

**TOWN OF ARLINGTON, MASSACHUSETTS
ADVANCED METERING INFRASTRUCTURE (AMI)
AND WATER METER INSTALLATION SERVICES
BID NO. 21-44**

ADDENDUM NO. 1

To be considered as part of the contract documents for Advanced Metering Infrastructure (AMI) and Water Meter Installation Services, Bid No. 21-44. Bidders are advised that this Addendum must be acknowledged in the appropriate space provided on the Form of General Bid.

GENERAL

- 1. Deadline for receipt of bids has been changed to 10:00 a.m. October 20, 2021.**
2. This addendum breaks out meter supply into Bid Alternates. The Town will consider supply of solid-state meters only under Bid Alternate A and will allow mechanical meter supply 5/8-inch to 1-inch under Bid Alternate B. Solid-state meters must meet the requirements of the specification as originally published. Mechanical meters must meet the requirements of the supplemental specification added via this Addendum.
3. A contract bid item for meter setting jumper wire furnish and installation was added for the event composite meters are proposed. Bidders are asked to assert the make and model of proposed meter with bid, and may propose \$0.00 unit price jumper wire if they are proposing a metallic meter. Estimated quantity for meter jumper wire is based on review of photographs of 150 Town meter settings where 48% of existing settings were observed to not have jumper cables installed.

QUESTIONS AND ANSWERS

1. QUESTION: Will Sensus Omni meters (floating ball technology) be accepted?

ANSWER: Sensus Omni meter is not a solid state meter and therefore will not be accepted.

SPECIFICATIONS

SECTION 00100 – ADVERTISEMENT FOR BIDS

Delete deadline for receipt of bids,

“...until 10:00 a.m. prevailing time, on October 13, 2021...”

and replace with a revised deadline for receipt of bids,

“...until 10:00 a.m. prevailing time, on October 20, 2021...”

SECTION 00200 - INSTRUCTIONS TO BIDDERS

Delete deadline for receipt of bids,

“...until 10:00 a.m. prevailing time, on October 13, 2021...”

and replace with a revised deadline for receipt of bids,

“...until 10:00 a.m. prevailing time, on October 20, 2021...”

SECTION 00410 – FORM OF GENERAL BID

Delete Section 00410, Form of General Bid in its entirety and replace with the attached Section 00410, Form of General Bid.

SECTION 01270 – MEASUREMENT AND PAYMENT

Delete Section 01270, Measurement and Payment in its entirety and replace with the attached Section 01270, Measurement and Payment.

SECTION 15120 – INSTALLATION OF WATER METERS, REGISTERS AND AMI MODULES

1. Page 15120-4, delete the first sentence of 2.01G, and replace with the following sentences:

“Meters shall be solid state (ultrasonic, electromagnetic, fluidic oscillator) 5/8-inch through 3-inch for Alternate A. Meters shall be mechanical (nutating disc, oscillating piston) 5/8-inch to 1-inch and solid state (ultrasonic, electromagnetic) for meters 1.5-inch to 3-inch for Alternate B. All meters shall have high resolution registers and be of new construction.”

2. Page 15120-7, After Paragraph 2.01J, add the following paragraph:

“K. Mechanical Meters

Positive Displacement

All mechanical meters shall conform to the applicable AWWA Standards C700.

All meters shall consist of high-quality no-lead bronze or epoxy coated ductile iron main case certified by NSF 61 with raised markings to indicate the direction of flow and size. The meter serial number shall be stamped on the main case.

The no-lead bronze main case shall be certified by NSF 61 and shall comply with NSF 61 Annex F, which sets the maximum allowable lead leach limit to 5 ppb, and NSF 372, which sets the maximum lead content for a product to be 0.25% (15 ppb) lead for all wetted components.

Main case shall be the frost-protected type with removable bottom cap secured with stainless steel bolts, nuts, and washers. Bottom caps for meters 5/8-in. through 1-in. shall be interchangeable. Meters utilizing frost plugs are not acceptable.

Frost-protected meters shall have a cast iron cap. The cross section of the bottom shall break clean when subjected to a freezing pressure of 600 to 850 pounds per square inch (psi). The internal portion of the cap shall be protected from corrosion by either an inner lining or coating.

All main case bolts, nuts, and washers shall be Type 316 stainless steel to prevent corrosion. Bottom cap bolt lugs shall be enclosed in the main case and shall not have externally exposed, threaded through holes. The bottom cap bolts shall be secured with a tamperproof seal wire.

All 1½-inch and 2-inch meters shall have a split-case design secured by Type 316 stainless steel bolts, nuts, and washers. The meters shall be furnished with flanged ends. Flanged meters shall be furnished with companion flanges, gaskets, bolts, and nuts. Companion flanges shall be cast iron.

The measuring chamber shall be of a 2-piece snap-joint type. The chamber shall be made of non-hydrolyzing synthetic polymer, and shall be smoothly and accurately machined, and shall contain a removable molded diaphragm of the same material as that of the chamber. No screws shall be used to secure the chamber together.

The control block shall be of the same material as the measuring chamber and shall be mounted on the chamber top to provide sand ring protection. The control block assembly shall be removable to facilitate repairing and allow for a greater disc socket wear surface for increased longevity. Control block assemblies shall be designed as not to allow any magnetic slippage that would result in a loss of revenue.

The measuring chamber outlet port shall be sealed to the main case outlet port by means of an "O" ring gasket to eliminate any chamber leak paths.

The size, capacity, accuracy, and meter length shall be as specified in the latest revision of AWWA C700. The meters shall operate without leakage or damage to any part at a continuous working pressure of 150 pounds per square inch (psi)."

3. Page 15120-8, add paragraph 2.03C as follows:

"C. Bid Alternative A allows composite or metallic solid state water meters size 5/8-inch to 1-inch. To ensure compliance with Massachusetts Electrical Code, the Contractor shall electrically bond the water meter setting by furnishing and installing clamps on each side of the water meter setting with jumper wire connected between the clamps. Products shall include one 2' length of insulated 4 AWG wire and two (2) ground clamps per setting. Wire shall be 4 AWG THHN-THWN-2 stranded bare copper with PVC insulation and nylon jacket. Ground clamps shall be designed for connecting copper ground wire to water pipe 5/8-inch to 1-inch and be constructed of a high strength copper alloy of high conductance. Bonding is not required if a metallic meter is proposed."

4. Page 15120-18, add Paragraph 3.02K as follows:

"K. The Contractor shall determine the location where ground clamps are to be installed. One ground clamp shall be installed prior to the meter and affixed to the incoming service line before the first isolation valve. One ground clamp shall be installed after the meter and affixed to the home's metallic

plumbing after the second isolation valve. If it is impossible to achieve the above and ground clamps must be installed closer to the meter or on the tailpieces. The clamp shall be installed in a manner as not to interfere with future meter change-outs or valve operation. The clamp shall not be installed on any isolation valves. Once the ground clamp location has been determined, clean the surface of pipe/tubing at the installation site with an abrasive pad or sand cloth, ensuring proper continuity, install ground clamps, and install the 4 AWG insulated cable between Cable ends shall be trimmed to minimizing the risk of risk of clothing catching.”

ATTACHMENTS

- Section 00410, Form of General Bid
- Section 01270, Measurement and Payment

END OF ADDENDUM NO. 1

TOWN OF ARLINGTON, MASSACHUSETTS
BY ITS PROCUREMENT OFFICER

WESTON & SAMPSON ENGINEERS, INC.
READING, MASSACHUSETTS

SECTION 00410
FORM OF GENERAL BID

Proposal of _____ (hereinafter called "Bidder")*

- a corporation, organized and existing under the laws of the State of _____
- a partnership
- a joint venture
- a limited liability company
- an individual doing business as _____

*Insert corporation, partnership, joint venture, LLC or individual as applicable.

To the Town of Arlington, Massachusetts (hereinafter called "Owner").

Everyone:

The undersigned Bidder, in compliance with your invitation for bids for construction of the AMI and Water Meter Installation Services, having examined the plans and specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all superintendence, labor, services, materials, equipment, plant, machinery, apparatus, appliances, tools, supplies, bailing, shoring, removal, and all other things necessary to construct the project in accordance with the contract documents, as prepared by Weston & Sampson Engineers, Inc., within the time set forth below, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the contract documents, of which this bid is a part.

The Bidder hereby agrees that if selected as the Contractor it will commence work under this contract on or before a date to be fixed in the written "Notice to Proceed" given by the Owner to the Contractor and to fully complete the project by the required contract completion date of September 30, 2022. The Bidder further agrees to pay as liquidated damages the sum of

\$600 for each consecutive calendar day thereafter during which the work has not been fully completed, as provided in the "Liquidated Damages" provisions of Section 00800 SUPPLEMENTARY CONDITIONS.

Bidder acknowledges receipt of the following addenda:

No.	Dated:
No.	Dated:
No.	Dated:
No.	Dated:

The Bidder agrees to perform the work described in the specifications and shown on the plans for the following lump sum or unit prices:

BASE BID

Item No.	Estimated Quantity*	Brief Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figures
1		General:	
1a	Lump Sum	Mobilization, lump sum (not to exceed 5% of the sum of items 2 through 6)	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	
2		AMI Module Installation:	
2a	12,300 units	AMI Module, installed, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

Item No.	Estimated Quantity*	Brief Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figures
2b	20 units	Pit AMI Module, installed, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
2c	3,516 units	Wire replacement, meter to AMI module, during initial service visit, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
2d	500 units	Wire replacement, meter to AMI module, during follow-up service visit, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
3		Meter Installation:	
3a	3,290 units	5/8-inch water meter with register, installed, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

Item No.	Estimated Quantity*	Brief Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figures
3b	1 unit	3/4-inch water meter with register, installed, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
3c	110 units	1-inch water meter with register, installed, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
3d	30 units	1-1/2-inch water meter with register, installed, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
3e	75 units	2-inch water meter with register, installed, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

Item No.	Estimated Quantity*	Brief Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figures
3f	10 units	3-inch water meter with register, installed, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	
4		Non-Standard Meter Installation:	
4a	170 units	5/8-inch to 1-inch non-standard type-1, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	
4b	170 units	5/8-inch to 1-inch non-standard type-2, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	
4c	10 units	1-1/2-inch to 2-inch non-standard type-1, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

Item No.	Estimated Quantity*	Brief Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figures
4d	5 units	1-1/2-inch to 2-inch non-standard type-2, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	
4e	20 units	1-1/2-inch to 2-inch meter rightsizing, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	
4f	1 unit	3-inch non-standard type-1, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	
4g	1 unit	3-inch non-standard type-2, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	
4h	3 units	3-inch meter rightsizing, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

Item No.	Estimated Quantity*	Brief Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figures
5		Meter Rightsizing Evaluation:	
5a	30 meters	Meter rightsizing evaluation, per meter	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
6		Building Inspection:	
6a	3,500 premises	Building inspection, complete with attributes and photos, per premise	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
7		Salvaged Meters	
7a	3,400 meters	Credit for salvage of removed 5/8-inch to 1-inch meter, per meter	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
7b	105 meters	Credit for salvage of removed 1-1/2-inch to 2-inch meter, per meter	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

Item No.	Estimated Quantity*	Brief Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figures
7c	10 meters	Credit for salvage of removed 3-inch meter, per meter	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

BID ALTERNATE A

Make and Model of Water Meters Proposed: _____

The Bidder agrees to perform the work described in the specifications and shown on the plans for the following lump sum or unit prices:

Item No.	Estimated Quantity*	Brief Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figures
A1		Meter Supply:	
A1a	2,330 units	5/8-inch solid-state water meter with register, furnished, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
A1b	1 unit	3/4-inch solid-state water meter with register, furnished, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
A1c	110 units	1-inch solid-state water meter with register, furnished, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

Item No.	Estimated Quantity*	Brief Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figures
A1d	30 units	1-1/2-inch solid-state water meter with register, furnished, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
A1e	75 units	2-inch solid-state water meter with register, furnished, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
A1f	10 units	3-inch solid-state water meter with register, furnished, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
A2		Electrical Bonding of Water Meter Setting:	
A2a	1,660 units	Electrical bonding of water meter setting (if composite water meter proposed), furnished and installed, per unit	
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

BID ALTERNATE B

Make and Model of Water Meters Proposed: _____

The Bidder agrees to perform the work described in the specifications and shown on the plans for the following lump sum or unit prices:

Item No.	Estimated Quantity*	Brief Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figures
B1		Meter Supply:	
B1a	2,330 units	5/8-inch positive displacement water meter with register, furnished, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
B1b	1 unit	3/4-inch positive displacement water meter with register, furnished, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	
B1c	110 units	1-inch positive displacement water meter with register, furnished, per unit	\$ _____
		_____ (dollars)	
		and _____ (cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

Item No.	Estimated Quantity*	Brief Description Unit or Lump Sum Price Bid in Both Words and Figures	Total in Figures
B1d	30 units	1-1/2-inch solid-state water meter with register, furnished, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	
B1e	75 units	2-inch solid-state water meter with register, furnished, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	
B1f	10 units	3-inch solid-state water meter with register, furnished, per unit	\$ _____
		(dollars)	
		and	
		(cents)	
		(\$ _____)	

*Quantity assumed for comparison of bids.

TOTAL OF BASE BID

The proposed contract price for the Based Bid for all Items 1 through 7 inclusive is:

_____ Dollars
and _____ Cents (\$_____).

TOTAL OF BID ALTERNATE A

The proposed contract price for all Items A1 through A2 inclusive is:

_____ Dollars
and _____ Cents (\$_____).

TOTAL OF BID ALTERNATE B

The proposed contract price for all Item B1 inclusive is:

_____ Dollars
and _____ Cents (\$_____).

TOTAL OF BASE BID PLUS BID ALTERNATE A

The proposed contract price for Base Bid Items 1 through 7 inclusive and Bid Alternate A Items A1 through A2 inclusive is:

_____ Dollars
and _____ Cents (\$_____).

TOTAL OF BASE BID PLUS BID ALTERNATE B

The proposed contract price for Base Bid Items 1 through 7 inclusive and Bid Alternate B Item B1 inclusive is:

_____ Dollars
and _____ Cents (\$_____).

All entries shall be made clearly in ink or typewritten. Amounts are to be shown in both words and figures. In case of discrepancy between the prices written in words and those written in figures, the amount shown in words shall govern. In the event there is a discrepancy between the unit prices and the total sum of all of the items (the proposed contract price), the unit prices shall govern.

The above unit prices shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, bond premiums, etc., to cover the finished work of the several kinds called for.

The Bidder understands that all bids for this project are subject to the applicable bidding laws of the Commonwealth of Massachusetts, including General Laws Chapter 30, Section 39M, as amended.

The contract will be awarded to the lowest eligible and responsible bidder on the basis of the Base Bid plus Alternate A or the Base Bid plus Alternate B as selected by the Owner.

The Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 30 days, Saturdays, Sundays and legal holidays excluded, after the opening of bids.

The Bidder understands that this project will be funded by H.R.1319 – American Rescue Plan Act of 2021 and will be subject to Federal requirements.

Within 10 days of receipt of the written notice of acceptance of this bid, the Bidder will execute the formal agreement attached in Section 00520 AGREEMENT and provide the requisite payment and performance bonds and certificates of insurance.

Bid security is attached in the sum of five percent (5%) of the total bid in accordance with the conditions of Section 00200 INSTRUCTIONS TO BIDDERS. The bid security may become the property of the Owner in the event the contract and bond are not executed within the time set forth above.

The selected Contractor shall furnish a performance bond and a payment bond in an amount at least equal to one hundred percent (100%) of the contract prices in accordance with Section 00610 PERFORMANCE BOND, Section 00615 PAYMENT BOND, and as stipulated in Section 00700 GENERAL CONDITIONS of these specifications.

The undersigned offers the following information as evidence of its qualifications to perform the work as bid upon according to all the requirements of the plans and specifications.

1. Have been in business under present name for _____ years.

2. The names and addresses of all persons interested in the bid (if made by a partnership or corporation) as Principals, are as follows:

(Attach supplementary list if necessary)

3. The Bidder shall state below what work of a similar character to that included in the proposed contract it has done, and give references that will enable the Owner to judge its experience, skill and business standing (add supplementary page if necessary).

Completion Date	Project Name	Contract Amount	Design Engineer	Reference Name	Telephone No.
a					
.					
b					
.					
c					
.					
d					
.					
e					
.					
f.					

Pursuant to M.G.L. CH. 62C, Sec 49A, the undersigned Bidder certifies under the penalties of perjury that he is in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

The Contractor shall maintain as a goal on this project a not less than five percent ratio of women work force to total project hours in the contract. A Labor Scheduling Table will be used as a tool for achieving women work force participation for the entire project. Before starting work, the Contractor shall submit a plan for achievement of the equal opportunity goals of the contract. A good faith effort will be required to achieve these goals. The plan will indicate if the Contractor expects to achieve the requirements during the first quarter. If there are reasons why the Contractor does not expect to achieve the requirements during the first quarter year of the contract then the Contractor shall provide a plan calculated to address, to the extent reasonably possible, these obstacles to a good faith effort to achieve such goals. Not more than ten days following the end of each work quarter, the Contractor will report on the achievement of the goals, detailing the good faith efforts that have been made and will continue to be made and any other appropriate efforts not yet undertaken. All reports will be signed by an officer or principal of the company who has the authority to contractually obligate the company

The undersigned Bidder hereby certifies it will comply with the specific Town of Arlington affirmative action steps contained in the EEO/AA provisions of this Contract, including compliance with the women work force provisions as required under these contract provisions. The contractor receiving the award of the contract shall incorporate the EEO/AA provisions of this contract into all subcontracts and purchase orders so that such provisions will be binding upon each subcontractor or vendor.

The undersigned Bidder hereby certifies that (1) it is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (2) that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and 3) that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by

the United States Occupational Safety and Health Administration that is at least 10 hours in duration.

The undersigned Bidder hereby certifies, under pains and penalties of perjury, that the foregoing bid is based upon the payment to laborers to be employed on the project of wages in an amount no less than the applicable prevailing wage rates established for the project by the Massachusetts Department of Labor and Workforce Development. The undersigned bidder agrees to indemnify the awarding authority for, from and against any loss, expense, damages, actions or claims, including any expense incurred in connection with any delay or stoppage of the project work arising out of or as a result of (1) the failure of the said bid to be based upon the payment of the said applicable prevailing wage rates or (2) the failure of the bidder, if selected as the Contractor, to pay laborers employed on the project the said applicable prevailing wage rates.

The undersigned certifies under penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this paragraph the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity.

The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth of Massachusetts under the provisions of Section Twenty-Nine F of Chapter Twenty-Nine, Section 25C (10) of Chapter 152 (workers' compensation) or any other applicable debarment provisions of any other Chapter of the General Laws or any rule or regulations promulgated thereunder.

Respectfully submitted:

Date _____

By _____
(Signature)

(Name - Typed or Printed)

(Title)

(SEAL - if bid is by a corporation)

(Business Name)

(Federal ID Number)

(Business Address)

(City and State)

(Telephone Number)

(Fax Number)

END OF SECTION

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SECTION 01270

MEASUREMENT AND PAYMENT

PART 1 - DESCRIPTION

1.01 GENERAL:

- A. The following subsections describe the measurement of and payment for the work to be done under the items listed in Section 00410, FORM OF GENERAL BID.
- B. All work performed as described in these contract documents shall be paid for under one or more of the items listed in Section 00410, FORM OF GENERAL BID. All other activities required in connection with performance of the work, including all work required under Division 1, GENERAL REQUIREMENTS, whether described in the contract documents or mandated by applicable codes, permits and laws, will not be separately paid for unless specifically provided for in the FORM OF GENERAL BID, but will be considered incidental to performance of the overall project.
- C. Each unit or lump sum price stated in the Section 00410, FORM OF GENERAL BID shall constitute full compensation as herein specified for each item of work completed in accordance with the drawings and specifications.
- D. The payment items listed herein and in Section 00410, FORM OF GENERAL BID are intended to provide full payment for the work shown on the drawings and specified herein. Any work called for or implied in the documents but not listed as a payment item shall be considered incidental to the overall project.
- E. The Contractor will not be paid for delays and installations not completed due to either customer "lockout" or pre-existing conditions that prevent the installation as described in Section 15120, INSTALLATION OF WATER METERS, REGISTERS, AND AMI MODULES.
- F. The Contractor will **not** be paid for an installation until all documentation, photos, and **data installation files in the correct format** are submitted as detailed in Section 15120, INSTALLATION OF WATER METERS, REGISTERS, AND AMI MODULES.
- G. Work associated with shutting off the water service by the Owner if necessary and reattachment of any existing grounding wire clamps or jumper cables that were detached to complete the meter replacement shall not be separately measured for payment, but shall

be considered incidental to the removal of the existing meter and installation of the new meter.

- H. Work associated with the control and management plan, public notifications, care and protection of property, clean up, documentation, and testing, shall not be separately measured for payment and shall be considered incidental to the project.
- I. In those cases where the Contractor completes an installation that fails the operational test through no fault of the installer (examples include malfunctioning register or AMI Module) AND which after correction by the Owner and Supply Contractor result in an operational system, Contractor shall be entitled to a payment of 100% of the unit bid price.
- J. No separate compensation will be provided for resources expended at issue-accounts which are not resolved through the course of contract work (long-term unresponsive, inadequate plumbing, refusals, etc.). No separate compensation will be provided for delays incurred as a result of customer cancellations, customer no shows, or issues with existing plumbing which require support by the Owner or property owner. Such issues are inherent to work, incidental to the project, and if bidder deem required, should be accommodated-for in established bid unit pricing.
- K. The older meters, registers, AMR RF modules, and wiring shall be disposed of by the Contractor at its expense. Disposal as described in Section 151120, INSTALLATION OF WATER METERS, REGISTERS, AND AMI MODULES shall not be separately measured for payment but shall be considered incidental to the project.
- L. A five (5) percent retainage will be withheld until the project is considered substantially complete, as determined by the Owner and Engineer.

PART 2 – PAYMENT ITEMS

2.01 GENERAL:

- A. The lump sum price for Item 1a shall constitute full compensation to the Contractor for the general mobilization necessary to make the contract operational including all insurance, bonds, temporary facilities, and tools/equipment/systems required for the project and not included in other items listed herein. It is the Contractor's responsibility to obtain all equipment, handhelds, hardware, software, and/or other devices required by the Contractor for successful installation and configuration of meters and the AMI reading system. The Contractor shall submit for approval by the Owner prior to the first payment application a lump sum breakdown detailing proposed drawdown of the lump sum over the contract duration. **The lump sum cost for mobilization shall not exceed 5% of the total cost of items 2 through 6 in Base Bid.**

2.02 AMI MODULE INSTALLATION:

- A. AMI module installation shall be measured per unit installed, and shall be paid at the contract unit prices under the subdivisions of the item “AMI Module Installation”. The installation shall include all work as specified in Section 15120, INSTALLATION OF WATER METERS, REGISTERS, AND AMI MODULES.
- B. Wire replacement from the meter register to the AMI module shall be measured per unit installed, and shall be paid at the contract unit prices under the subdivisions of the item “AMI Module Installation”. The installation shall include removal of existing wiring; and installing, connecting, and testing the new wire system between the meter register and AMI module. Wire replacement shall be considered in addition to the unit price for AMI module installation under the items “AMI Module Installation”.

2.03 WATER METER INSTALLATION:

- A. Water meter installation shall be measured per unit installed, and shall be paid at the contract unit prices under the subdivisions of the item “Meter Installation”. This shall include each installation of meters furnished to the Contractor by the Owner as well as meters furnished by the Contractor through Bid Alternate A or B. The installation shall include all work as specified in Section 15120, INSTALLATION OF WATER METERS, REGISTERS, AND AMI MODULES.
- B. The unit price for all items under the subdivisions of “Meter Installation” are valid for a “Standard Installation” as specified in Section 15120, INSTALLATION OF WATER METERS, REGISTERS, AND AMI MODULES.
- C. The Contractor shall be responsible for storing the removed meter, register, and radio modules (if applicable) for a minimum of nine (9) months so that the units may be accessed at the Owner’s request. Following the holding period, the removed units shall be disposed of by the Contractor at its expense. Disposal as described in Section 15120, INSTALLATION OF WATER METERS, REGISTERS, AND AMI MODULES, shall not be separately measured for payment but shall be considered incidental to the project. A credit shall be applied back to the Owner, per unit salvaged, and shall be paid at the contract unit prices under the subdivisions of the item “Salvaged Meters”.

2.04 NON-STANDARD METER INSTALLATION:

- A. “Non-Standard, Type-1”, shall include instances where new couplings, fittings, flanges, tailpieces, and spool pieces are required for installation of the meters, including those in pits. The work shall include furnishing and installing necessary couplings, fittings, flanges, tailpieces, and spool pieces. The Contractor shall perform non-standard meter installations on meters of all sizes ranging from 5/8-inch to 3-inch. The installation shall include shut down of the water service by the Owner if required for the installation. The installation shall be measured per unit completed and paid at the contract unit prices under the subdivisions of the item “Non-Standard Meter Installation”.

- B. “Non-Standard, Type-2”, shall include instances where a meter valve, meter setter, or threaded to flange conversion kit for meters of all sizes ranging from 5/8-inch to 3-inch is required in addition to the work included in a Non-Standard Installation Type-1. The work shall include pit meters. Note that Non-Standard Type-1, will not additionally be paid when rendering Non-Standard, Type-2 work. The work shall include furnishing and installing necessary materials for installing the valve, meter setter, or flange conversion kit. The installation shall include shut down of the water service by the Owner if required for the installation. The installation shall be measured per unit completed and paid at the contract unit prices under the subdivisions of the item “Non-Standard Meter Installation”.
- C. “Water Meter Right-Sizing” shall be measured per meter right-sized and shall be paid at the contract unit prices under the subdivisions of the item “Water Meter Right-sizing”. Specific accounts will be rightsized based on recommendations following Meter Evaluation and following the Owner’s desktop review of facility character, historic consumption, and fixture maximum demand estimate. The right-sizing shall be from 1½-inch, 2-inch, or 3-inch meter to a specified smaller meter size. Work shall include all work included in typical meter replacement (as specified in Section 15120, INSTALLATION OF WATER METERS, REGISTERS AND AMI MODULES) plus plumbing services to reconstruct setting or downsizing conversion kits. Downsized meters will include compound, turbine, and positive displacement meters, with and without strainers existing.
- D. For all items under “Non-Standard Meter Installation”, this work is considered in addition to the unit price for meter installation under the items “Meter Supply & Installation”.

2.05 METER RIGHTSIZING EVALUATION:

- A. Meter evaluations shall be measured per evaluation completed and shall be paid at the contract unit prices under the appropriate subdivisions of the item “Meter Evaluation”. Only meters which the Owner requests to be evaluated shall be paid for under this item. Meter evaluations shall include all work as specified in Section 15120, INSTALLATION OF WATER METERS, REGISTERS AND AMI MODULES.

2.06 BUILDING INSPECTION:

- A. Building inspections shall be measured per premise inspected and shall be paid at the contract unit prices under the subdivisions of the item “Building Inspection”. Building inspections shall include inspection of premises for illicit connections to the sewer, including but not limited to: sump pumps, floor drains, and external downspouts. Building inspections shall record size, quantity, material, and configuration of illicit connections through inspection reports and photos. Building inspection reports, data tabulations, and photos shall be provided electronically to the Owner following completion of inspections.

2.07 SALVAGED METERS:

- A. Salvaged meters shall be measured per meter salvaged. Credit shall be made at the contract unit price under the subdivisions of the item “Salvaged Meters.”
- B. Storage and disposal costs associated with the salvaged meters shall not be separately measured for payment but shall be considered incidental to the salvage of the meter.
- C. The cost of removing the existing meter for the purposes of the salvage is included for payment under appropriate subdivisions of the item “Meter Installation”.

2.08 ALTERNATE A AND ALTERNATE B:

- A. Water meter supply shall be measured per furnished unit installed in accordance with the specification. Units stocked by the contractor shall not be paid until installed. At the conclusion of the contract the Owner may choose to buy surplus stock the Contractor has on-hand at the contract unit price. Work shall be paid at the contract unit prices under the subdivisions of the item “Meter Supply”.
- B. Electrical bonding of the water meter setting shall be measured per premise with bonding furnished and installed. The item shall be measured and paid only in cases where composite meters are applied and bonding of the water meter setting does not already exist. Work shall include all hardware, equipment, labor, and documentation (conditions should be captured in before/after setting photograph). Work will be paid at the contract unit prices under the subdivisions of the item “Electrical Bonding of Water Meter Setting”.

END OF SECTION

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