## **ADDENDUM NO. 2**

## ТО

## INVITATION FOR PROPOSALS AND CONTRACT REQUIREMENTS

## FOR THE

## MANCHESTER-BY-THE-SEA DEPARTMENT OF PUBLIC WORKS ADVANCED METER INFRASTRUCTURE (AMI) FY 25 METER REPLACEMENT

WP PROJECT NO. 21897

2/11/2025

**PREPARED BY:** 

WRIGHT-PIERCE

78 BLANCHARD ROAD, SUITE 404 BURLINGTON, MA 01803 978.416.8000 | WRIGHT-PIERCE.COM



## MANCHESTER-BY-THE-SEA DEPARTMENT OF PUBLIC WORKS ADVANCED METER INFRASTRUCTURE (AMI) FY 25 METER REPLACEMENT

## **ADDENDUM NO. 2**

## WP PROJECT NO. 21897

As a point of clarification, it should be understood that the Contract Documents govern all aspects of the project. Discussions held over phone or email are informal and informational only. All official changes to the Contract Documents are made only by addenda. The following changes and additional information are hereby made a part of the Contract Documents:

## CHANGES TO THE INVITATION FOR PROPOSALS

## <u>Appendix A – Scope Of Services</u>

#### **Section 2 Paragraph D - Performance**

Delete the words "or AWWA C700-20 (for displacement type mechanical meters, metal alloy main case)" from page 16 section D as shown in strikethrough below:

Meter manufacturer's solid-state meters shall meet or exceed AWWA C715-18 (for ultrasonic meters)-or AWWA C700-20 (for displacement type mechanical meters, metal alloy main case) accuracy standards and warranty their published accuracy levels for the life of their meters. All meters shall have a minimum certified 99% accuracy at a minimum flow rate of 0.2 gpm to 25 gpm. This accuracy shall be guaranteed for 10 years regardless of volume of flow passing through meter and there shall be no exclusions in this warranty for water quality. The meter shall have a starting flow reading of 0.015 gpm.

## Appendix C – Technical Specifications

1. Section 1.0 General Scope for Cold Water Meters 5/8-inch to 1-inch Specifications Delete the words "AWWA Standard C-700 or" from page 22 section 1.0 as shown in strikethrough below:

Except as otherwise modified or supplemented herein, the latest revision of AWWA Standard C-700 or AWWA Standard C-715 for Cold Water Meters shall govern the materials, design, manufacture, and testing of all meters furnished under this specification or equal as approved by the Town.

**2.** Section 1.0 General Scope for Cold Water Meters 1.5-inch to 2-inch Specifications Delete "AWWA Standard C-702 or" from page 23 section 1.0 as shown in strikethrough below:

Except as otherwise modified or supplemented herein, the latest revision of <del>AWWA Standard C-702 or</del> AWWA Standard C-715 for Cold Water Meters shall govern the materials, design, manufacture, and testing of all meters furnished under this specification or equal as approved by the Town.

## Appendix D – Selection Criteria

## **Criteria 8 Minimum Evaluation Criteria**

Delete "AWWA Standard C-700, C-702, or" from page 26 criteria 8 as shown in strikethrough below:

The proposed meter will have a guarantee to meet the latest revision of AWWA Standard C-700, C-702, or AWWA Standard C-715 for Cold Water Meters and a meter accuracy requirement for at least 10 years.

## <u> Appendix G – Form for General Proposal</u>

Delete Appendix G on pages 46 to 49 in its entirety and replace with the updated Appendix G beginning on page 6 of this Addendum.

## Appendix H – Measurement and Payment

Delete Appendix H on pages 50 to 53 in its entirety and replace with the updated Appendix H beginning on page 12 of this Addendum.

## **QUESTIONS AND ANSWERS**

Questions from the Proposers received by Email:

1. *Q:* Does the town have a preference on which meter type they would like for the different sizes? i.e. ultrasonic vs positive displacement? If the proposer offers both options, would they like pricing on both options?

A: The Town will only be accepting proposals for AMI Ultrasonic Water Metering Technology, based on the recommendation from the Water Resource Protection Task Force that was commissioned by Manchester's Select Board.

2. *Q*: Does the town prefer a metal water meter or a polymer (plastic) water meter?

A: The Town does not have a preference but understands that metal might be required especially in the larger meter sizes.

3. *Q:* Does the town prefer the MIU mounted on the exterior of the buildings/houses or inside?

A: The Town's preference is indoor but outdoor is also acceptable. The Town's goal is a cost effective system that includes 100% coverage of their system.

4. *Q*: Is there a specific wire length requirement coming out of the meter? (i.e. 10ft, 25ft, etc?)

A: Assume 10 ft for indoor installations and assume 25 ft for outdoor installations.

5. *Q:* For section C. The PROPOSAL FORM - if the proposer is proposing a Cellular AMI Solution, what item number should the cellular communication charge be included in?

A: WP has submitted a revised bid form and measurement and payment in this addendum to resolve.

6. *Q:* For the LCCA, what assumptions should be made for the AMI Meter/MIU Maintenance Cost \* (Lump Sum)? i.e. is there a failure rate we should assume for meters and MIU's that will have to be replaced?

A: Proposers shall state any, and all assumptions made in the LCCA in the spaces provided in the revised Appendix G section. Failure rates should be based off proprietary information from previous installations. If failure rates exceed assumptions additional costs shall be borne by the vendor and be included under the AMI meter/MIU maintenance cost section of the LCCA.

7. *Q:* Regarding the Customer Portal, if this is not part of the AMI System, where should that cost be included on the price proposal form?

A: WP has submitted a revised bid form and measurement and payment in this addendum to resolve.

8. *Q*: Are the 5/8" meters, 5/8"x1/2" or 5/8"x3/4"?

A: Assume all 5/8" meters are 5/8"x3/4".

9. *Q*: Are the 3/4" meters, 3/4"x9" or 3/4"x7.5"?

A: Assume all 3/4" meters have a lay length of 9". Costs for the 3/4"x9" meter will be held at the proposed rate if a smaller size (3/4"x7.5") is required for installation.

10. *Q*: How should the IFP be submitted? Print, flash drive, or electronically? Please clarify.

A: Proposals can be submitted via print as stated in INSTRUCTION TO PROPOSERS Article 4 of the IFP. One original and one hard copy shall be submitted along with a USB digital copy. All proposals shall be submitted in a sealed, opaque envelope. 11. *Q: In section III Proposing Procedure: it states the "reference form" is attached, where is this form?* 

A: WP has submitted a revised Appendix G in this addendum to resolve.

12. *Q*: Does the contractor certification form need to be filled out and submitted with the IFP?

A: Yes, Proposers (Contractor) will need to complete the Proposal Qualification Form located in Appendix F and submit to be considered for this IFP.

13. *Q:* In one section you show flow rate minimums that exceed the capabilities of mechanical meters but in the approved meters it shows two mechanical meter specs (C700 and C702). Please clarify.

A: This addendum clarifies the Town will only be accepting bids for ultrasonic meters. All AMI Meters must meet the minimum low flow requirements and meter accuracy requirements and AWWA Standard C-715 for Cold Water Meters.

14. *Q:* Section *D* (additional requirements) contradicts specification of the required meters. *Please clarify.* 

A: This addendum clarifies the Town's expectations for AMI water meter proposals

15. *Q:* In order to perform a propagation study could we be provided with the Manchester owned infrastructure with locations and heights?

A: The tank inspection report for the Moses Hill Standpipe has been included as an attachment in this addendum and details its location and height.

16. *Q:* In order to perform a propagation study could we be provided with a service area boundary map of MBTS?

A: A service area boundary map has been included as an attachment to this addendum.

## <u>APPENDIX G</u> FORM FOR GENERAL BID

## TO THE AWARDING AUTHORITY:

A. The undersigned proposes to furnish all labor, materials, equipment, and supervision required for the

Advanced Meter Infrastructure (AMI) FY 25 Meter Replacement in Manchester-bythe-Sea, Massachusetts for the itemized pricing specified below, subject to additions and deductions according to the terms of the specifications.

B. This bid includes addenda number(s) \_\_\_, \_\_\_, \_\_\_,

C. The proposed BID FORM is:

Item Number	Description**	Estimated Quantity	Unit	Unit Price	Proposal Price	Proposal Price in Words
1	Host Software & AMI Collection Unit	1	LS			
2	Project Management	1	LS			
3a	AMI System interface to billing system; installation and set-up	1	LS			
3b	Customer portal software set- up and training	1	LS			
4	Customer portal annual service and fees*	1	LS			
5	Communication annual service and fees*	1	LS			
6	Support Services*	1	LS			
7	Training Services*	1	LS			
8	Documentation	1	LS			
9a	5/8" Meter and MIU***	1,358	EA			
9b	3/4" Meter and MIU	652	EA			
9c	1" Meter and MIU	513	EA			
9d	1 1/2" Meter and MIU	68	EA			
9e	2" Meter and MIU	54	EA			
10	Recommended equipment or services	1	LS			
			T	otal Proposal		

\*The price submitted will be guaranteed cost for year 1. The following years 2-10 will need guaranteed cost documented in the Life-cycle cost analysis in the next section. \*\*Descriptions are defined in Appendix H

\*\*\*Estimated meter size quantities for the purposes of responding to this RFP. Final meter size quantities and pricing will be based on the final amount of meters delivered and accepted by the Town.

TOTAL Dollars in Figures (\$\_\_\_\_\_)

TOTAL Dollars in Words \_\_\_\_\_

The undersigned has completed and submits herewith the following documents:

- 1. Signed Bid Form, 2 pages
- 2. Signed Certifications, 1-page
- 3. Authority to Sign, 1-page

The undersigned agrees that, if s/he is selected as general contractor, s/he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the awarding authority, execute a contract in accordance with the terms of this bid and furnish the required insurance certificates.

(Name of General Bidder)	
(Authorized Signature)	
(Printed Name and Title of Signatory)	
(Business Address) (CORPORATE SEAL)	
(Town, State, Zip)	
(E-mail address)	
(Telephone/Fax)	
(Federal Tax I.D. #)	
(Date)	

**NOTE:** If the bidder is a corporation, indicate state of incorporation under signature, and affix corporate seal; if a partnership, give full names and residential addresses of all partners; and if an individual, give residential address if different from business address.

# Item 11: Annual Operating and Maintenance Cost for Use In Conducting Life-Cycle Cost Analysis

Year	Customer/Client Portal Software Support, Maintenance and License Fees* (Lump Sum)	Fixed/Cellular Data Collector Maintenance and License Fees* (Lump Sum)	Fixed/Cellular Data Collector Backhaul Communication Costs* (Lump Sum)	AMI Meter/MIU Maintenance Cost* (Lump Sum)	Subtotal Annual Cost**
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
Total					

Annual costs and fees should include a 3% cost escalation factor unless being fixed and/or waived as part of this proposal.

The proposer shall provide the estimated annual power/energy usage for the fixed or cellular data collection system. The energy costs will be calculated based on a cost of \$0.40/KW using a 3% cost escalator for the 20-year period of the life cycle cost analysis.

Annual Estimated power/energy usage = KW

\*Years 1-10 are guaranteed cost. Years 11-20 are estimated costs. If submitted costs for years 11-20 will be guaranteed, please specify this.

A life cycle cost analysis shall be provided with clearly defined operating costs and verifiable evidence set at a fixed rate over 20 years. The operating cost shall have all incidental costs and fees including but not limited to hosting fees, cellular communication fees, customer portal fees, software maintenance and licensing, AMI meter and MIU components maintenance and replacement, collector maintenance and replacement, and communication fees.

\*\* Summation of the entire row

**NOTE:** Any assumptions made by the proposer for years 11-20 in the life-cycle-cost-analysis shall be clearly stated in the space provided below.

## **REFERENCE FORM**

Bidde	r:	
Customer References (from last 5 years):		
1.	Name:	
	Phone:	
	Address:	
	Email: :	
	Business Relationship: :	
2.	Name:	
	Phone:	
	Address:	
	Email: :	
	Business Relationship: :	
3.	Name:	
	Phone:	
	Address:	
	Email: :	
	Business Relationship: :	

## <u>APPENDIX H</u> MEASUREMENT AND PAYMENT

## A. Host Software & AMI Collection Unit (Proposal Item 1)

- A. Method of Measurement: Host Software and AMI Collection Unit shall be measured on a lump sum basis.
- B. Basis of Payment: The AMI system reading equipment hardware must be user friendly, simple to use, and provide detailed information. The AMI System must allow Town staff to easily manipulate the customer database to allow for changes in the customer information. The AMI data collection unit shall be sited, furnished, and installed by the Proposer, inclusive of an FCC license if needed.

The AMI meter reading software should be aesthetically pleasing, simple for users to navigate, and be capable of storing the utilities customer database. The meter reading software shall have at least two licenses for access concurrently. The software shall easily interface with the current billing system (CUSI).

The Proposer shall manage the data, and back-office operations, including but not limited to data backups, software upgrades, and installation of software patches after system start-up. The host server shall be accessible by the Town with a secure utility or customer log in and password to view the system data from any web enabled device. The Proposer shall update the AMI software upon release of new updates by the manufacturer. The Proposer shall validate proper installation of the upgrade and the integration into the Town's billing system. The Proposer shall provide separate on-site training for Town staff at no additional cost to the Town within 15 days of any significant upgrades on the operation of the software. The Proposer shall provide unlimited on-line and telephone support to address any questions or issues in the use of the software. The Proposer shall coordinate costs for data hosting for the first full year following acceptance shall be included in this agreement. Costs for data hosting over subsequent years will be paid for under a separate agreement.

Proposer shall include a ten (10) year full replacement warranty on all equipment, software and labor on the AMI system provided that shall be in effect following commission and acceptance of the entire system including MIU's.

## **B. Project Management (Proposal Item 2)**

- A. Method of Measurement: Project Management shall be measured on a lump sum basis.
- B. Basis of Payment: The Proposer shall provide project management for their scope of work. The project manager shall be required to coordinate activities with the Town and its Independent Installation Contractor. The Proposer's project manager will function as a part of the overall program management team led by the Town. The Proposer shall provide as part of the technical proposal its proposed statement of project management responsibility including scheduling project activities, coordinating activities, tracking progress, and reporting to the Town. Project

management and technical services shall include, but are not limited to the following:

- i Arrange and oversee installation of network control software.
- ii Coordinate with the Town and representatives from the Town's existing billing system and information system to execute required interfaces.
- iii Analyze AMI system performance during implementation to ensure testing and acceptance criteria are met.
- iv Participate in meetings with the Town and its designated representatives during project implementation by the Town's Independent Installation Contractor.
- v Coordinate FCC licensing, if required.

The Proposer shall submit a draft Project Implementation Plan with their technical proposal. The Project Implementation Plan should detail the following items, at a minimum:

- i Project team
- ii Project approach
- iii AMI software installation and configuration
- iv Plan and approach for interface with billing system
- v System testing
- vi Training, and
- vii Equipment manufacturing/product lead times.

## C. AMI System Interface to Billing System; Installation and Set-up (Proposal Item 3a)

- A. Method of Measurement (3a): AMI System Interface to Billing System installation and set up shall be measured on a lump sum basis.
- B. Basis of Payment: The Proposer shall provide services and facilitate the Town for the integration and set-up of the AMI system with the Town's billing system CUSI. The integration and set-up will provide the Town and Customers the ability to view each customer's up-to-date account balance, water bill, and billing history. The integration and set-up will provide the Customer with the ability to sign up for bill alerts including when a bill is available, due, or overdue. The system will provide the Customer with the ability make payments towards account balances.

Testing will be conducted on the installed system by reading the meters with the AMI system, downloading the reading data into the Town's workstations, and manipulating the data as would be used during normal operations by the Town. During testing, if a meter fails to be read, errors are communicated, or other questionable actions occur, the Proposer shall work with the Town, Town's representatives, and meter installation contractor to determine the cause. If the equipment furnished by the Proposer is found to be faulty, the Proposer shall replace and install the equipment at no cost to the Town.

The following criteria will be **<u>demonstrated</u>** by the Proposer to assure the equipment functions as specified:

- i Activation and functionality of radio collectors or cellular equipment.
- ii That accounts are recognized in ready state.
- iii Account data reading between the AMI network, customer portal, and customers CUSI.
- iv Average of 99% success rate for delivery of daily reads for network.
- v System can recover missed interval profile data.
- vi Time accuracy is synchronized to within 5 seconds across the entire network.
- vii Town personnel training in retro-fitting nodes and/or installation of hardware. viii Verify accurate bills.
- ix Leak, high-use and tamper alarms and functionality.
- x Submit and receive acceptance of operating manuals.

## D. Customer Portal Software Set-up and Training (Proposal Item 3b)

- A. Method of Measurement (3b): Customer portal software setup and training shall be measured on a lump sum basis.
- B. Basis of Payment: The Proposer shall demonstrate the functionality of the customer portal supplied, working closely with the Town during implementation and all other incidental set-up for the customer portal and client dashboard requirements. The customer portal set up, training, and first year implementation costs should be clearly documented in the bid form. The customer portal software for the following 2-10 years will need to have guaranteed costs documented in the LCCA. The customer portal shall be available through a web browser at a minimum. The addition of IOS Android device application is preferred. Daily water usage records shall be provided to customers within 24 hours of reads.

## E. Customer Portal Annual Services and Fees (Proposal Item 4)

- A. Method of Measurement: Customer Portal shall be measured on a lump sum basis.
- B. Basis of Payment: Proposer shall provide and maintain a functioning customer portal for Town customers available through a web browser at a minimum.

## F. Communication Annual Services and Fees (Proposal Item 5)

- A. Method of Measurement: Communication Services shall be measured as the actual number of years' service will be delivered and guaranteed
- B. Basis of Payment: Proposer shall provide AMI communication services that allow the proposed AMI data collection method to communicate with residential meter data.

## **G.** Support Services (Proposal Item 6)

- A. Method of Measurement: Support Services shall be measured on a lump sum basis.
- B. Basis of Payment: The Proposer shall provide both telephone and onsite support services for one year from the final delivery of water meter and MIUs. For telephone support, the Proposer shall provide trained persons to answer technical questions and guide Town employees through the use or diagnosis of the system through a toll-free number. Telephone support shall be available at a minimum from 8:00 a.m. through

6:00 p.m. Eastern time. Indicate telephone support hours proposed and response time expected. For On-site support and additional training, The Town requires that a manufacturer representative visit the appropriate utility personnel on no less than a quarterly basis to provide service and support for the life of the system.

The successful Proposer shall provide to the Town on-call assistance services for a period of ten (10) years following the delivery of the equipment. The Proposer shall have a factory trained system specialist on staff and located with-in two hours travel time of the Town or have a network operations center which continuously monitors system performance staffed by network specialists. The proposer shall provide a toll-free telephone help desk with availability between the hours of 8:00 a.m. and 6:00 p.m., Eastern Time, with afterhours telephone numbers available as needed for Town staff and customer support. The help desk services shall include: mobile software operations problems/questions; equipment returns and repairs; loaner equipment processing; evaluation of information for updates or revisions; evaluation of personnel training needs.

The help desk must maintain a minimum four (4) hour acknowledgement of issue, with a twenty-four (24) hour maximum resolution time on all issues. Latitude for programming issues will be given on an issue-by-issue basis and shall be resolved within a reasonable time not to exceed (1) week. However, the successful Proposer must present a reasonable alternative to utilize within the twenty-four (24) hour time, during the extended resolution period. This requirement is for the initial contract period and future maintenance agreements.

For warranty-related problems, loaner equipment shall be provided to the Town while the failed equipment is repaired or replaced by the Successful Proposer. Loaner equipment must be delivered overnight, at no cost to the Town.

All hardware or software upgrades shall be provided free of charge during the oneyear-long period after system acceptance.

Additional on-site training shall also be available for an additional daily fee if necessary.

## H. Training Services (Proposal Item 7)

- A. Method of Measurement: Training Services shall be measured on a lump sum basis.
- B. Basis of Payment: Proposal shall provide separate training at Town's offices. Training shall be completed in a minimum of four (2) sessions of 4 hours (maximum) and accommodate up to 12 total attendees. The Town reserves the right to videotape all training sessions. Training must cover (at a minimum) the following items:
  - i installation,
  - ii trouble shooting,
  - iii configuration,
  - iv billing system integration,

- v software functionality and reporting, Mobile error coding, and
- vi uploading / downloading data from the data collection units from the AMI system software.

## I. Documentation (Proposal Item 8)

- A. Method of Measurement: Documentation shall be measured on a lump sum basis.
- B. Basis of Payment: Proposer must provide Town with all documentation needed to install, operate, and maintain the AMI system and all components. Documentation must serve both for training and reference and must be kept up to date with any system or software upgrades or corrections. Complete customized documentation shall be provided in paper and electronic versions.

## J. Water Meter and MIU Various Sizes (Proposal Items 9a through 9e)

- A. Method of Measurement: Documentation shall be measured as the actual number of water meters delivered and installed.
- B. Basis of Payment: Proposer shall delivery the Town water meters and MIUs of the corresponding sizes and quantities as noted in the bid form. Meter shall meet the quality standards as identified throughout the IFP.

#### K. Recommended Equipment or Services (Proposal Item 10)

- A. Method of Measurement: Recommended Equipment and Services shall be measured on a lump sum basis.
- B. Basis of Payment: Any additional equipment or products that the Proposer suggests is beneficial to the Town may be recommended for implementation. This includes any additional equipment, meter modifications, services, or AMI devices that are not being proposal as part of the base proposal form.

## L. Life Cycle Cost Analysis (Proposal Item 11)

- A. Method of Measurement: Life Cycle Cost Analysis shall be measured as the actual number of years' service will be delivered and guaranteed.
- B. Basis of Payment: The Life Cycle Cost Analysis shall account for guaranteed pricing to be held for years 1-10 for all proposed items. Pricing for years 11-20 shall be estimated with any and all assumptions used noted in the spaces provided. The total cost for the Life Cycle Cost Analysis shall be ranked under Item 5 of the Comparative Evaluation Criteria.

## END OF ADDENDUM NO. 2

Attachments Follow: Moses Hill Standpipe Inspection Report Service Area Map



Phone: 877.821.6138 | office@underwatersolutionsinc.com Your National Water Infrastructure Specialists

Report Date: 1/30/2023



#### EXTERIOR PERIMETER OF TANK

Is this structure located within a guarded facility? No

GUARDED FACILITY DETAILS		
Does this structure have a fence that spans its circumference?	Yes	
What is the height of the fence? (In Inches)	80	
Does this fence have barbed wire?	No	
What is the overall condition of the fence?	Fair	
Are they any deficiencies throughout the fence?	Yes	
Explain deficiencies	Sections missing	
Are there any signs of forced entry / vandalism?	Yes - Graffiti on vent/roof surfaces	
Is access gate functional and secured with a lock?	Yes	



#### EXTERIOR WALL/SHELL

Mildew

#### EXTERIOR WALL AESTHETICS

NORTH WALL

Aesthetics

