such as parked cars or temporary interferences of communication path.

Table 1.3 – Collector Locations

Name	Coordinates	Elevation (ft)	Antenna Height (ft)	Description
Wagon Wheel	32.967157, -97.023681	518 ft	Approx 150 ft	Existing Elevated Storage Tank
Southwestern	32.949224, -97.006384	518 ft	Approx 165 ft	Existing Elevated Storage Tank
MacArthur Park	32.960933, -96.958794	518 ft	Approx 80 ft	New Monopole Installation

For the Collector Locations identified in Table 1.3, CLIENT shall:

- Coordinate with installer as required prior to electrical trenching.
- Provide fiber data communication backhaul at each collector site.
- Provide access for digging equipment and temporarily remove any fencing as required to provide adequate space for installation of base stations.
- Obtain all necessary approvals, including the access rights, easement rights if necessary and consent of any 3rd party owners and/or other interested parties (if applicable) to construct, maintain and operate the collector tower at the location identified in Table 1.3 for the term of this

Agreement. Access rights shall include the ability to operate the collectors and repeaters for the entirety of the performance guaranty period.

- SIEMENS assumes that soil/underground conditions at the Collector Location are suitable to install the collector tower. To the extent Siemens determines that the location is unsuitable to install the tower, SIEMENS reserves the right to propose a new location and, if necessary, the parties shall enter into a mutually agreeable change order adjusting the time for completion and compensation due Siemens.
- Client shall be solely responsible for locating and identifying any underground utility lines within the proposed trenching path for each site. SIEMENS reserves the right to handle any deviation from proposed trenching path as a change in scope of work, and issue a change order;
- All required electrical work, mass data transfer and system commissioning is also included in this scope. Global positioning system coordinates will be provided for all meters. Unless otherwise specified in the contract, GPS coordinates will typically be accurate within consumer grade specifications, which is typically 3 to 5 meters. All removed meters shall become property of CLIENT, and will be placed in a storage location as mutually agreed between CLIENT and SIEMENS. CLIENT shall provide bins/storage containers for removed meters. Serial numbers, readings and photos of all removed meters will be taken and meters will be discarded into provided bins on a daily basis.

For each completed collector site(s), the CLIENT and SIEMENS will perform testing to evidence proper collection of data from a test meter population and demonstrate that the meter data has imported correctly into the data management software and is ready for integration to the billing system. SIEMENS shall have the right to determine the size, layout, and scope of the meter testing program.

Once the testing procedure for each collector has been successfully completed to the billing system, that collector will be deemed accepted, sign-offs by the CLIENT, SIEMENS, and Installer will be done and SIEMENS will have authority to commence full scale installation of meters in the collector site(s) location.

SIEMENS shall also include:

- Interface program to interface with Sensus AMI Software to New World Billing System;
- AMI system start up/testing/commissioning in accordance with manufacturer's guidelines;
- Onsite field training to include:
 - Training on use of AMI system;
 - Training for field personnel of proper installation and maintenance of system;
 - Training to interface billing software to Sensus data collection system.
- Electric power connection from breaker box to Basestation.

Exclusions:

- Any deficiencies in existing electrical system at sites chosen for collectors, including proper grounding and bonding;
- Any deviation of proposed electrical trenching route at each site chosen for data collection equipment due to unknown location of buried pipes, or other existing electrical conduit, etc.;
- Any additional new customer accounts the city acquires;
- Any ongoing license and service fees charged by manufacture of software;
- Any ongoing backhaul communication fees;
- Billing system customization, maintenance, or support beyond scope of Exhibit A.

1.3 **Technical Specifications, Drawings, and Exhibits:** The Work shall be performed in accordance with the following specifications, drawings and other attachments hereto, which are specifically incorporated herein and made part hereof, including Attachments 1 -5 to Exhibit C

1. All electrical work to comply with applicable NEC guidelines;
2. New AMI system and other associated Drawings to remain property of SIEMENS until City has paid in full;
3. All O&M manuals, wiring diagrams, and manufacturer's warranties to be supplied to City;

CLIENT'S Responsibilities (in addition to those in Article 6 of the Agreement):

- Ancillary installation materials and labor including, but not limited to, meter boxes, box lids, spool pieces, curb stops, valves, risers, setters, strainers, adapters, test ports, etc.;
- Provide a designated representative to interface with SIEMENS on all issues related to the Project;
- Provide for timely review of Project schedules and submittals (typically a 5-day approval turn-around unless otherwise specified);
- Provide access to Facilities with 3-day advance notice of work schedules, including coordination with Facility occupants and stakeholders
- Provide authorized personnel as required in secure areas;
- Provide for timely review and approval of completed Work;
- Provide assistance for electrical utility shutdowns of sections of the Facilities that may be required. SIEMENS will coordinate with Facility personnel to minimize disturbances.
- CLIENT shall provide access to the water utility bills and other utility usage data subject to a confidentiality agreement to allow evaluation of performance of building systems installed by SIEMENS. Account numbers for buildings affected shall also be provided by CLIENT. This access shall be provided near the start of the construction period so that electric energy consumption can be tracked for the purposes of calculating construction period savings (if applicable). Any access to client account information must be subject to a confidentiality agreement between SIEMENS and the City.
- Scheduling shutdowns, downtimes, and relocation of new commercial vaults;

- CLIENT shall continue to be responsible for reading meters until all commissioning and acceptance plan steps are completed for the AMI system.
- CLIENT shall provide a secure and accessible location during entire construction period for SIEMENS to place storage containers to store meters and other equipment associated with this Project.

Article 2: Work Implementation Period

- 2.1 Commencement of Work: SIEMENS shall commence the Work sixty (60) calendar days from the date funds are authorized and available, shall perform the Work diligently, and shall complete the Work no later than 420 calendar days from the day of commencement.
- 2.2. *Milestones*: Specific scheduling milestones and coordination requirements will be defined in Project schedule.

Article 3: Scope of Performance Assurance Services Program (PASP)

- 3.1 The Performance Assurance Service Program (PASP) shall commence on the Guarantee Date and shall be performed during the Performance Guarantee Period unless terminated by CLIENT in accordance with terms and conditions of Article 4 of the Performance Contracting Agreement.
- 3.2 SIEMENS will provide PASP services consistent with the Agreement and Exhibit C. SIEMENS will provide an Annual Performance Assurance Report ninety (90) days after the end of each Annual Period.
- 3.3 Performance Assurance Services are all labor activities, site visits, monitoring and analyses necessary to calculate the Annual Realized Savings achieved by the Project, and to prepare and present the Annual Performance Assurance Report for the respective Annual Period.
- 3.4 Each Annual Performance Assurance Report shall include:
- 3.4.1 The Measured and Verified Savings for the respective Annual Period, including supporting documentation required to complete the Measurement and Verification Plan outlined in Article 4, Exhibit C of this Agreement.
- 3.4.2 The Realized Annual Savings achieved by the Project for each respective Annual Period
- 3.4.3 A comparison of the Annual Realized Savings and Guaranteed Annual Savings to determine whether there is a Savings Shortfall for the respective Annual Period, pursuant to Article 4 of the Performance Contracting Agreement
- 3.4.4 Summary of annual inspection of tested meters.

3.5 Siemens will perform water meter testing on 5/8" and 1" meters as one combined sample population as per Exhibit C of this Agreement.

3.6 Client's Responsibilities:

- Once a quarter, Client to provide Siemens an electronic report of zero read meters on a monthly basis sorted by address. Report can be emailed.
- Client is responsible for shipping costs to the manufacturer associated with any warranty claims.
- Client is responsible for any meter or AMI repairs and replacements due to vandalism or damage caused by a third party other than Siemens.
- Client is responsible for keeping AMI and billing software up to date with accurate data related to any changes made to meter data or billing data associated with the water metering system.
- Within 30 days of the end of each annual period, Client to provide Siemens with Client's most recent water quality report.

Article 4: Scope of Services-Maintenance Services Program

CLIENT has elected to self-implement maintenance. Therefore SIEMENS shall not perform any on-going maintenance services, although the Parties may negotiate a separate agreement for such services at a later date. CLIENT agrees that it will maintain the equipment per manufacturer specifications and that it will operate the Equipment in accordance with the Contracted Baseline described in Article 7 of Exhibit C. If CLIENT fails to properly maintain or operate the Equipment, SIEMENS shall have the right to modify the Performance Guarantee pursuant to Article 4 of the Agreement.

By signing below, this Exhibit A is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

CLIENT: **City of Coppell, TX**

SIEMENS: **Siemens Industry, Inc.**

Signature: _____
Printed Name: _____
Title: _____
Date: _____

Signature: _____
Printed Name: _____
Title: _____
Date: _____