

Village of Ada, Ohio Water Meter Replacement

ADDENDUM 3

September 5, 2024

Planholders on the Village of Ada, Water Meter Replacement are hereby notified of the following amendments to the Contract Documents. This Addendum is hereby made a part of the Contract Documents.

SPECIFICATIONS

Replace the following specifications with the attached:

C-410 – Bid Form for Construction Contracts

15215 - Water Meters

RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED ON PAGE B-1 OF THE BID.

BID FORM

Village of Ada, Ohio

Water Meter Replacement

Contract 21

ARTICLE 1 - BID RECIPIENT

1.01 This Bid is submitted to:

Village of Ada, Ohio 115 W Buckeye Ave, Ada, OH 45810

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

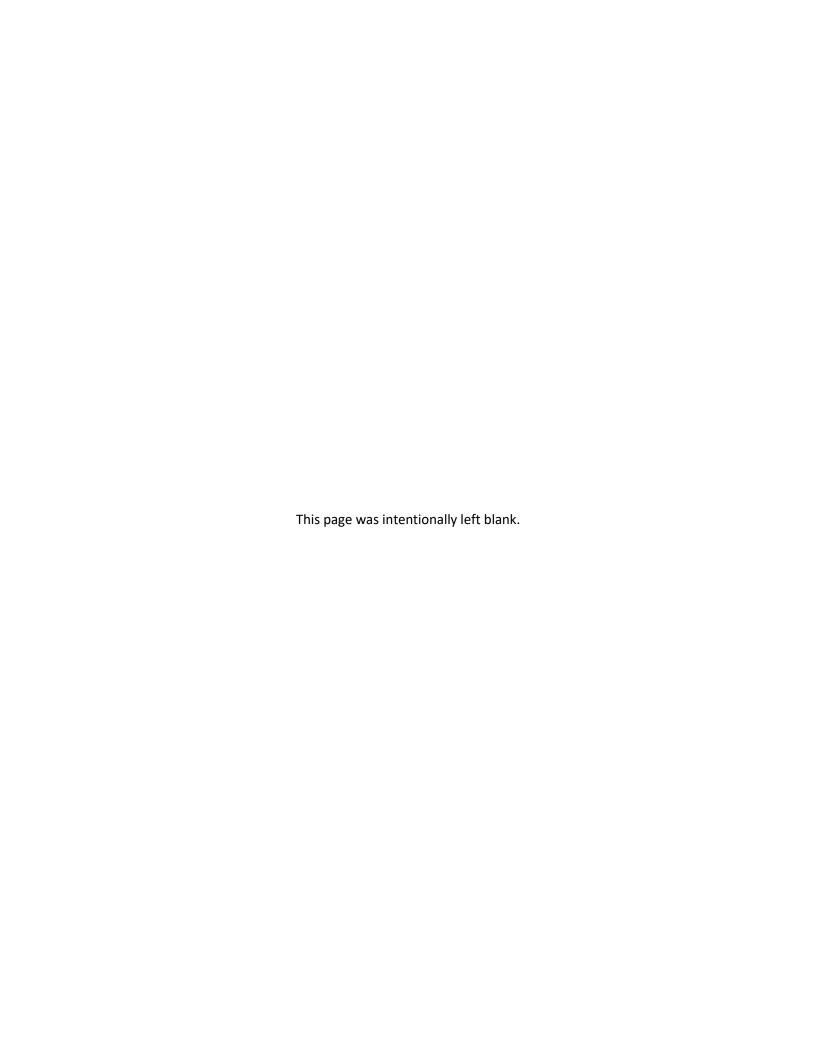
2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
 - A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No.	Addendum, Date

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and

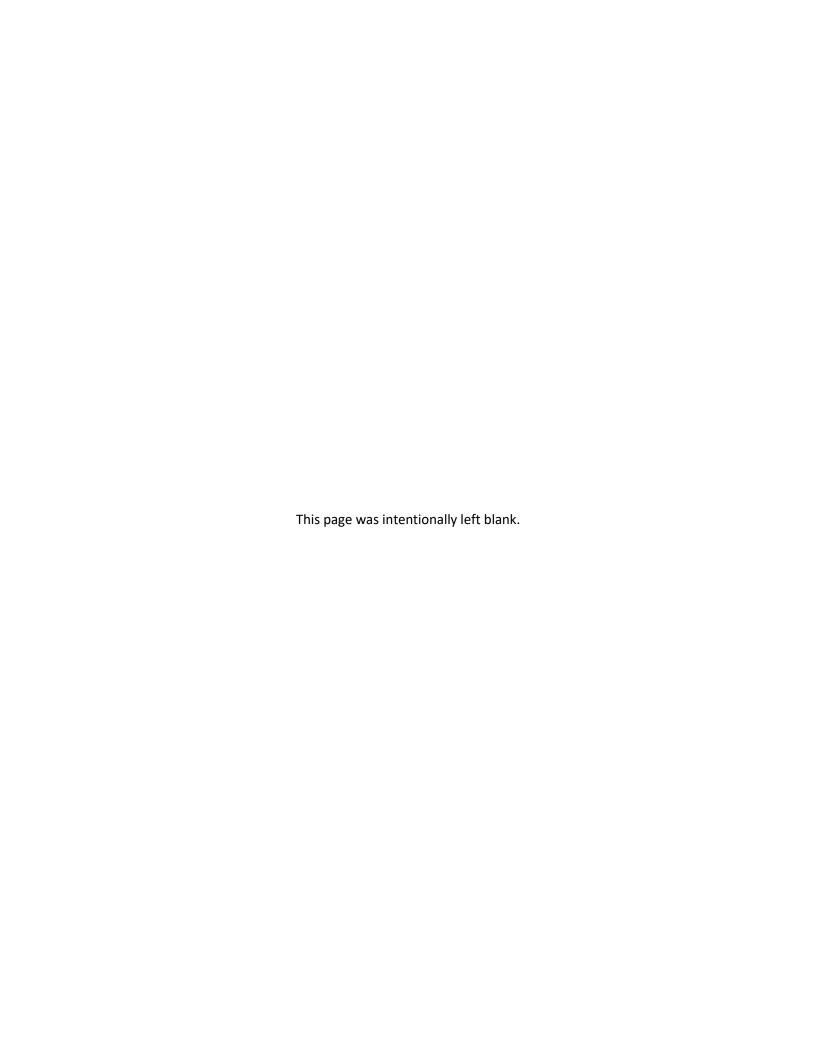


- drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- E. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- F. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- G. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- H. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- I. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and



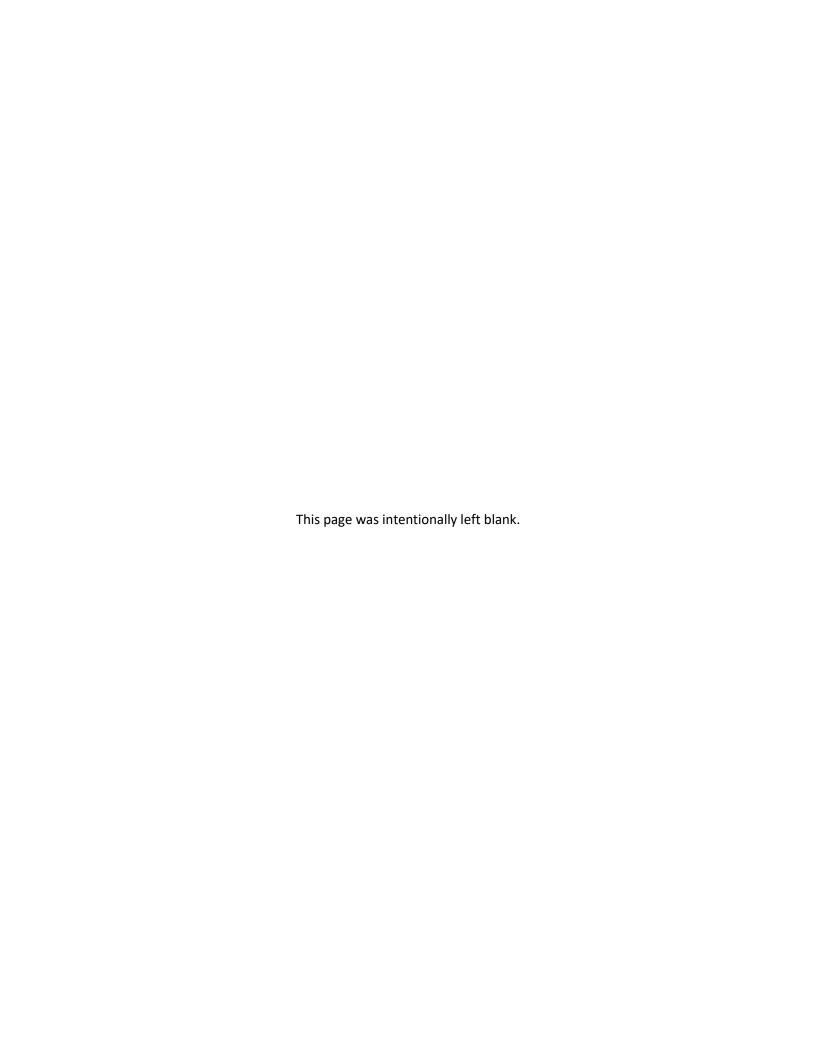
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the e execution of the Contract.

ARTICLE 5 - BASIS OF BID

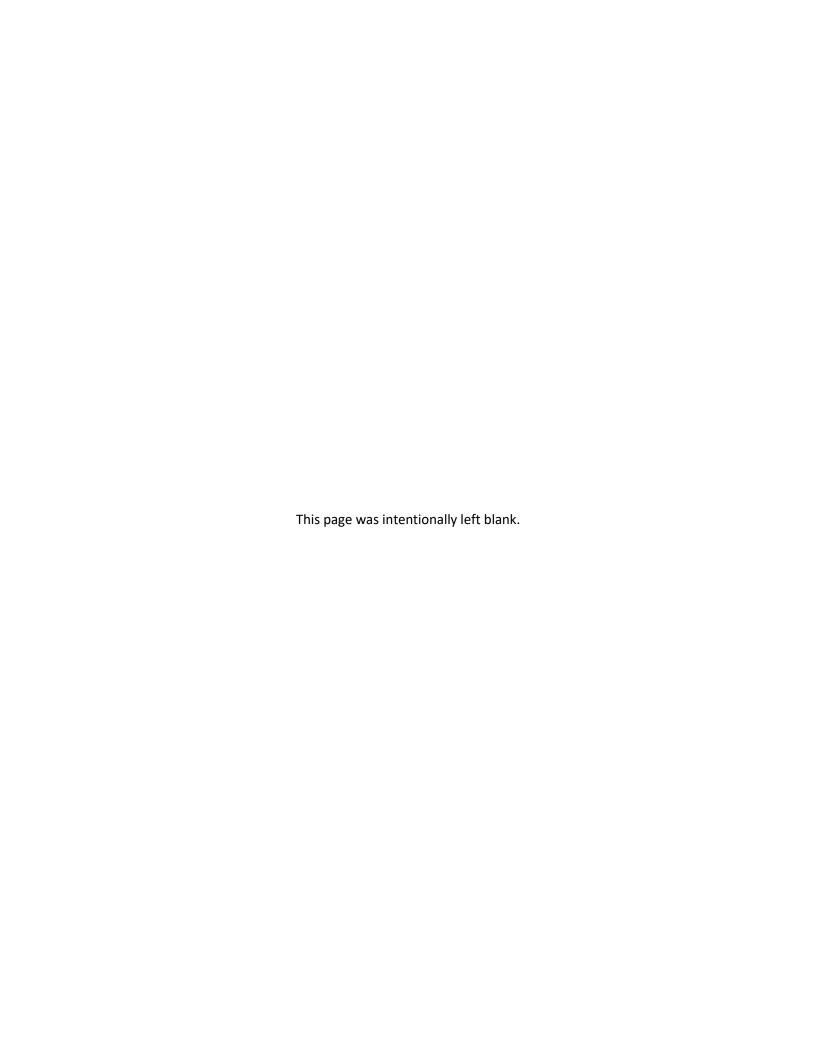
- 5.01 Bidder will complete the Work in accordance with the Contract Documents for the price(s) included on C-410-4 and C-410-5. Bidder shall fill in all blanks on the Bid Form.
 - A. The name or make of any piece of equipment or material of construction specified in the Contract Documents and identified on the following Base Bid Products and Equipment Manufacturer List shall be utilized in determining the base bid price.
 - B. Where two or more Equipment or Product Manufacturers are named, or the words "Or Equal" are listed in the Contract Documents and not included in the Base Bid List, Bidders may utilize any of the named or follow the "Or Equal" process outlined in the Contract Documents.
 - C. The Bidder shall identify their selected Equipment or Product Manufacturer on the Base Bid List as follows:

	Base Bid Equipment or Product List
Specification	Product or Equipment Manufacturers
Section	Select One by Circling
15215	Badger Meter, Master Meter, Neptune, Sensus
15215, 2.06	Radio Frequency, Cellular

- D. The Owner will have the right to select the Equipment or Product Manufacturer in the Base Bid List if Bidder fails to make a selection where required.
- 5.02 Bidder shall provide pricing for the Mandatory Alternates below.
 - A. Where required, Bidder shall make a selection for the "Add" or "Deduct" by circling one, indicating that the price is to be Added to the Base Bid or Deducted from the Base Bid. If the Bidder fails to make a selection the default will be a Deduction.
 - B. A Mandatory Alternate is required for each Equipment or Product Manufacturer listed.



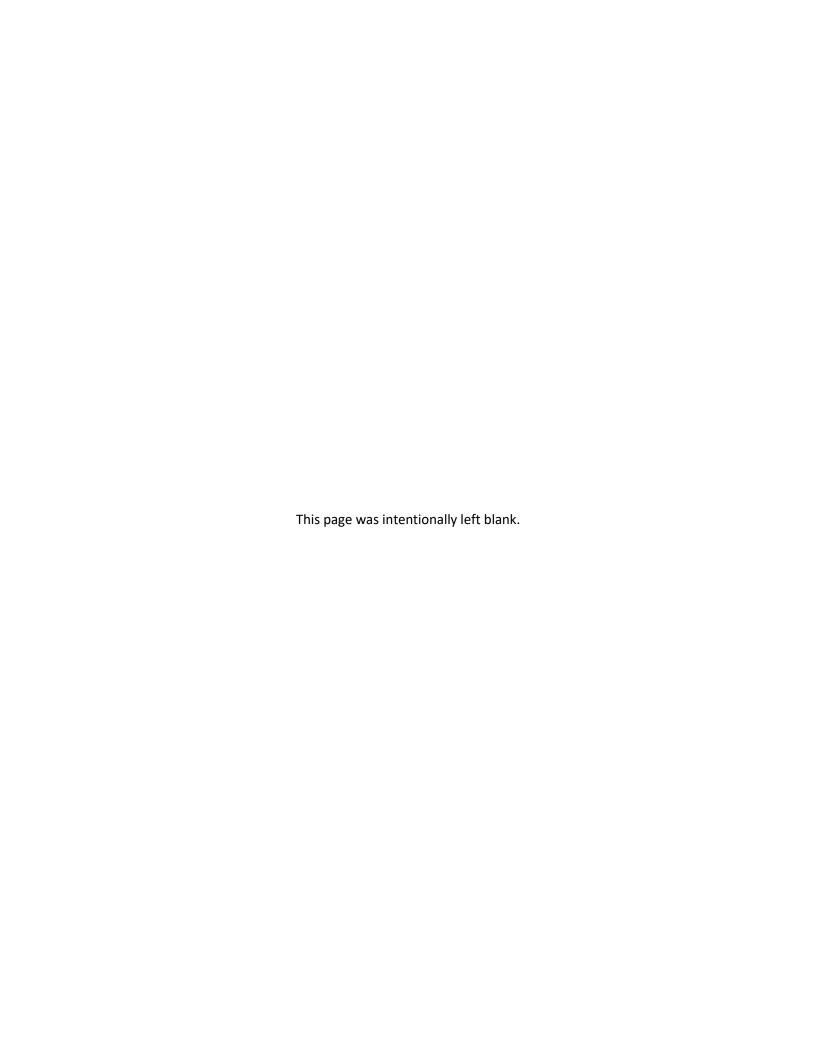
	Mandatory Alte	ernate	
Specification	Manufacturers	Circle One	Dollar Amount
Section	Shall not be the same as Base Bid		
	Provide pricing for Mandatory	Assumed to be a	
	Alternate for all listed manufacturers	deduct unless	
		one is circled	
		Add/Deduct	



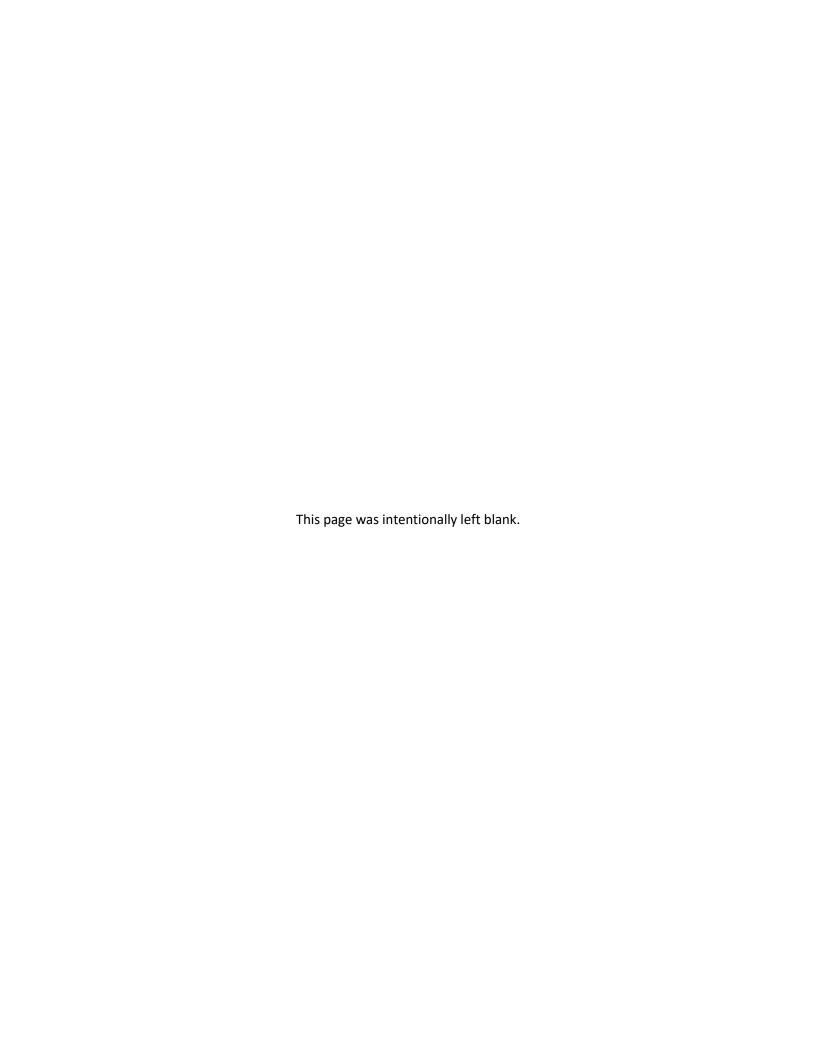
UNIT PRICE BID

and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents. Owner reserves the right to award the Bid based on a total of all base Bid items or the total of all base bid items with Alternative Bid items and consideration of Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, annual subscription fees.

Mobilization/Demobilization LS LS 5/8-inch Water Meter (Meter Pit) 1720 EA PR 5/8-inch Water Meter (Inside Residence) 54 EA PR 3/4-inch Water Meter (Inside Residence) 22 EA PR 1-inch Water Meter (Inside Residence) 12 EA PR 1-1/2-inch Water Meter (Inside Residence) 3 EA PR 2-inch Water Meter (Inside Residence) 3 EA PR 2-inch Water Meter (Inside Residence) 3 EA PR 2-inch Water Meter (Inside Residence) 3 EA PR		Description	Estimated Quantity	Unit	Unit Cost in Numbers	Unit Price in Words	Total Estimated Cost of Item	_
1720 5 5 22 12 9 9 11 11	Mobilization/Demobilization	nobilization	1	LS				
54 5 22 12 9 9 11 26	5/8-inch Water I	Meter (Meter Pit)	1720	EA				
5 22 12 9 9 11 11	5/8-inch Water	Meter (Inside Residence)	54	EA				
22 12 9 9 11 11	3/4-inch Water	Meter (Meter Pit)	5	EA				
12 9 nce) 3 11 26	1-inch Water N	leter (Meter Pit)	22	EA				
9 3 11 26	1-inch Water N	1eter (Inside Residence)	12	EA				
11 26	1-1/2-inch Wat	er Meter (Meter Pit)	6	EA				
11 26	1-1/2-inch Wat	er Meter (Inside Residence)		EA				
26	2-inch Water N	1eter (Meter Pit)	11	EA				
	2-inch Water I	Meter (Inside Residence)	26	EA				



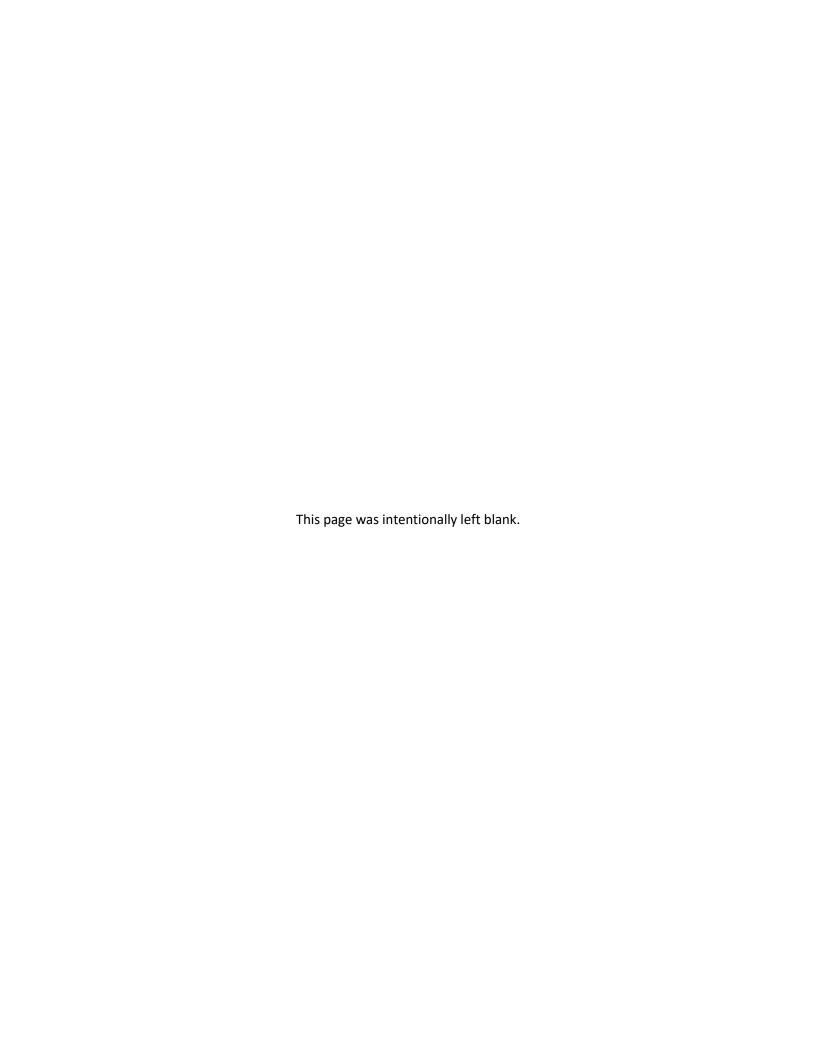
Item No.	Description	Estimated Quantity	Unit	Unit Cost in Numbers	- .	Unit Price in Words	Total Estimated Cost of Item	ated em
	3-inch Water Meter (Inside Residence)	6	EA					
2k	4-inch Water Meter (Inside Residence)	10	EA					
3a	AMI Infrastructure	1	ST					
3b	Software Integration and Programming	1	LS					
4	Annual Subscription Fees*	1	LS					
5	Allowances	1	rs	\$50,000	00	Fifty Thousand Dollars and zero cents	\$50,000	00
Total Est	Total Estimated Construction Costs, Bid Items 1 thru 5:	5:						
Alternat	Alternative Bid Items – Ultrasonic Meters for Bid Items 2a, 2b, 2c, 2	ıs 2a, 2b, 2c, 2d, 2e	2e					
Alt-2a	5/8-inch Water Meter (Meter Pit)	1720	EA					
Alt-2b	5/8-inch Water Meter (Inside Residence)	54	EA					
Alt-2c	3/4-inch Water Meter (Meter Pit)	5	EA					
Alt-2d	1-inch Water Meter (Meter Pit)	22	EA					
Alt-2e	1-inch Water Meter (Inside Residence)	3412 Addendum 3,	EA					



Item No.	Description	Estimated Quantity	Unit	Unit Cost in Numbers	Unit Price in Words	Total Estimated Cost of Item
		September 5, 2024				
Alt -2f	Alt -2f 1-1/2-inch Water Meter (Meter Pit)	6				
Alt-2e	Alt-2e 1-1/2-inch Water Meter (Inside Residence) 3	3	EA			
Total Est Items 2a Estimate	Total Estimated Construction Costs with Alternative Bid Items. Substitute Bid Items 2a thru 2e with Alternative Bid Items Alt-2a thru Alt-2e and provide Total Estimated Construction Costs	3id Items. Substit. Alt-2e and provid	titute Bid vide Total			

Addendum 2, August 30, 2024

^{*}Five years of annual subscription fees will be included in the total bid costs. Owner to pay those fees on annual basis separate from the Contract price.



ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete on or before October 31, 2025, and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before November 30, 2025.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

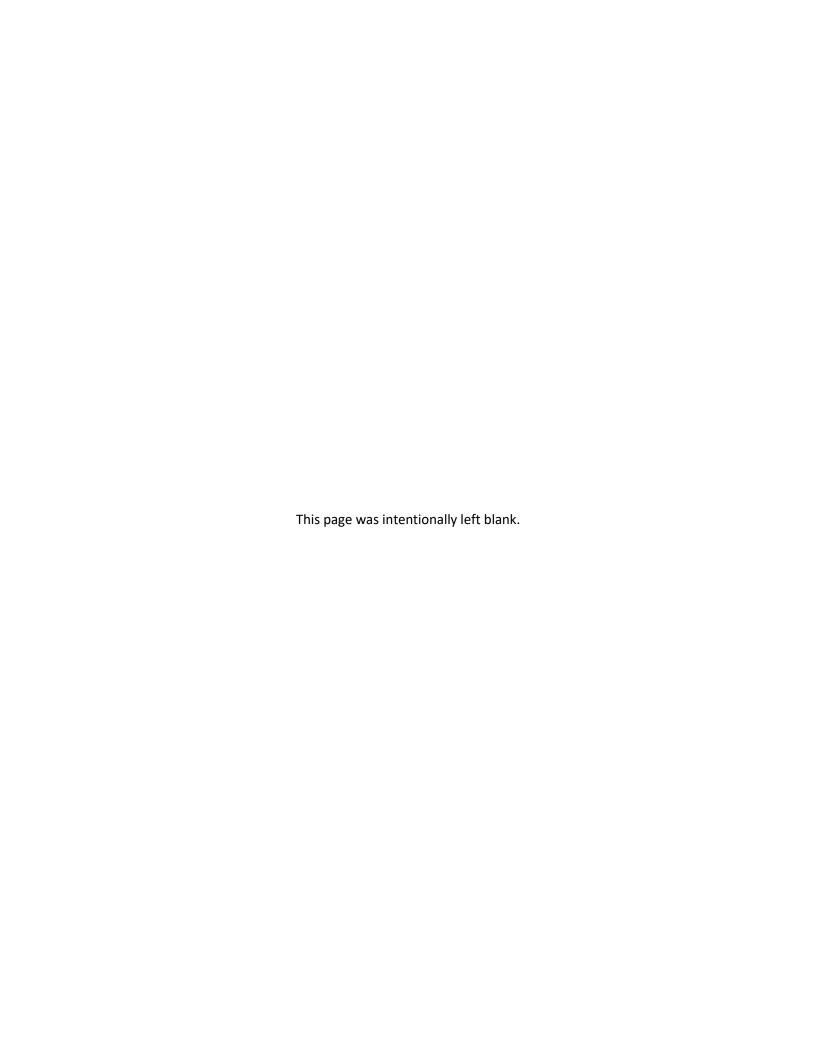
- 7.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security;
 - B. Evidence of authority to do business in the state of the Project; and

ARTICLE 8 – DEFINED TERMS

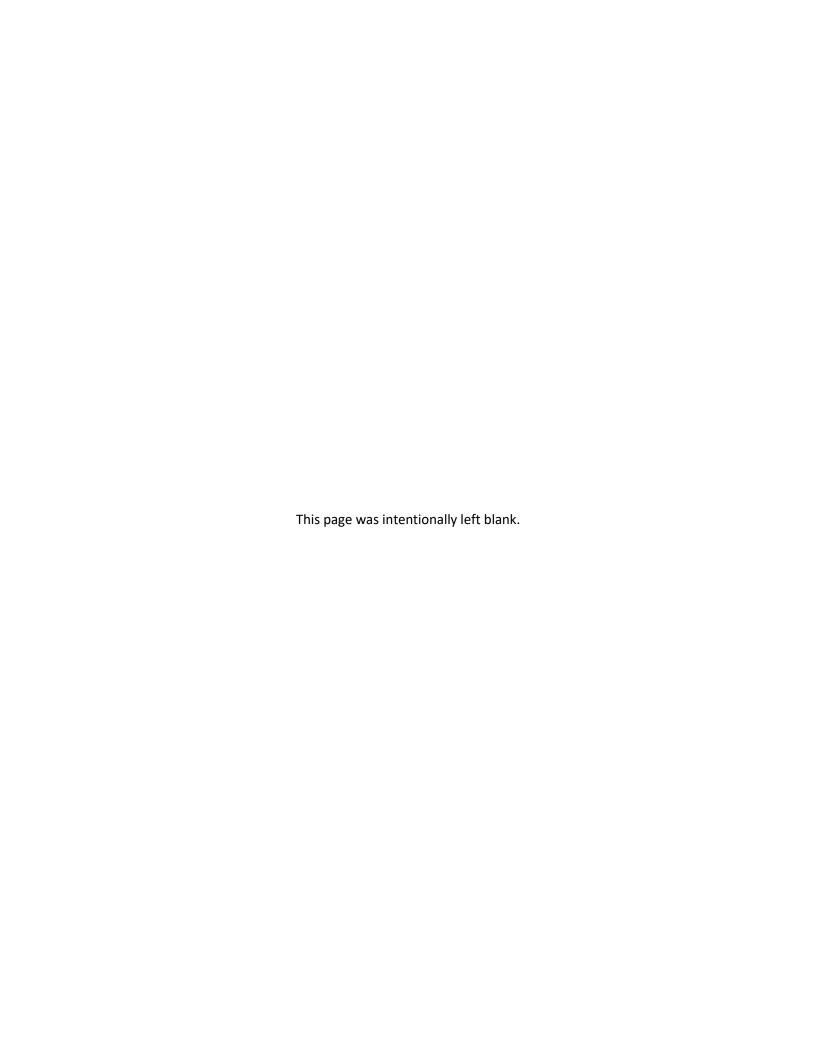
8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: [Indicate correct name of bidding entity]
Ву:
[Signature]
[Printed name]
(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)
Attest:
[Signature]
[Printed name]
Title:
Submittal Date:
Address for giving notices:

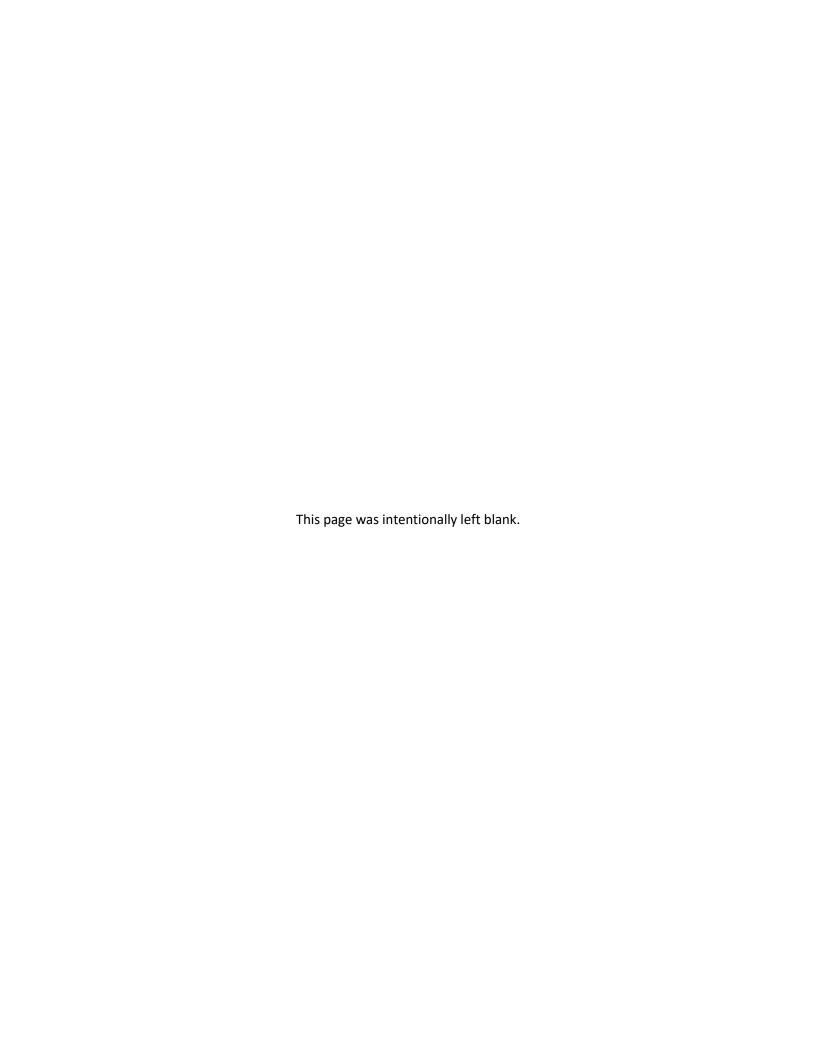


014-7983.001	Ada, Ohio
03/2023	Water Meter Replacement
Telephone Number:	
E. N. ober	
Fax Number:	
Contact Name and e-mail address:	
Bidder's License No.:	
(where applicable)	



PERSONAL PROPERTY TAX AFFIDAVIT

STATE OF OHIO)		
)ss.		
COUNTY OF)		
		, being first duly swo	orn, deposes and says as
follows: answering	whichever is applicable by	placing an "X" before items 1 c	or 2.
1.		narged with any delinquent per sonal property in	
2.	tax list of	ed with delinquent personal pr Cour in the amount of \$	nty, Ohio including unpaid
		Bidder	
		Ву:	
		Title:	
Sworn and subscribe	ed before me this	day of	20
		Notary Public in and for	
			State
		My Commission Expires:	
			20



SECTION 15215 WATER METERS

PART 1 GENERAL

1.01 SCOPE

- A. This Section includes removal, furnishing, installation and testing of water meters as indicated by these specifications or directed by the Owner.
- B. Work includes, but is not limited to:
 - 1. Service shutdown, existing meter removal, new meter installation, pit covers or pit cover alteration, startup and training services.

1.02 SUBMITTALS

- A. Submittals shall be in accordance with the requirements of Section 01300 and shall include:
 - 1. Shop Drawings for review:
 - Manufacturer's assembly drawing and parts list for water meters and required accessories indicating materials of construction and model numbers.
 - b. Manufacturer's recommendations for installation.

1.03 MANUFACTURERS

- A. It is the specific intent of this Section to limit the equipment furnished to a product of a major water meter manufacturer that has substantial experience and expertise in fixed network advanced metering infrastructure (AMI) with an expected accuracy and read rate of at least 98.5% for all meters in the system. Manufacturer is responsible for all system functionality. Meters shall be manufactured by a company with a minimum of ten years experience in the manufacturing of water meters.
- B. All meters, AMI infrastructure, project management, IT support, software, training and annual service and subscription fees and accessories shall be furnished by a single manufacturer who has adequate experience, in the judgment of the Engineer, concerning meters compatible with AMI technology to be furnished under this section.
- C. Meters and associated network infrastructure shall be compatible with Tyler Technologies software for billing.
- D. A single contract will be award for water meters, AMI infrastructure, installation, and system maintenance.
- E. To establish a minimum of quality required, the products furnished under this Section shall be one of the following manufacturers:

- 1. Badger Meter
- 2. Master Meter
- 3. Neptune Technology Group
- 4. Sensus

1.04 QUALITY ASSURANCE

- A. The Bidder shall provide evidence of the following qualifications for the installing contractor with the Bid:
 - 1. The installing contractor shall be certified or licensed by the manufacturer as an installer of the specified products.
 - 2. The installing contractor shall be trained in all aspects of the installation of meters including installation of required accessories and appurtenances, transceivers, and meter program and start-up with the specified software.
 - 3. Owner name, contact information, project name and number of meters installed.
- B. The products specified herein shall comply with the listed ASTM standards and the noted design requirements.
- C. The Contractor may substitute a manufacturer or installation contractor after the accepted bid only with the written approval of the Engineer and Owner.

PART 2 PRODUCTS.

2.01 GENERAL

A. Meter installations consists of existing service line shutoff, removal of existing lid and meter, installation of new meter, register, end points, gaskets, expansion connections, plastic top lids or lid alterations.

2.02 5/8-INCH THROUGH 1-1/2-INCH METERS

- A. Meters 5/8-inches through 1-1/2-inches in size shall be Positive Displacement, Multi-jet, or Ultrasonic type. The base bid cost for Bid Items 2a thru 2e shall be given by the Contractor based on the approved meter models in this paragraph 2.02, B, C and D. It is the intent of the Owner to obtain bids for positive displacement or Multi-jet type meters for these sizes; however if the manufacturer does not furnish a positive displacement or multi-jet type meter, an ultrasonic meter can be bid in its place.
 - 1. Contractor to verify thread diameter prior to installation. 5/8-inch meters are 5/8 x ½, 7.5" laying length. **Addendum 2, August 30,2024**
- B. Positive Displacement (PD) Water Meters

- 1. Water meters shall be provided by and installed by the Contractor. The Contractor shall coordinate the startup of water meters with the Owner's staff.
- 2. Water meters between the sizes 5/8-inches and 1-1/2-inches may be PD water meters
- 3. Water meters shall meet AWWA C-700 size, capacity, lengths, accuracy and pressure loss requirements. The meter shall be compliant with ANSI/NSF Standard 61.
- 4. Positive Displacement water meters shall be Badger M-Series, Neptune T-10 or Sensus Accustream for 5/8 to 1 inch.

C. Multi-jet meters

- 1. Water meters shall be provided by and installed by the Contractor. The Contractor shall coordinate the startup of water meters with the Owner's staff.
- 2. Water meters between the sizes 5/8-inches and 1-1/2-inches may be multi-jet water meters
- 3. Water meters shall meet AWWA C-708 size, capacity, lengths, accuracy and pressure loss requirements. The meter shall be compliant with ANSI/NSF Standard 61.
- 4. Multi-jet water meters shall be Master Meter Bottom Load Multi-jet.

D. Ultrasonic meters

- Ultrasonic water meters shall be provided by and installed by the Contractor.
 The Contractor shall coordinate the startup of water meters with the Owner's staff.
- 2. 1-1/2-inch may be ultrasonic water meters.
- 3. Ultrasonic meters shall meet AWWA C-715 size, capacity, meter lengths, accuracy and pressure loss requirements. The meter shall be compliant with ANSI/NSF Standard 61.
- 4. 1-1/2-inch ultrasonic water meters shall be the Sensus Cordonel.

2.03 ULTRASONIC WATER METERS

- A. Ultrasonic water meters shall be provided by and installed by the Contractor. The Contractor shall coordinate the startup of water meters with the Owner's staff.
- B. Water meters between the sizes of 2-inch and 4-inch shall be ultrasonic water meters.
- C. An alternative bid item will be included for ultrasonic water meters between the sizes of 5/8-inches and 1-1/2-inches. This includes bid items Alt-2a, Alt-2b, Alt-2c, Alt-2d and Alt-2e.
- D. Ultrasonic meters shall meet AWWA C-715 size, capacity, meter lengths, accuracy and pressure loss requirements. The meter shall be compliant with ANSI/NSF Standard 61.

- E. Ultrasonic meters between the sizes of 2-inch to 4-inch shall be Badger E-Series, Neptune Mach 10, Sensus Cordonel or Master Meter Octave for meters.
- F. Ultrasonic meters between the sizes of 5/8-inch to 1-1/2-inch shall be Badger E-Series, Neptune Mach 10, or Master Meter Sonata.

2.04 REGISTER

- A. The registers will vary by manufacturer and meter style but at minimum meet the following requirements in this section. Registers must be an electronic device encapsulated in glass with 9 programmable digits utilizing a liquid crystal display (LCD). The register shall read and transmit flow in cubic feet. It will have indicators for flow direction, empty pipe, battery life and unit of measurement.
- B. The register must be hermetically sealed with a heat tempered glass cover and be tamper resistant.
- C. The electronic register shall have internal data logging data logging through encoder, register or transmitter and Addendum 3, September 5, 2024 capability and alarm status messaging to include reverse flow, tamper detection, empty pipe low or zero flow indication, Addendum 1, August 14, 2024 leak detections, and battery status
- D. The register must be able to read and transmit data every 12 hours at a minimum.
- E. Registers and meters shall be capable of installation in an existing meter pit or inside residence/business.

2.05 PRESSURE CAPABILITY

A. System shall operate up to a working pressure of 150 psi without leakage or damage to any parts and have no effect on the meter's accuracy.

2.06 METER PIT LIDS

A. Existing lids on meter pits consist of cast iron constructed lids. It is the responsibility of the Contractor to replace or alter the existing lids to ensure read rate accuracy of the new meters and AMI system.

2.07 ADVANCED METERING INFRASTRUCTURE (AMI) SYSTEM

- A. The AMI system may utilize either:
 - Radio frequency (RF) system with proper FCC licensing if operating on the applicable frequencies to transmit data to and from MIUs to the system. RF systems should include all base stations, repeaters and all infrastructure required to ensure accuracy and read rates per this specification.
 - 2. Cellular based system to transmit data to and from transceivers to the system to transmit data to and from MIUs to the system.
- B. The AMI system shall have a 98.5% read rate accuracy.

- C. The AMI system shall be able to integrate with Tyler Technologies billing system already in use by the Village.
- D. The AMI system shall consist of
 - 1. Meter Interface Units (MIUs) capable of sending readings for collection every 12 hours at a minimum either to a base station for a RF system or directly to a cellular network with a cellular-based system.
 - 2. Base Station if a RF system is being utilized to collect data from the MIU and send to the Village's web-based platform.
 - 3. All additional infrastructure including software, billing integration, customer portal
- E. When deployed as a fixed network, the System shall provide hourly consumption interval data, time-synchronized at the host meter reading software. The host software shall provide individual account consumption interval data displayed in graphical as well as tabular formats, readily accessible to utility Customer Service Representatives to facilitate customer bill complaint resolution without the need for a truck roll.
- F. When deployed as a fixed network, the System shall provide priority alarm notification of potential leak and/or reverse flow events with user-configurable email or text messages for notification to utility personnel.
- G. When operating as a fixed network, the System shall provide the capability for a demand read initiated from the host software application. The number of demand read requests made over the lifetime of an MIU shall not impact the battery life or warranty.

PART 3 EXECUTION

3.01 INSTALLER REQUIREMENTS

- A. Contractor to implement a call-in program to meter owners and provide door hanger notification tags or direct mailing postcards at a minimum of two weeks before meter is to be replaced. The Contractor is responsible for providing and hanging the notification tags.
- B. Contractor installing the new meters and placing notification tags on private property shall have identification as follows:
 - 1. Vehicle identifying Contractor name
 - Name badge identifying Contractor name

3.02 WARRANTIES

A. The following includes the warranty period for system components starting at the date of substantial completion.

1. Positive Displacement or Multi-jet Meters:

a. General materials and workmanship - 2 yearb. Housings or Main Case - 15 years

c. Registers 20 years (10 years full/ 10 years prorated)
 d. MIUs - 20 years (10 years full/ 10 years prorated)

e. Base Stations 1 year

2. Ultrasonic Meters:

a. General materials and workmanship - 2 yearb. Housings or Main Case - 10 years

c. Registers 10 years (5 years full/ 5 years prorated)d. MIUs - 20 years (10 years full/ 10 years prorated)

e. Base Stations 1 year

3.03 REMOVAL

 The Contractor shall clean and flush the inlet side of the service line thoroughly before installing the new meter. Make sure that metallic water service plumbing is properly grounded as per local electrical codes. Reinstall any grounding wiring that is removed during the removal and installation of the new water meter.
 Addendum 2, August 30, 2024

В.

C. Coordinate with the Village and shut off water supply valves if the shutoff valves in the meter pit are inoperable and remove and disassemble the existing water meter.

3.04 INSTALLATION

- A. The Contractor shall orient the new meter so that the flow arrow on the body of the meter is aligned with the flow in the plumbing system.
- B. The Contractor shall install water meters inside existing meter pits or inside residences as directed by the Village. The installation location will match the existing location. Any required relocations of meters will be performed by the Owner outside of the Work.
- C. After completing installation, the Contractor shall test for leakage and proper meter operation in accordance with the manufacturer's instructions.
- D. For each residence, a photo will be taken of the existing meter in the meter pit or inside the residence prior to removal, a photo taken after the new meter has been installed and a photo taken to show the new meter programed and operating.

3.05 TRAINING AND SUPPORT

- A. Complete installation and operating instructions will be included for all of the supplied hardware and software equipment. The training must be supplied by the System manufacturer. The vendor will also inform the customer of what pre-installation activities are to be completed and what support material will be needed for the initial installation.
 - 1. Equipment vendors are required to supply information on required maintenance programs and should offer a five year maintenance contract Annual Subscription. Addendum 2, August 30, 2024
- B. The vendor shall have a customer support department required to help maintain and support the system through the use of the service agreement.

PART 4 SPECIAL PROVISIONS

4.01 WATER METER SCHEDULE

Water Meter	Quantity
5/8-inch (Pit)	1720
5/8-inch (Inside)	54
¾-inch (Pit)	5
1-inch (Pit)	22
1-inch (Inside)	12
1-1/2-inch (Pit)	9
1-1/2-inch (Inside)	3
2-inch (Pit)	11
2-inch (Inside)	26
3-inch (Inside)	9
4-inch (Inside)	10

Addendum 2, August 30, 2024

END OF SECTION

Ada, OH		014-7983.001
Water Meter Replacement		2024
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