MEMO 25-23

TO:

Frank Schulte, City Administrator

FROM:

James Kowalski, Director of Public Services

DATE:

July 15, 2025

SUBJECT:

Water Meter Reader Replacement Final Phase

The Department of Public Works has been working with Badger Meter, Inc. to replace all water meter reading devices (meter heads and transponders) throughout the city's residential home and commercial accounts. The current system is outdated and no longer will be supported in the next couple of years. The new readers are cellular and will not have to use repeater antennas, that are obsolete as well.

On June 16, 2025, Council approved the first phase of this project to begin purchasing the inventory of the transponders at a cost of \$500,000.00.

Therefore, I am recommending that Council approve the purchase of the remaining inventory from Badger Meter, Inc., 4545 W. Brown Deer Road, P.O. Box 245036, Milwaukee, WI 53224 in the amount of \$961,549.88.

Badger Meter, Inc. recommended using Utility Metering Solutions, LLC to install all the new water meter reading devices, their proposal is attached. I further recommend installation of the equipment be done by Utility Metering Solutions, LLC, 211 W Thomas St., Hammond, LA 70401 in the amount of \$816,565.12.

The total project will not exceed \$2,278,115.00.

This is a budgeted item included in 2025/2026 fiscal year budget available in the Water/Sewer Equipment/Meters account no. 592-537-977.100 in the amount of \$1,751,444.00. Due to adding recycling of the batteries and plastic from the transponders, the additional funds require a budget amendment and transfer from account no. 592-000-692.000, Transfer from prior year Reserve Fund Balance into the Water/Sewer Equipment/Meters account no. 592-537-977.100 in the amount of \$26,671.00.

If you have any questions concerning this matter please contact me.

I do not believe any benefit will accrue to the City by seeking further bids. Approved for Council consideration.

Frank Schulte, City Administrator

Data

Fund Certification:

Account numbers and amounts have been verified as presented.

Steven Schmidt, Treasurer/Comptroller

Date

Grosse Pointe Woods Cost Comparisons

1 Year Deployment					
Material	Price	Price		Total Cost	
Cell Endpoint	\$	140.98	6874	\$ 969,096.52	
HR-E Encoder	\$	71.64	6874	\$ 492,453.36	
Total				\$ 1,461,549.88	

EXHIBIT A

SCOPE OF WORK

A. PRE – DEPLOYMENT SERVICES

[SETUP_1] PROJECT INITIATION AND SETUP

- A.1 SERVICE PROVIDER will launch the project with a kickoff meeting, including all assigned SERVICE PROVIDER staff, [CLIENT]'s stakeholders, and project steering committee members. During this meeting, UMS will review the project scope, timeline, communications plan, and housekeeping items.
- A.2 SERVICE PROVIDER will create the Master Project Plan, covering required readiness and deployment activities.
- A.3 SERVICE PROVIDER will create an Issue Log to identify, document, and resolve issues quickly to minimize impacts to the project.

A.4 SERVICE PROVIDER Deliverables:

A.4.1 Master Project Plan including:

A.4.1.1	Project organizational chart
A.4.1.2	Communication procedures
A.4.1.3	High-level Project schedule, including phasing and key milestones.
A.4.1.4	Quality assurance
A.4.1.5	Invoicing procedures
A.4.1.6	Issue Log

A.5 CLIENT Responsibilities:

A.5.1.1	Assign a single resource as the primary contact for the project.
A.5.1.2	Provide data requested by UMS promptly.
A.5.1.3	Attending the initiation phase kickoff meeting and regularly
	scheduled weekly meetings during the project.

A.6 Acceptance Criteria for SERVICE PROVIDER Deliverables:

A.6.1.1 Acceptance and implementation of the Master Project Plan

B. PROJECT MANAGEMENT SERVICES

[P.MGMT_2] MMCO INTERFACE SETUP AND CONFIGURATION

- B.1 SERVICE PROVIDER will initialize, configure, and test the Xchange Meter Information System ("WOMS") application.
- B.2 SERVICE PROVIDER will perform an initial data upload of the Customer-approved CIS meter and account data.
- B.3 SERVICE PROVIDER will develop and execute test cases to exercise the functions and scenarios supported by the work order interface between the CIS and Xchange.
- B.4 SERVICE PROVIDER will complete integration development between SERVICE PROVIDER's WOMS (Xchange) and CIS.
- B.5 SERVICE PROVIDER to provide on-demand access to the MIS (Xchange) portal (dashboard and installation-specific data) for installations completed through the previous day, including Account Details, Installation Photos, Substantial Completion Report, Production Summary, and Detail Reports, Issues Report, and Punch List Report.
- B.6 SERVICE PROVIDER to provide training to CLIENT staff of the SERVICE PROVIDER Xchange functions, including access and navigation of the Xchange WOMS, searching for meter exchanges, reviewing completed meter exchange data and pictures, reporting, and data exports.

B.7 SERVICE PROVIDER Deliverables:

- B.7.1 Completed installation data and pictures, accessible via the web-based portal.
- B.7.2 On-demand installation (field production) report.

B.8 CLIENT Responsibilities:

- B.8.1 Provide SERVICE PROVIDER with current CIS meter and accurate account data
- B.8.2 Notify CIS vendor that SERVICE PROVIDER is an authorized agent to establish a mass meter change-out interface.

B.9 Acceptance Criteria for SERVICE PROVIDER Deliverables:

- B.9.1 Access to completed meter installation data and pictures.
- B.9.2 Access to on-demand installation reports.

[P.MGMT_3] PROJECT MANAGEMENT

- B.10 SERVICE PROVIDER will communicate project status and issues to all designated CLIENT team members.
- B.11 SERVICE PROVIDER will create and maintain an Issue Log to identify, document, and resolve issues quickly to minimize impacts to the project.
- **B.12 SERVICE PROVIDER Deliverables:**
 - B.12.1 Project Milestone Timeline
 - B.12.2 Installation Schedule
 - B.12.3 Change Requests, as required.

B.13 CLIENT Responsibilities:

- B.13.1 CLIENT will designate appropriate personnel to participate and with authority to make decisions.
- B.13.2 CLIENT will comply with stakeholder responsibilities as defined in the Project Installation Plan.

CLIENT will communicate concerns and issues to the appropriate parties in a prompt manner.

C. DEPLOYMENT SERVICES

[DEPLOYMENT 4] APPOINTMENT SCHEDULING

- C.1 SERVICE PROVIDER to create and maintain an online scheduling portal, available 24x7, for the CLIENT's residential customers to self-schedule an inside meter installation appointment.
- C.2 SERVICE PROVIDER will provide strategic guidance and templates for the CLIENT to utilize for the project.
- C.3 SERVICE PROVIDER will develop, print, and provide the required door hangers customized for this project

- C.4 SERVICE PROVIDER to staff an Appointment Call Center with standard hours of operation (Monday-Friday 8 AM-6 PM (Eastern) and Saturday 9 AM-3 PM (Eastern)) for the CLIENT's customers to obtain assistance in making an appointment for an inside meter installation, with English and Spanish-speaking customer service representatives.
- C.5 SERVICE PROVIDER to collaborate with CLIENT to develop an installation route plan and Black-Out calendar to facilitate appropriate appointment scheduling.
- C.6 SERVICE PROVIDER will send scheduling letters by the open routes. If no response, SERVICE PROVIDER will cold call as well as canvass to attempt to obtain an installation appointment with a 2nd attempt door hanger, a 3rd attempt door hanger. When unsuccessful, the CLIENT will receive the returned account as an "Assist."
- C.7 SERVICE PROVIDER Deliverables:
 - C.7.1 Project Online scheduling portal.
 - C.7.2 Route installation plan and Black-Out schedule.
 - C.7.3 Print ready toolkit to include:
 - C.7.4 Door hangers
 - C.7.5 Inside Meter Scheduling Letter
 - C.7.6 Inside Meter Scheduling 2nd and 3rd Attempt Door Hangers

C.8 CLIENT Responsibilities:

- C.8.1 CLIENT will support SERVICE PROVIDER in the development of a scheduling/installation Black-Out calendar.
- C.9 Acceptance Criteria for SERVICE PROVIDER Deliverables:
 - C.9.1 Access to schedule an appointment on the online scheduling portal.
 - C.9.2 CLIENT will review and provide feedback on the door hangers

[DEPLOYMENT _5] MOBILIZATION_FIELD CREW

- C.10 SERVICE PROVIDER will staff an onsite field services manager to oversee meter installations, field safety, quality, and field technician resources throughout the installation phase.
- C.11 SERVICE PROVIDER will work with the CLIENT to develop the installation ramp-up plan to ensure all advanced meter system components are operational.
- C.12 SERVICE PROVIDER to mobilize competent installation personnel to complete the required field meter change-outs and retrofits in a safe, timely, and quality manner. SERVICE PROVIDER will complete project-specific training for the installation crew.

C.13 SERVICE PROVIDER Deliverables:

C.13.1 Onsite field management and the installation crew(s) adequately screened (drug and background), qualified, and trained.

[DEPLOYMENT_6-10] RETROFIT METER (REGISTER & ENDPOINT)

- C.14 SERVICE PROVIDER will collaborate with the CLIENT to develop a retrofit route plan and Black-Out calendar to facilitate meter retrofit outside of the CLIENT's meter reading and billing window.
- C.15 SERVICE PROVIDER will manage meter endpoint retrofits and the collection of meter exchange data electronically.
- C.16 SERVICE PROVIDER will monitor field staff for compliance with all safety and standard operating procedures (SOP), including but not limited to: OSHA/safety requirements, PPE, quality, equipment handling, retrofit best practices, customer interaction, vehicle signage, and data collection.
- C.17 SERVICE PROVIDER to staff a 24x7 emergency service call center to address any postretrofit customer questions.
- C.18 CLIENT to supply meter endpoints, and all required hardware for meter retrofits.
- C.19 SERVICE PROVIDER shall collect as found photos including meter area, meter before transmitter exchange, old transmitter serial number, and photos of new installation.
- C.20 SERVICE PROVIDER will request that the (inside set residential) customer sign a form stating that the work has been completed with no property damage, that the retrofit area has been left clean, and that the customer will periodically check for leaks around the meter for at least three days. SERVICE PROVIDER will be responsible for remedying any plumbing issue caused by the SERVICE PROVIDER's negligence during the meter retrofit.
- C.21 SERVICE PROVIDER must be able to access the meter. SERVICE PROVIDER shall assess a fee at the Service Attempt Charge for any meters that are inaccessible at the scheduled appointment time that requires the SERVICE PROVIDER to return to the location.
- C.22 SERVICE PROVIDER expects to complete all required installation work in a single visit.

 If the SERVICE PROVIDER attempts an installation and the service connection requires

- a revisit due to necessary work outside the SERVICE PROVIDER's scope of work, the SERVICE PROVIDER shall provide applicable Rehabilitation Work.
- C.23 SERVICE PROVIDER believes transmitter installation will involve the complete exchange of existing transmitter and encoder with new encoder register and endpoints.
- C.24 SERVICE PROVIDER will restore meter surroundings to pre-installation condition and shall leave no meter location in an unsafe condition.
- C.25 SERVICE PROVIDER shall obtain and validate endpoint configurations meet established CLIENT requirements.
- C.26 SERVICE PROVIDER shall ensure installers are properly trained and have required equipment to configure and activate endpoints.
- C.27 SERVICE PROVIDER shall install, configure, and activate endpoint to ensure network communication is established and operating. If the network communication is unreliable, the SERVICE PROVIDER shall work with the Manufacturer to resolve the root cause of the issue.
- C.28 SERVICE PROVIDER shall submit to CLIENT a list of meter installations that have achieved three (3) consecutive days of communicating billable reads after installation.
- C.29 SERVICE PROVIDER shall troubleshoot those endpoints requested by CLIENT have achieved account signoff status and subsequently failed to communicate during the installation Warranty Period. Beyond the installation Warranty Period, troubleshooting shall be performed at the Rehabilitation Rate. Accordingly, when the SERVICE PROVIDER responds to a troubleshooting issue, the SERVICE PROVIDER will track its time. If it is a warranty issue, the SERVICE PROVIDER shall resolve the issue at no additional charge. If it is not a warranty issue, the SERVICE PROVIDER shall document the issue and provide the applicable Rehabilitation Work.
- C.30 SERVICE PROVIDER to develop with CLIENT a list of items requiring client support to enable meter endpoint retrofit (i.e., can't access the meter, customer refusal, missed appointment, Inoperable Value, etc.) and the process by which to obtain CLIENT support to resolve the condition within five (5) days of notice.
- C.31 SERVICE PROVIDER will collaborate with the CLIENT to resolve incomplete retrofit issues on the first visit.
- C.32 SERVICE PROVIDER will work with CLIENT-assigned field support personnel to address retrofits that require assistance from CLIENT to complete and for approval of

- any additional work outside of the project's contractual scope of work. Pricing for such services will be in accordance with the Rehabilitation Services Add-Ons (Labor Only) pricing provided.
- C.33 If needed, SERVICE PROVIDER shall exchange meters as "like for like" (same meter size and lay length) with no plumbing modifications required. Water meters are to be on setters or equipped with standard meter connections that can be reused during installation activities. Meter exchanges do not include the provision of or replacement of expansion connectors, meter couplings, setters, or flanges. Pricing for such services will be in accordance with the Rehabilitation Services Add-Ons (Labor Only) pricing provided.
- C.34 SERVICE PROVIDER will RTU (Return to Utility) accounts that meet the non-standard retrofit criteria (including but not limited to inoperable valve or curb stop, piping and or fittings in a state that appear to have a potential imminent failure, CLIENT-side leak, finished basements with no access for wire run, hidden meters behind a wall, large meter re-piping other than the addition of a spool piece, vault tops requiring cutting, or when concrete or asphalt work required).

C.35 SERVICE PROVIDER Deliverables:

C.35.1 Project and Retrofit Schedule Updates C.35.2 On-demand access to web-based Meter Retrofit System (Xchange) for reports and retrofit data/images C.35.3 Customer appointment scheduling Print and hand delivery of 2nd and 3rd Attempt Door hangers C.35.4 C.35.5 Retrofit of transmitters (refer to Exhibit B) C.35.6 Electronic meter exchange data collection and images C.35.7 Route installation plan and Black-Out schedule. C.35.8 **KPIs and Status Updates** C.35.9 Scheduling letters by the open routes C.35.10 Door hangers/advisory left with the customer C.35.11 Project Online scheduling portal C.35.12 Staffed 24x7 emergency call center C.35.13 Validated data in the UMS Xchange system C.35.14 Completed Work Order data exports from Xchange C.35.15 Verified meter communications on the network

C.35.16 Export of all data and images collected during installations

C.35.17 Notifications of Network Availability Issues

C.35.18 Account signoff detail report.

C.36 CLIENT Responsibilities:

- C.36.1 CLIENT will provide at least one project-assigned experienced field services employee throughout the meter retrofit to support SERVICE PROVIDER in completing the fieldwork. Support will include addressing Assists and Return to Utility requests.
- C.36.2 CLIENT will resolve issues related to retrofits that SERVICE PROVIDER could not complete on the first visit and return those to SERVICE PROVIDER for retrofit. If the CLIENT cannot resolve an issue within ten business days of notification, then the CLIENT will accept those accounts as RTUs and approve their removal from the SERVICE PROVIDER scope.
- C.36.3 CLIENT will support SERVICE PROVIDER in the development of a scheduling/installation Black-Out calendar. CLIENT will release all residential meters in route read order.
- C.36.4 CLIENT will supply all meters, endpoints, and other ancillary parts/hardware needed to complete meter exchanges.
- C.36.5 CLIENT will be responsible for processing completed work order files in the CIS.
- C.36.6 CLIENT will be responsible for performing the correct sequence of steps to process completed work order files and obtain meter readings following the Customer's old (legacy) methods when necessary.
- C.36.7 CLIENT will review completed accounts when account signoff reports are received from SERVICE PROVIDER and inform SERVICE PROVIDER of acceptance or refusal reason within ten business days of notification

C.37 Acceptance Criteria for SERVICE PROVIDER Deliverables:

- C.37.1 Final review of the updated retrofit schedule and plan.
- C.37.2 Access to Xchange retrofit reports.

 Review, signoff, and acceptance of completed meter retrofits

D. REHABILITATION SERVICES

[REHAB_10] RECYCLING OF END POINTS AND REGISTERS

- D.1 SERVICE PROVIDER shall properly dispose of all meters and components removed during the completion of the work order. Credit related to scrap disposal will be applied to SERVICE PROVIDER to offset recycling costs.
- D.2 SERVICE PROVIDER shall facilitate pick-up and delivery of scrap meters and other materials to a recycling center.
- D.3 SERVICE PROVIDER shall facilitate the pick-up and delivery of electronic scrap materials to a zero-landfill recycling facility.
- D.4 SERVICE PROVIDER shall be responsible for transportation, lithium-ion battery disposal, concrete and meter recycling costs.

PRICING

LINE	CATEGORY	SERVICE	वार	PRICE	TOTAL
1	SETUP	Project Initiation & Setup	1	\$ 5,000.00	\$ 5,000.00
2	P.MGMT	MMCO Interface Setup and Configuration MMCO Interface Setup & QA/QC	1	s 10.000.00	s 10.000.00
3	P.MGMT	Project Management	6874	s 15.00	s 103,110.00
4	DEPLOYMENT	Appointment Scheduling Charge Service includes: preparing and managing the appointment process, mailers, staffing our call center, and maintaining our online scheduling application.	687-4	s 45.00	\$ 309.330.00
5	DEPLOYMENT	Mobilization: Field Crew	1	s 5.000.00	\$ 5.000.00
6	DEPLOYMENT	Retrofit Meter (Register & Endpoint) Residential 5/8" - 1"	6655	\$ 45,00	s. 299.475.00
7	DEPLOYMENT	Retrofit Meter (Register & Endpoint) Intermediate 1.5"- 2"	194	s 65.00	s 12.610.00
8	DEPLOYMENT	Retrofit Meter (Register & Endpoint) Large 3" and up	25	s 165.00	s 4.125.00
9	DEPLOYMENT	Transmitter Activation & Configuration	6874	\$ 6.00	s 41.244.00

10	REHAB	Meter Disposal & Recycling	6874	\$ 3.88	5 26.671.12
		Recycling of Register and Endpoint			
11	ADDTL	UNIS Purchased Materials (Cost = 20%) and 3rd Party Services	0	\$ 0.00	\$ 0.00
12	ADDTL	Field Labor Rate	O	s 120.00	s 0.00
13	ADDTL	Service Attempt Charge (SAC) When a meter installation is attempted but cannot be completed, the service is returned to the utility as an "Assist". If the utility removes the installation from the scope of work, UMS charges a "Service Attempt Charge" to cover the costs of the attempted work. This fee is smaller than the full-service charge but ensures fair compensation for the effort made by our team.	О	s 25.CQ	s 0.00

Grand Total	\$ 816.565.12

TERMS OF SERVICE: METER INSTALLATION

STANDARD PROJECT TERMS

- 1. Installation services will commence within six to ten weeks upon receipt of the Notice to Proceed (NTP).
- 2. Project pricing is based on standard wage classifications. Any requirement for special wage classifications or rates will necessitate a pricing revision.
- 3. Project pricing applies only to meters accessible by standard vehicles and does not cover access by boat, ATV, or other non-standard vehicles.
- 4. The Client is responsible for providing all necessary materials for meter installation (meters, endpoints, ancillary parts). To enable UMS to mobilize, the Client must have either a) all required materials on-site, or b) a minimum six-week supply of materials with a shipping schedule that aligns with the production schedule.
- 5. UMS requires uninterrupted work progression once the project begins. Interruptions due to material shortages or reasons beyond UMS's control will result in additional charges at the hourly rate, along with any warehousing, housing, or early termination fees.
- 6. If security concerns arise in specific areas, UMS may require the Client to provide security or police personnel as needed. If the Client does not provide the requested security, UMS reserves the right to delay or suspend work in affected areas until adequate security measures are in place, without liability for resulting delays.
- 7. Removed meters and endpoints will either be stored, transported, and recycled per contract terms.
- 8. The Client is responsible for warehouse storage,

UMS assumes no special permits or licenses are required for the installation of advanced metering network collectors. If
permits are necessary, the Client will either be responsible for obtaining them or compensating UMS for the effort at the
agreed hourly rates.

10. GENERAL INVOICING AND PAYMENT TERMS

- 11. Invoicing: Invoices will be submitted each month. Payment terms are Net 30. Late payments will incur a 1.5% fee. The Client must review and raise any disputes or request corrections within three (3) business days of receiving the invoice. If no corrections are requested within this timeframe, the invoice will be considered accepted as-is. Corrections requested after the 3-day review period will not alter the original payment due date.
- 12. Bonding: If bonding is requested, the cost will be calculated at 2.75% of the contract value and invoiced once the bond is provided. A bonding fee of 2.75% shall apply to all change orders.
- 13. Unit Fees: All work completed will be invoiced at the unit pricing outlined in the contract. Unit pricing provided is based on the project size and project duration. Changes in project size and duration could result in unit pricing revisions.
- 14. Service Attempt Fees: UMS aims to complete meter installations in one visit. If an installation attempt cannot be completed, UMS will charge the Service Attempt Fee as outlined in the contract. All installation attempts will be returned to the utility as an Assist for the first 10 days. If the Client completes the assist request within this 10-day period, UMS will complete the installation at the unit rate specified in the contract. After 10 days, the Assist will be removed from the scope of work, and future installation attempts will be invoiced at the appropriate hourly rate.
- 15. Monthly Service Fees: All monthly services will be invoiced at the rates outlined in the contract. If the project is completed early, the remaining months will be invoiced in the final bill. If the project is extended, the monthly fees will continue until project completion.
- 16. Time and Materials Service Fees: All third-party services and materials procured by UMS on behalf of the Client will be invoiced at cost plus a 20% markup. Services rendered that fall outside existing terms or lack a predefined unit price will be billed at the appropriate hourly rates as outlined in the contract.
 - Additional Services: UMS provides unit pricing for common issues that can be addressed during meter installation, with prior client approval. Any additional work requested after meter installation will be billed at standard time and materials rates.
 - b. Additional Costs: Any additional work beyond the initial scope (e.g., specialized operations, access issues, debris removal, or unforeseen conditions) will incur additional time and or material charges.
- Annual Pricing Adjustment: All prices are subject to annual adjustment by the Consumer Price Index (CPI) or 5%, whichever is higher.

18. GENERAL METER INSTALLATION TERMS

- 19. The Client will provide all active and inactive meter and account data electronically (CSV or Excel). The provided data must be accurate and complete. UMS will not modify or edit this data.
- 20. All necessary interfaces, such as Customer Information Systems (CIS) and Mass Meter Change Out (MMCO) interfaces, must be established and tested before installation begins.
- 21. The AMI network must be established, tested, and fully functional before installations begin.
- 22. The Client shall authorize UMS to work on the Client's behalf with the CIS/utility billing, Meter, and AMI vendors in order to complete the work.
- 23. The Client is responsible for delivering all customer notification letters and mailings.
- 24. Residential meter installations will follow the route read sequence. The Client will supply a meter-reading/blackout schedule before the project begins.
- 25. Meters located in confined spaces, as defined by OSHA, will require additional time, personnel, and safety equipment. These extra costs will be billed in accordance with our Time and Materials Service Terms.
- 26. The Client shall assist with unsafe installations or unusual circumstances.
- 27. UMS will only be responsible for repairs or damages caused by UMS inside the meter box. UMS is not liable for any damages downstream/downline from the meter or meter box.
- 28. UMS will validate that all endpoints are activated on the AMI network and confirm three consecutive daily billable reads.

29. METER ACCESS AND SCHEDULING TERMS

30. UMS will collaborate with the Client to customize post installation door hangers for outdoor meter installations. For indoor meter installations post installation door hangers and installation scheduling documents will be created. Indoor meter installations will also include developing a scheduling letter to notify customers of their upcoming appointment, along with 2nd and 3rd attempt door hangers for unsuccessful initial contact.

- 31. Utility Service Shutoff: UMS will be responsible for shutting off utility service to each meter serviced and notifying each utility client of the shutoff. UMS will knock on residential clients' doors before work and leave a notification upon completion.
 - a. For large commercial clients, special efforts will be made to minimize disruption, and UMS will schedule replacements directly with these clients. UMS is responsible for any damage or leaks occurring within the utility meter box or meter setting but shall not be liable for damages outside the meter box resulting from the meter replacement process, including shutoff, temporary outage, or restart of service. Responsibility for plumbing/electrical/gas fixtures inside each facility rests with the utility client.
- 32. Appointment Scheduling: For meters located indoors and require access to inside the residence the client must release 30% more meters than our project or production schedule outlines to account for customers who do not schedule an appointment.
 - UMS will provide a scheduling database, website, and toll-free call center to assist with appointment scheduling for indoor meter installations.
- 33. Installation Service Attempts: UMS aims to complete meter installations in one visit. UMS will use best practices, including requesting client support or authorization for additional work while onsite. If the issue cannot be resolved during the visit, it will be marked as an "Assist" and subject to the service attempt fee.
 - a. All customer refusals will be reported to the utility as an "Assist" and will be subject to the service Attempt Fee.
- 34. WATER METER INSTALLATION TERMS
- 35. All meter exchanges must be "like-for-like" (same size and lay length), with no plumbing alterations required.
- 36. All system isolation devices are expected to be operational and located within the meter box or meter setting. UMS is not responsible for failures or inaccessibility of these devices.
- 37. Water meter installations may involve either full replacement or retrofit. UMS is not responsible for pre-existing issues, including corrosion or deteriorating plumbing.
- 38. UMS shall return any meters in hazardous conditions or with code violations to the Client. These will be marked as a Service Attempt and removed from UMS's scope.
- 39. Standard connections will be reused for meter installations unless otherwise specified. Additional services such as the replacement of meter couplings, setters, or flanges will be charged separately in accordance with our Time and Materials Service Terms.
- 40. Access to meters deeper than 18 inches, or requiring extensive excavation, will incur additional time and/or material charges.
- 41. Changed Conditions: If UMS encounters subsurface or latent physical conditions differing materially from expected conditions, UMS will notify the Client in writing before further disturbing the site. The Client will investigate and, if the conditions materially differ, both parties will negotiate a change order. If these conditions affect cost or time, an alternative solution will be negotiated.
- 42. Installations of large meters require specialized operations and may incur additional costs, which will be communicated to the Client.
- 43. Unobstructed access is required for large pit meters. Additional costs for debris removal or equipment rental will be billed separately.
- 44. UMS assumes that all valves for meters 1.5 inches or larger are functional.
- 45. WARRANTY
- 46. UMS warrants that all meter installation services performed will be free from defects in workmanship for a period of six (6) months from the installation date. This warranty covers only the labor performed by UMS and does not extend to equipment or materials provided by the Client or third parties.
- 47. If the Client suspects a defect related to UMS's workmanship, the Client must first conduct an initial investigation. This warranty does not cover defects arising from equipment or materials provided by the Client or third parties, or from misuse, neglect, or external factors beyond UMS's control.
- 48. To submit a warranty claim, the Client must follow UMS's standard claims process, detailing the nature of the defect and providing relevant evidence. Upon receipt, UMS will investigate, which may involve dispatching a technician to the site. If the defect is found to be due to faulty workmanship, UMS will resolve the issue at no cost to the Client. However, if the defect is determined to be due to customer tampering, equipment misuse, or external factors, UMS will invoice the Client for the investigation and any corrective work authorized, in accordance with UMS's time and materials pricing.

END OF DOCUMENT